

# NOTICE AND AGENDA FOR REGULAR MEETING

DATE/TIME: Wednesday, September 14, 2016, 1:30 PM

PLACE: Board of Supervisors Chambers 651 Pine Street, Martinez, CA 94553

**NOTICE IS HEREBY GIVEN** that the Commission will hear and consider oral or written testimony presented by any affected agency or any interested person who wishes to appear. Proponents and opponents, or their representatives, are expected to attend the hearings. From time to time, the Chair may announce time limits and direct the focus of public comment for any given proposal.

Any disclosable public records related to an open session item on a regular meeting agenda and distributed by LAFCO to a majority of the members of the Commission less than 72 hours prior to that meeting will be available for public inspection in the office at 651 Pine Street, Six Floor, Martinez, CA, during normal business hours as well as at the LAFCO meeting.

All matters listed under CONSENT ITEMS are considered by the Commission to be routine and will be enacted by one motion. There will be no separate discussion of these items unless requested by a member of the Commission or a member of the public prior to the time the Commission votes on the motion to adopt.

For agenda items not requiring a formal public hearing, the Chair will ask for public comments. For formal public hearings the Chair will announce the opening and closing of the public hearing.

If you wish to speak, please complete a speaker's card and approach the podium; speak clearly into the microphone, start by stating your name and address for the record.

#### Campaign Contribution Disclosure

If you are an applicant or an agent of an applicant on a matter to be heard by the Commission, and if you have made campaign contributions totaling \$250 or more to any Commissioner in the past 12 months, Government Code Section 84308 requires that you disclose the fact, either orally or in writing, for the official record of the proceedings.

#### Notice of Intent to Waive Protest Proceedings

In the case of a change of organization consisting of an annexation or detachment, or a reorganization consisting solely of annexations or detachments, or both, or the formation of a county service area, it is the intent of the Commission to waive subsequent protest and election proceedings provided that appropriate mailed notice has been given to landowners and registered voters within the affected territory pursuant to Gov. Code sections 56157 and 56663, and no written opposition from affected landowner or voters to the proposal is received before the conclusion of the commission proceedings on the proposal.

#### American Disabilities Act Compliance

LAFCO will provide reasonable accommodations for persons with disabilities planning to attend meetings who contact the LAFCO office at least 24 hours before the meeting, at 925-335-1094. An assistive listening device is available upon advance request.

# As a courtesy, please silence your cell phones during the meeting.

# SEPTEMBER 14, 2016 CONTRA COSTA LAFCO AGENDA

- 1. Call to Order and Pledge of Allegiance
- 2. Roll Call
- 3. Adoption of Agenda
- 4. Public Comment Period (please observe a three-minute time limit):

Members of the public are invited to address the Commission regarding any item that is not scheduled for discussion as part of this Agenda. No action will be taken by the Commission at this meeting as a result of items presented at this time.

5. Approval of Minutes for the August 10, 2016 regular LAFCO meeting

# SPHERE OF INFLUENCE (SOI)/BOUNDARY CHANGES

- <u>LAFCO 13-08</u> Northeast Antioch Reorganization (Area 2A): Annexations to the City of Antioch and Delta Diablo and Detachment from County Service Area P-6 – receive update from City staff; consider reorganization proposal of 116± acres (19 parcels) located immediately west of State Route 160 and the Antioch Bridge; and consider related actions under CEQA Public Hearing – Continued from June 8, 2016 Meeting
- 7. <u>LAFCO 16-05</u> Montreux Residential Subdivision Boundary Reorganization: Annexations to the City of Pittsburg, Contra Costa Water District (CCWD), and Delta Diablo Zone 2 (DD) and Detachment from County Service Area P-6 consider reorganization proposal of 161± acres (four parcels) located on the west and east sides of Kirker Pass Road in conjunction with the proposed development of 351 single-family homes; and consider related actions under CEQA Public Hearing

# **BUSINESS ITEMS**

- 8. *Agricultural & Open Space Preservation Policy* receive a report from the Policies & Procedures Committee and consider adopting an Agricultural & Open Space Preservation Policy
- 9. West Contra Costa Healthcare District Special Study (WCCHD) receive an overview of the Public Review Draft WCCHCD governance options study and provide input
- 10. Compliance with Enterprise System Catalog (SB 272) informational item
- 11. CALAFCO Legislative Update informational item

# **CORRESPONDENCE**

12. Correspondence from Contra Costa County Employees' Retirement Association (CCCERA)

# **INFORMATIONAL ITEMS**

- 13. Commissioner Comments and Announcements
- 14. Staff Announcements
  - CALAFCO Updates
  - Pending Projects
  - Newspaper Articles

# **ADJOURNMENT**

*Next regular LAFCO meeting – October 12, 2016 at 1:30 p.m.* LAFCO STAFF REPORTS AVAILABLE AT <u>http://www.contracostalafco.org/meeting\_archive.htm</u>

#### CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION MINUTES OF MEETING

August 10, 2016

# Board of Supervisors Chambers Martinez, CA

September 14, 2016 Agenda Item 5

- 1. Chair Mary Piepho called the meeting to order at 1:30 p.m.
- 2. The Pledge of Allegiance was recited.
- 3. Roll was called. A quorum was present of the following Commissioners:

County Members Mary Piepho and Alternate Candace Andersen. Special District Members Mike McGill and Igor Skaredoff and Alternate Stanley Caldwell. City Member Don Tatzin. Member Rob Schroder arrived at 1:33 p.m. Public Members Don Blubaugh and Alternate Sharon Burke.

Present were Executive Officer Lou Ann Texeira, Legal Counsel Sharon Anderson, and Clerk Kate Sibley.

4. <u>Approval of the Agenda</u>

Upon motion of Blubaugh, second by Tatzin, Commissioners, by a vote of 6-0, adopted the agenda.

AYES:Andersen (A), Blubaugh, McGill, Piepho, Skaredoff, TatzinNOES:noneABSENT:Glover (M), Schroder (M)ABSTAIN:none

5. <u>Public Comments</u>

There were no public comments.

6. <u>Approval of July 13, 2016 Meeting Minutes</u>

Upon motion of Andersen, second by Tatzin, the minutes were unanimously approved by a vote of 6-0.

AYES:	Andersen (A), Blubaugh, McGill, Piepho, Skaredoff, Tatzin
NOES:	none
ABSENT:	Glover (M), Schroder (M)
ABSTAIN:	none

7. LAFCO 16-02 - Detachment from the Byron Bethany Irrigation District (BBID)

The Executive Officer provided background on this proposal submitted by Contra Costa County to detach 480<u>+</u> acres from BBID located in two separate areas in Discovery Bay west. The subject areas comprise territory where BBID and the Town of Discovery Bay Community Services District (TODBCSD) boundaries overlap.

The areas proposed for detachment are within the SOIs of both BBID and the TODBCSD. Removal of these areas from BBID's SOI is not required, and presently there is no proposal to remove the subject areas from BBID's SOI in conjunction with the proposed detachment. If desired, a proposal to amend BBID's SOI can be submitted at a later time.



The County Board of Supervisors (BOS) adopted a tax transfer agreement providing that BBID's share of the annual property tax associated with the proposed detachment, which currently totals approximately \$685,000, would be allocated to the County. Further, the BOS directed its staff to prepare a second tax exchange agreement to allow the County to transfer, annually, the reallocated BBID tax revenue from the County to East Contra Costa Fire Protection District (ECCFPD), unless an application to initiate dissolution of ECCFPD is filed with LAFCO, at which point the property tax transfer from the County to ECCFPD would automatically terminate.

Prior to the July LAFCO meeting, Rick Gilmore, BBID General Manager, requested two amendments to the proposal. The first was to exclude from the proposed detachment the two BBID owned parcels that contain a BBID-owned pipeline. The two parcels are located at the western edge of the TODBCSD, and exclusion of the two parcels from the proposed detachment will not create an island or gap. The second request was that LAFCO detach these same two parcels from the TODBCSD, as the parcels do not require the TODBCSD's services.

Commissioners continued the public hearing from the July 13 meeting in order for the BBID proposed revisions to the original proposal to be publicly noticed. The revised proposal would exclude APNs 011-190-044 and -045 from the detachment of territory from BBID, and it would detach the same parcels from TODBCSD.

The Chair opened the public hearing. No one spoke, and the hearing was closed.

Upon motion of Blubaugh, second by Schroder, Commissioners unanimously, by a 7-0 vote, found the project exempt pursuant to CEQA Guidelines, Sections 15061(b)(3); approved the proposal to be known as Detachment from the Byron Bethany Irrigation District and Detachment from the Town of Discovery Bay Community Services District; determined that the territory being detached has no effect on BBID's or TODBCSD's authority to collect taxes for bonded indebtedness; found that the subject territory is inhabited, has less than 100% consent of the affected landowners, is subject to a protest hearing; and authorized LAFCO staff to conduct the protest proceedings.

AYES:	Andersen (A), Blubaugh, McGill, Piepho, Schroder, Skaredoff, Tatzin
NOES:	none
ABSENT:	Glover (M)
ABSTAIN:	none

8. <u>Fire and Emergency Medical Services MSR/SOI Updates (2<sup>nd</sup> Round)</u>

The Executive Officer provided brief background on this MSR, which encompasses an updated study of fire and emergency medical services provided by three cities and eight special districts. As of this time, the MSR report has gone through broad review, by the affected local agencies, the public and the Commission. In May, the Commission held its first public hearing where LAFCO staff and the consultants presented an overview of the MSR process, the report and significant findings as presented in the staff report. At that meeting, in addition to receiving comments from several members of the Fire/EMS community, Commissioners received a letter from the Executive Fire Chiefs' Association requesting that LAFCO delay final consideration of the MSR until the consultants could include in the report the impacts of CCCERA's recent decision to lower the rate of return on investments. The Commissioners agreed to a 90-day pause and directed that the Final Draft MSR be presented at this August 10<sup>th</sup> meeting.

As directed by the Commission, staff also, in that 90-day period, prepared an information piece summarizing the major MSR findings, and distributed it to cities, districts, the media, and other interested parties, encouraging the recipients to share this information in their communities.



The staff report provides a summary of the major findings contained in the MSR, dealing with growth and service demand, service levels, infrastructure needs, accountability and governance options. Included with the staff report is a draft resolution containing the determinations as required by the CKH.

The Chair thanked staff and the consultants for the comment log; Richard Berkson of the consulting team noted that the comments received were helpful.

Mr. Berkson pointed out that an independent board for ECCFPD will not generate more money for the district, but it will mean enhanced interface with the community. He also commented on the consultants' research into updated CCCERA information, and noted that the recently published 2015 report sets the base for FY 2017-18.

Commissioner Andersen, who also sits on the CCCERA Board, confirmed that letters to agencies will be sent out in October, and that they will not see an increase in rates in FY 2017-18.

Mike Oliver, of the consulting team, reported that ECCFPD reopened a station on July 2<sup>nd</sup> with the funds provided by the County and the cities of Brentwood and Oakley. There will be a measure on the November ballot asking voters if they want the board to be composed of elected members. Additionally, both Brentwood and Oakley are considering utility user tax measures for the November ballot. These measures could be approved by a simple majority, and could help fund fire protection services.

Mr. Oliver reported that a fiscal stability analysis of RHFPD projecting revenues through 2020 revealed that the district's majority of fund reserves will be depleted by the end of FY 2016-17. Even with only one station, RHFPD will run about \$1 million short. The district is also considering a special (2/3-majority) tax measure for the November ballot. While RHFPD can work on a number of efforts that could help its fiscal situation (i.e., extension of FEMA SAFER grant, more development fees from the City of Hercules), they have a substantial year-to-year revenue shortfall that will continue unless they receive a new, reliable, ongoing source of revenue. The City of Hercules has numerous redevelopment obligations in addition to RHFPD, and unfortunately RHFPD comes far behind other agencies in amounts and priorities.

Mr. Oliver stressed his and the consulting team's belief that local government entities have responsibility to do what they can do to provide fire protection services to their residents. The adoption of appropriate fees that can be applied should be applied, and funding sources should be secured on an independent basis so that the State or some other agency cannot interfere, and the district's relationship with the community can be sustained.

In response to a question from the Chair regarding a residents' group (East County Voters, or ECV) advocating for a reallocation of Prop 13 rather than a new tax, Mr. Oliver stated that he knows of no legislation like this that has been successfully carried, and no reallocation of property tax that has occurred. In any case, the property tax is 1%, so it's a "zero-sum game"; an increase in one local agency's pro-rata share of the1% will mean a decrease in another's allocation.

The Chair opened the public hearing.

Brian Kelly, of the consulting team, spoke on the wildland firefighting capability of the County: With the closure of 10 stations since the 2009 MSR, has there been any impact on this? Yes, but this actually reflects an overall lack of capacity to respond to emergencies of all sorts at peak times.

The Executive Officer read comments from Joseph J. Whitener, Bethel Island Fire Chief 1974-1995, who called the office. He has read both MSRs (2009 and 2016); he is concerned with a lack of service on Bethel Island (BI) – no fire station, no equipment, and no boats. They need a fire



station on either BI or Hotchkiss Tract. He's not opposed to a special tax as long as it results in increased fire protection services to BI, which now has an ISO rating of 10 (it was five when he was BI Fire Chief). He is concerned with the way the ECCFPD Board is weighted toward the cities of Oakley and Brentwood, and suggested that BI should consider returning to a volunteer fire department model.

The Chair closed the public hearing.

There was a brief discussion among Commissioners regarding fire service to Shell and other refineries.

The Executive Officer drew Commissioners' attention to the chart showing SOI and governance options, as well as the SOI updates made as a result of the 2009 MSR (CSA EM-1, ECCFPD, MOFD, and SRVFPD; and a partial update to CCCFPD's SOI, excluding the west county portion). At that same time LAFCO deferred SOI updates for Crockett-Carquinez FPD, KFPD and RHPRD in anticipation of the formation of a West County Ad Hoc committee to develop a work plan to address west county EMS/fire issues, which never occurred. The three city SOIs were updated in conjunction with the West County sub-regional MSR. Staff is seeking direction from the Commissioners on 2016 SOI and governance options, particularly with regard to ECCFPD, RHFPD, CCCFPD, and the other west county agencies.

Following discussion on the options presented, staff was directed to consult with the fire chiefs for their input on the SOI and governance options and return with a report to the October 12, 2016 meeting.

The Chair thanked the public safety community and Municipal Resource Group for their work on this report.

Upon motion by Tatzin, second by Blubaugh, Commissioners, by a 7-0 vote, accepted the Final MSR Report; determined that the MSR project is categorically exempt pursuant to CEQA Guidelines §15306, Class 6; adopted the MSR determinations; and directed staff to notice a public hearing for October 12, 2016, at which time the Commission will consider the SOI updates.

AYES:Andersen (A), Blubaugh, McGill, Piepho, Schroder, Skaredoff, TatzinNOES:noneABSENT:Glover (M)ABSTAIN:none

9. Rollingwood-Wilart Park Recreation and Park District (RWPRPD) Special Study

The Executive Officer reported that the Commission's approved work plan includes preparing two special governance options studies - one relating to the West Contra Costa Healthcare District (WCCHD), and one relating to the RWPRPD. Both districts face ongoing financial and service challenges. Earlier this year, LAFCO entered into a contract with Berkson Associates to prepare the WCCHD study, which is currently underway. A Public Review Draft report will be released this month, and the Commission will receive an overview of the WCCHD study in September. Staff is proposing an amendment to the contract with Mr. Berkson , who has over 30 years of experience working with public agencies including this LAFCO, to prepare the RWPRPD study as well.

The final scope and timeline will be completed following the Commission's approval. The special study will take approximately four to five months to complete, and the cost is approximately \$18,000. Adequate funds are included in the FY 2016-17 budget.



Commissioner Tatzin suggested that the study be structured so that the Commission can have an early look at the options in order to direct Mr. Berkson to focus more of the study's resources on resolution of the issues.

Upon motion by McGill, second by Blubaugh, Commissioners, by a 7-0 vote, authorized the LAFCO Executive Officer to execute a contract amendment with Berkson Associates to prepare a governance options study for the Rollingwood-Wilart Park Recreation and Park District, which will extend the contract term from September 30, 2016 to February 28, 2017; and increase the total contract amount from \$25,000 to \$43,000.

AYES:Andersen (A), Blubaugh, McGill, Piepho, Schroder, Skaredoff, TatzinNOES:noneABSENT:Glover (M)ABSTAIN:none

#### 10. <u>Correspondence from CCCERA</u>

There were no comments on this item.

11. Commissioner Comments and Announcements

Commissioner McGill reported that the CALAFCO Legislative Committee meeting scheduled for August 5 was cancelled. He also pointed out that the Little Hoover Committee (LHC) will be convening to study special districts, and that CALAFCO had sent an excellent response to the LHC's request for input.

Commissioner McGill also reported that he may miss the September meeting.

12. <u>Staff Announcements</u>

The Executive Officer drew Commissioners' attention to the disc containing the EIR for the Montreux project, which will be heard in September; provided updates on LAFCO-related legislation, which is awaiting the Governor's signature; and reminded Commissioners to submit their CALAFCO Annual Conference registrations and payments to staff.

The meeting adjourned at 2:29 p.m.

Final Minutes Approved by the Commission September 14, 2016.

AYES: NOES: ABSTAIN: ABSENT:

By\_

Executive Officer



# CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION EXECUTIVE OFFICER'S REPORT September 14, 2016

September 14, 2016 (Agenda)

Agenda Item 6

LAFCO 13-08Northeast Antioch Reorganization Area 2A - Annexations to the City of<br/>Antioch and Delta Diablo Zone 3 (DD) and detachment from County Service<br/>Area (CSA) P-6 This item was continued from the February 12, 2014, March<br/>12, 2014, April 9, 2014, June 11, 2014, June 10, 2015, and June 8, 2016<br/>LAFCO meetingsPROPONENTCity of Antioch (by Resolution)ACREAGE &<br/>LOCATIONArea 2A comprises 116± acres (19 parcels) and is located immediately west<br/>of State Route 160 (Attachment 1).PURPOSEProvide municipal services to the area, which is largely built out with marina,<br/>commercial, storage and incidental uses, along with several dwelling units.

#### <u>SYNOPSIS</u>

The Area 2A reorganization is the third and final in a series of three reorganizations encompassing Northeast Antioch. In 2014, the Commission approved the annexations of Area 1, comprising  $470\pm$  acres located both north and south of Wilbur Ave, which is largely industrial; and Area 2B, comprising  $103\pm$  acres located south of Wilbur Ave and roughly centered on Viera Ave, which is primarily residential.

Given that Areas 1 and 2B were previously annexed to the City, Area 2A now constitutes an island, which is surrounded by the City of Antioch to the west and south, the City of Oakley to the east, and the San Joaquin River to the north. LAFCO is precluded from creating islands, as discussed in section #13 below.

Although the applications to annex Northeast Antioch were submitted to LAFCO in three separate proposals, it is assumed by all parties that all three areas would ultimately be annexed to the City and the two districts. The property tax transfer agreement approved by the City and County covers all three areas and assumes that all areas would be annexed to the City.

A number of options are presented for the Commission's consideration at the end of this report. Should the Commission decide to take action today to approve or deny the proposal, we have included the full staff analysis as presented below.

#### <u>UPDATE</u>

The Commission last discussed this proposal on June 8, 2016. At that time, the Commission received public comment, and discussed the ongoing unresolved issues, including the faulty storm drain infrastructure, the City's land use designations in the area, and outreach to the property owners in the area. The Commission also had questions regarding management of the Antioch Dunes wildlife area following annexation, the availability of funding to finance the needed improvements in Area 2A, and LAFCO protest proceedings. These issues are summarized below.

• Storm water infrastructure – The pipeline is located in a private road partially owned by Marterm Holdings, LLC, and partially owned by Sportsmen, Inc. It was constructed over 20 years ago by the developer, in conjunction with the Antioch Kmart project. The purpose of the pipeline is to

drain the Kmart Basin, located fully in the City of Antioch. The pipeline is sized to support future development in this area of the City, and does not serve Area 2A. The Contra Costa County Flood Control District assumed the responsibility for maintaining the pipeline under a drainage easement, until 2004, when the easement was transferred to the County.

The pipeline appears to have been faulty since initial construction, possibly due to the materials used, soil conditions and tidal impacts. Since the beginning of 2016, the County has performed two repairs totaling \$150,000. County staff reports that the full cost to repair the existing line would be approximately \$1 million; and the cost for a full removal and replacement of the line would be over \$3 million. County staff reports that no funds are available to undertake further pipeline repairs and, as such, additional repairs are not planned at this time. County staff reports that this is the only location in the County where the County owns and maintains a storm drain facility that benefits only a city and not the unincorporated area.

Concerns regarding the pipeline were raised late in the annexation process, following the City's submittal of the annexation application to LAFCO. As reiterated in the City's letter dated August 31, 2016, (Attachment 2), the City will not accept the pipeline until repairs deemed satisfactory to the City are made and the pipeline is accepted by the Antioch City Council.

Since the June 8<sup>th</sup> LAFCO meeting, there have been various meetings among City, County and LAFCO staff to discuss the pipeline and a repair strategy. To date, this issue has not been resolved. At the City's request, a LAFCO condition is recommended to acknowledge that this annexation will not impact the County's existing rights and obligations with regard to the drainage easement and pipeline. However, inasmuch as the City will continue to need this pipeline to drain existing City properties, as well as potential future City development, LAFCO urges the City and County to continue to work together to share the repair obligations with an eye towards the eventual transfer of the maintenance responsibilities to the City.

• City's General Plan update – Several of the commercial landowners (i.e., Kiewit Construction, Vortex Marine Construction, Wilbur Avenue Storage) are currently opposed to the annexation due to concerns regarding the City's land use designations of their properties and potential costs associated with future sewer service. At least one of these properties has indicated that they would not oppose the annexation if the City would provide the appropriate land use designation for their property.

For over two years, LAFCO has continued to delay its action to allow the City time to process the necessary General Plan and zoning amendments to address the land use designations for some of the heavy industrial uses, and to explore options to fund a sewer system in the area. City staff indicates that it will complete the General Plan update by the end of the year. The City has heard the concerns expressed by the landowners and has indicated its commitment to address these concerns through the General Plan process. Regarding sewer service to Area 2A, the City indicates in its Plan for Service, that sewer service in this area will be funded by future development in the area, and/or through assessment districts. Thus, completion of the General Plan update and the extension of sewer service to the area are within the City's purview, do not warrant further delay by LAFCO.

- Outreach to Area 2A landowners and residents Several landowners and a number of marina patrons have expressed opposition to the proposed annexation. The landowners are mostly concerned about their land use and zoning designations under the City's current General Plan; LAFCO is still unclear as to the concerns of the marina patrons. It is important that the City reach out to the landowners and others in the area and respond to their concerns. As with the annexation of Area 2B (Viera Avenue), it was useful to meet with the residents and landowners. City staff should consider updating and making available the previously prepared *Frequently Asked Questions* (FAQ) handout to address common questions and concerns.
- Antioch Dunes wildlife area LAFCO staff has confirmed that the Antioch Dunes National Wildlife Refuge is a federally owned and maintained facility; the City of Antioch has no responsibility for this area.
- Funding In conjunction with the annexation of Areas 1 (large industrial area) and 2B (Viera Avenue) see map (Attachment 3), both the City and County received supplemental funding.

In 2011, the City entered into an agreement with GenOn Marsh Landing, LLC which provides \$6.5 - \$7.5 million over a 12 year period. The funding supports the following: Community Centers Foundation; representative tax, post annexation, and water payments; payments prior to the Mirant Landing Generating Station (MLGS) coming online; \$1 million bonus payment to complete the annexation on or before December 31, 2012; and City assurances.

In 2011, the County also entered into an agreement with GenOn which provides \$6.5 million over 10 years and is available for disbursement, in whole or in part, at the County's direction to qualified community organizations.

In addition, the City and County, through the terms of the tax sharing agreement, agreed to contribute \$6 million (\$3 million each) to install the backbone water and sewer infrastructure in Area 2B (Viera Avenue). The County's \$3 million contribution is conditioned on the City matching the County's funding. The City estimates that the cost of sewer system to serve Area 2B will exceed \$10 million. There were no specific funds set aside for Area 2A.

• LAFCO protest proceedings – Commissioners have asked for clarification regarding the protest proceedings for Area 2A, as the proceedings are different depending on whether the area is inhabited or uninhabited, as summarized below and on the attached flowchart (Attachment 4).

INHABITED				UNINHABITED		
	erminate nnexation	Order Annexation without an election	Order Annexation subject to an election		Terminate Annexation	Order Annexation without an election
0	majority f voters protest	Less than 25% of voters or landowners owning less than 25% of the assessed value of land protest	At least 25%, but less than 50% of voters, or at least 25% of landowners owning 25% or more of the assessed value of land protest		Landowners owning 50% or more of the assessed value of land protest	Landowners owning less than 50% of the assessed value of land protest

Initially, Area 2A was deemed to be "uninhabited" (i.e., less than 12 registered voters). However, since 2014, the number of registered voters has grown, and at last count, was 20. This is perplexing given that there are no residential land use designations in Area 2A. Further, some of the voters have registered to vote listing the marina and their slip number as their address. According to County Code Enforcement and the Sheriff's Office, the County prohibits "liveaboards." Other voters are registered to vote listing the Sportsmen Yacht Club as their place of residence. Since 1934, the 111-year old Ferryboat Sausalito has been the clubhouse of the Sportsmen Yacht Club (the ferry's engines and paddle wheels have been removed). Club members can stay aboard the ferryboat in tiny cabins built on the main deck. According to the County Sheriff's Office, the maximum time one can rent a room on the ferryboat is two weeks.

County Elections has asked that LAFCO notify them of any returned registered voter mail in Area 2A, and they will remove these individuals from the registered voter list.

#### DISCUSSION

The Cortese Knox Hertzberg Act (CKH) sets forth factors that the Commission must consider in evaluating any proposed change of organization or reorganization as discussed below (Gov. Code §56668). In the Commission's review of these factors, no single factor is determinative. In reaching a decision, each factor is to be evaluated within the context of the overall proposal.

## 1. Consistency with the Sphere of Influence of Any Local Agency:

LAFCO is charged with both regulatory and planning functions. Annexations are basically a regulatory act, while establishing spheres of influence (SOIs) is a planning function. The SOI is an important benchmark as it defines the primary area within which urban development is to be encouraged. In order for the Commission to approve an annexation, it must be

consistent with the jurisdiction's adopted SOI. The annexation area is within both the City of Antioch and the DD SOIs, and within both the City of Antioch and County voter-approved Urban Limit Lines (ULLs).

#### 2. Land Use, Planning and Zoning - Present and Future:

Area 2A is part of the City's Eastern Waterfront Employment Focus Area as identified in the City's General Plan. In 2011, the City and County formed a committee to develop and implement a joint economic development strategy for the Northeast Antioch area. This committee was instrumental in addressing some of the concerns relating to the reorganization proposals, including fiscal and infrastructure issues.

The land in Area 2A is largely built out and includes some underdeveloped properties. Existing uses are predominately marina, commercial, storage and incidental uses, along with several residential dwelling units. The City's General Plan designations for Area 2A include "Marina/Support Uses" and "Commercial." The City has prezoned Area 2A as "Urban Waterfront" and "Regional Commercial."

Surrounding land uses include the San Joaquin River to the north; Highway 160 and heavy industrial to the east; heavy and light industrial to the south; and heavy industrial to the west.

The current and proposed uses are consistent with the City's plan and prezoning designations. No changes in land uses are proposed in conjunction with the proposal.

3. The Effect on Maintaining the Physical and Economic Integrity of Agricultural Lands:

The State Department of Conservation produces a map every two years that identifies California's agricultural lands (e.g., Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, Grazing Land, etc.) based on ratings that take into account soil quality and irrigation status.

Both LAFCO law and the California Environmental Quality Act (CEQA) provide their respective definitions of "agricultural land" and "prime agricultural land."

Under CEQA, the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is considered a significant impact. There is no farmland in Area 2A, and no portion of the area is under a Williamson Act Land Conservation Agreement.

4. Topography, Natural Features and Drainage Basins:

Area 2A is located just south of the San Joaquin River. A portion of Area 2A immediately adjacent to the San Joaquin River is located within a 100-year flood hazard zone. As discussed in the City environmental review, the City's project does not propose any new buildings or structures within an identified area of heightened flood risk.

The area has a relatively level topography. There are no other significant natural features affecting the proposal.

5. *Population*:

The area is designated primarily for marina, commercial, storage and incidental uses. Although there are no residential land use designations in Area 2A, there are an estimated four existing residential units in Area 2A, which appear to be caretaker quarters for existing storage facilities. In accordance with the City's General Plan and zoning designations, no residential development is proposed for this area. Thus, no increase in population is anticipated.

#### 6. Fair Share of Regional Housing:

Pursuant to §56668 of the CKH, LAFCO must consider, in its review of a proposal, the extent to which the proposal will assist the receiving entity in achieving its fair share of the regional housing needs as determined by the regional council of governments. Regional housing needs are determined by the State Department of Housing and Community Development; the councils of government throughout the State allocate to each jurisdiction a "fair share" of the regional housing needs. Given the current and proposed land uses in Area 2A, there is no effect to regional housing needs associated with the proposed reorganization.

#### 7. *Governmental Services and Controls - Need, Cost, Adequacy and Availability:*

In accordance with Government Code §56653, whenever a local agency submits an annexation application, the local agency must also submit a plan for providing services to the annexation area. The plan shall include all of the following information and any additional information required by LAFCO:

- (1) An enumeration and description of the services to be extended to the affected territory.
- (2) The level and range of those services.
- (3) An indication of when those services can feasibly be extended to the affected territory.
- (4) An indication of any improvement or upgrading of structures, roads, sewer or water facilities, or other conditions the local agency would impose or require within the affected territory if the change of organization or reorganization is completed.
- (5) Information with respect to how those services will be financed.

The City has provided a "Plan for Services" as required by statute. The level and range of services will be comparable to those services currently provided within the City. City services will be needed to support future development in the area. As part of the reorganization proposal, the City and County have entered into a tax sharing agreement.

Following annexation, the City will provide a range of municipal services to Area 2A, including police, streets and roads, street lighting, drainage, parks & recreation, library, and other services. Fire services will continue to be provided by the Contra Costa County Fire Protection District (CCCFPD).

Following annexation, the City will provide sewer collection, and DD will provide sewer treatment and disposal. The City will provide retail water, and Contra Costa Water District (CCWD) will provide wholesale water as summarized below. The City has existing sewer and water lines located within Area 2A that can serve the area following annexation.

*Police Services* – Law enforcement services are currently provided to Area 2A by the Contra Costa County Sheriff's Department. Upon annexation, police services will be provided by the City, and the area will be detached from the County's police services district (CSA P-6).

The City's standard for providing police services is 1.2 sworn officers per 1,000 residents. By including Community Service Officers in the sworn officer category, Antioch has maintained this ratio. Police response times are dependent on the agency's staffing level and size of the jurisdiction served. The Antioch General Plan establishes a response time goal of 7-8 minutes for Priority 1 (emergency) calls. The Antioch Police Department reports that the average response time is 11 minutes due to a lack of staffing. The City's CEQA document concludes that annexation of the three Northeast Antioch areas would not significantly impact or worsen the ratio of police staff to population or adversely affect the response times.

*Streets and Roads* – The City indicated that the road network is already in place in Area 2A. The City anticipates that as development occurs in Northeast Antioch, appropriate frontage improvements will be made to existing public streets in this area. The City currently maintains 314 total centerline miles; 669 total lane miles. There is one mile of public streets within Area 2A that would be added to the City's road inventory following annexation.

*Street Lighting* – The City reports that there are several existing street lights in Area 2A in close proximity to Highway 160, which are installed and maintained by Caltrans. Any new street lights installed in Area 2A would be in conjunction with new development.

*Drainage* – The City indicates that there are currently no drainage facilities that serve the annexation area; however, there are two large storm drain trunk lines that cross Wilbur Avenue and drain into the San Joaquin River. The extent and location of any storm drainage improvements in Area 2A will depend on future development in the area. Capacity in the existing storm drain lines is limited, and significant new development within the Northeast Antioch reorganization area will require construction of a new outfall to the San Joaquin River. All new development in the annexation area must comply with provisions of various municipal, regional, State and federal requirements, including measures to remove pollutants from stormwater for compliance with the federal Clean Water Act and the National Pollution Discharge Elimination System.

*Parks & Recreation* – The City of Antioch has 33 parks. The City's General Plan Performance Standards for parks propose five acres of improved public and/or private neighborhood parks and public community parkland per 1,000 residents, including appropriate recreational facilities. The City exceeds this standard when the trail system, the Costa Loma Regional Park, and the Lone Tree Golf Course are factored in. There are currently no public parks in the Northeast Antioch reorganization area.

The City operates a comprehensive recreation program including aquatics, sports, leisure time activities, community and cultural events, Prewett Family Water Park, Senior Center, youth activities, excursions, and 300 instructional programs for pre-school, youth, adult, seniors, and on-line.

The annexation is not expected to create any significant demand on the City's existing parks & recreation facilities and programs due to the limited number of residents in the area.

*Other Services* – The City provides a multitude of other services, including arts & cultural, capital improvements, code enforcement, landscape maintenance, library and special services which will be extended to Area 2A following annexation.

*Fire Protection* – Fire and emergency medical services are, and will continue to be, provided by CCCFPD following annexation. There are four fire stations located in Antioch: Station 81 - located downtown at 315 W. 10<sup>th</sup> St; Station 82 - located at 196 Bluerock Dr., just west of Lone Tree Way in the south central portion of the City; Station 83 - located at 2717 Gentrytown Dr., south of Buchanan Road in the western portion of the City; and Station 88 - located at 4288 Folsom Dr., just east of Hillcrest Avenue in the eastern portion of the City.

The City's CEQA document concludes that the annexation will result in no change to fire services and no impacts.

*Sewer Services* – The City provides wastewater collection services, while DD provides conveyance, treatment and disposal services to the City.

Currently, Area 2A is served by onsite septic systems. Many of these septic systems have been in operation for decades (in some cases 50 years). The age of the septic systems, as well as the proximity of Area 2A to the San Joaquin River and the high water table in the area, are cause for concern. Following annexation, property owners will have the opportunity to hook up to the City's sewer system, which is one of the benefits of annexation. The existing sewer line in Wilbur Avenue, which runs along Area 2A's Wilbur frontage, was installed by PG&E in conjunction with LAFCO's previous Out of Agency service approval; the line was later extended by NRG. Given that the existing Wilbur sewer line is at the "doorstep" of the Area 2A properties, connecting to this sewer line will be straightforward. However, there are a number of deep parcels in the area that will require lengthy connections, some as long as 1,000 lineal feet.

The City's existing ordinance stipulates that any property in the City with a septic system that is located within 200 feet of a City sewer line is required within 30 days to hook up to the sewer line. The distance is measured from the location of the sewer connection in the building to the sewer line. Given the distance of most developed properties from the Wilbur sewer line, most properties in Area 2A would not be impacted by the City's requirement. The City indicates in its Plan for Service, that sewer service in this area will be funded by future development in the area, and/or through assessment districts.

The City's population is 108,298 in a  $28\pm$  square mile service area. The City's wastewater collection system consists of 319 miles of gravity pipeline with three pump stations.

DD serves the cities of Antioch and Pittsburg and the unincorporated Bay Point community. DD serves 190,567 residents in a service area of  $49\pm$  square miles. DD has over 49 miles of sewer main and five pump stations. The District's treatment plant capacity is 16.5 million gallons per day (mgd); in 2012, the average dry weather flow (ADWF) was 14.2 mgd.

Regarding capacity, the City's existing ADWF is 7.4 mgd; the future ADWF is 10.7 mgd. The City estimates that the future peak dry weather flow (PDWF) is 16.8 mgd. DD allows an ADWF of 16.5 mgd. As noted above, during 2012, the ADWF influent to the treatment plant was12.7 mgd; in 2005 and 2010, the ADWF influent to the treatment plant was 14.2 mgd and 13.2 mgd, respectively. It is estimated that all three reorganization areas (Areas 1, 2A, 2B) have an existing estimated ADWF of 2.42 mgd which will increase to 3.71 mgd at buildout. The subject area is located in Zone 3 of DD's service area.

Both the City and DD indicate that they have the capacity to serve the Northeast Antioch reorganization area.

8. *Timely Availability of Water and Related Issues:* 

LAFCO must consider the timely and available supply of water in conjunction with a boundary change proposal. Contra Costa LAFCO policies state that any proposal for a change of organization that includes the provision of water service shall include information relating to water supply, storage, treatment, distribution, and waste recovery; as well as

adequacy of services, facilities, and improvements to be provided and financed by the agency responsible for the provision of such services, facilities and improvements.

The City provides water treatment and distribution services, with 328 miles of main, seven pump stations and 11 reservoirs. The City obtains a majority of its water supply from CCWD, along with diversions from the San Joaquin River.

CCWD's boundary encompasses 220<u>+</u> square miles in central and eastern Contra Costa County. CCWD's untreated water service area includes Antioch, Bay Point, Oakley, Pittsburg, and portions of Brentwood and Martinez. The District's treated water service area includes Clayton, Clyde, Concord, Pacheco, Port Costa, and parts of Martinez, Pleasant Hill, and Walnut Creek. CCWD also treats and delivers water to the City of Brentwood, Golden State Water Company (Bay Point), Diablo Water District (Oakley), and the City of Antioch. CCWD serves approximately 500,000 (61,085 water connections). The primary sources of water are the U.S. Bureau of Reclamation Central Valley Water Project and delta diversions.

Regarding the water distribution system, the City currently has existing "looped" water mains located in the Northeast Antioch annexation area, consisting of a 16-inch main that runs north/south along the length of Viera Avenue, a 12-inch water line that runs east/west along the length of Wilbur Avenue through Area 1, and 12-inch and 16-inch water lines that run along East 18<sup>th</sup> Street. Also, there is an existing 8-inch water line in Bridgehead Road that can serve properties in that area. These existing water lines provide the backbone of a future water delivery system that will ultimately be developed to serve properties and businesses located in the Northeast Antioch reorganization area.

In its Water Master Plan, the City examined its ability to serve all three subareas. The analysis confirms that, given the City's allocation of raw water and the City's rights to future water supplies of raw water, and based on the City's current and planned treatment capacity, the City has the ability to provide potable water to all three subareas based on the level of existing and future development.

The City reports that most of the existing uses in Area 2A currently have City water; and that these water service connections pre-date LAFCO.

9. Assessed Value, Tax Rate Areas and Indebtedness:

The annexation area is within tax rate area 53004. The total assessed value (secured and unsecured) is \$18,840,624 (2014-15 roll). The territory being annexed shall be liable for all authorized or existing taxes comparable to properties presently within the annexing agencies, if applicable.

10. *Property Tax Exchange:* 

Revenue and Taxation Code §99(b)(6) requires adoption of a property tax exchange agreement by affected local agencies before the Commission can consider a proposed boundary change. Both the City and County have adopted resolutions approving a tax revenue allocation agreement covering all three annexation areas. A tax allocation agreement covering Areas 1, 2A and 2B was previously approved by both the City and County. This agreement provides for various future revenues for both the City and County in conjunction with the annexation of Area 1, which was completed in 2014. These revenues include property tax (base and increment), sales and use tax, surcharge and franchise fees, and a special economic development initiative fund which provides both the City and County

\$100,000 per year for five years, with an option to extend the economic development initiative funding for an additional five years. The special funding can be used on economic development initiatives in any of the reorganization areas. This special fund provides that the City and County shall consult with the other party on how the economic funds are expended. As noted above, there are some underdeveloped properties in Area 2A. The City and County could dedicate some of these funds to make the needed pipeline improvements in Area 2A.

#### 11. Environmental Impact of the Proposal:

The City of Antioch, as Lead Agency, prepared and adopted the Northeast Antioch Area Reorganization Initial Study/Mitigated Negative Declaration (IS/MND). The City's IS/MND identified potentially significant impacts resulting from Air Quality, Biological Resources, Cultural Resources, Hazards & Hazardous Materials and Noise. Mitigation measures have been provided for each potentially significant impact, reducing all to a less than significant level. Copies of the City's document were previously provided to Commissioners and are available for review in the LAFCO office. The LAFCO Environmental Coordinator finds the City's CEQA document sufficient for LAFCO purposes.

#### 12. Landowner Consent and Consent by Annexing Agency:

At the various LAFCO hearings, the Commission has heard from members of the Sportsmen Yacht Club and a number of property owners of their opposition to the annexation. Per the Commission's direction, City, County and LAFCO staff previously met with members of the yacht club and property owners and residents of Area 2A to hear their concerns. A community meeting was held in February 2014 at the New Bridge Marina Yacht Club, located in Area 2A. There were over 50 attendees at the meeting. City staff prepared a FAQ relating to annexation, which was distributed at the meeting. City, County and LAFCO staff addressed a range of issues and questions. City staff responded to questions relating to water and sewer services, utility connection fees/rates and potential funding/grant options, zoning and land use, police and marine patrol services, the City's ability to serve the area, curbs and sidewalks, access roads and easements, code enforcement and eminent domain. County staff provided information regarding environmental health and septic system requirements. LAFCO staff provided information regarding LAFCO's role, mission and authority, LAFCO proceedings, protest thresholds, islands and Disadvantaged Unincorporated Communities (DUCs). The majority of attendees indicated opposition to the annexation.

Some of the common concerns relate to potential fiscal impacts to the landowners and residents of Area 2A following annexation, and requirements to connect to the City's water and sewer systems.

As explained in the FAQ and by City staff, there are no additional taxes or assessments associated with annexation. In November 2013, the Antioch voters passed a <sup>1</sup>/<sub>2</sub> cent temporary sales tax. The impact of this sales tax is insignificant given the lack of retail uses in Area 2A. As a sales tax, it would be paid by a customer buying a product or merchandise sold within Area 2A.

Regarding connection to the City's water and sewer utilities, City staff notes that all of the properties in Area 2A have City water service, and that all developed properties within Area 2A currently rely on onsite septic systems to handle wastewater flow. Many of these septic systems have been in operation for decades (in some cases 50 years). The age of the septic systems, as well as the proximity of Area 2A to the San Joaquin River and the high water

table in the area, are cause for concern. Following annexation, property owners will have the opportunity to hook up to the City's sewer system, which is one of the benefits of annexation.

City staff explains that most properties in Area 2A will not be required to hook up to City sewer system, given the distance of these facilities from the Wilbur sewer line. The City's existing ordinance stipulates that any property in the City with a septic system that is located within 200 feet of a City sewer line is required within 30 days to hook up to the sewer line. The distance is measured from the location of the sewer connection in the building to the sewer line. Most properties in Area 2A would not be impacted by this requirement.

In August 2016, LAFCO received updated information from the County Assessor (assessed values) and County Elections (registered voters). LAFCO staff has confirmed that Area 2A is "inhabited" (i.e., 12 or more registered voters); thus, the Commission's action is subject to notice, hearing, as well as protest proceedings. If the Commission approves the annexation as proposed, a subsequent notice and protest hearing will follow. Authority to conduct the protest hearing has been delegated to the LAFCO Executive Officer.

#### 13. Boundaries and Lines of Assessment:

Area 2A is contiguous to the existing City of Antioch boundary. A map and legal description to implement the proposed boundary change have been received and are subject to approval by the County Surveyor.

On January 8, 2014, the Commission approved the annexation of Areas 1 and 2B. All three areas are contiguous and could have been included in one proposal; however, the City chose to divide the area into three separate LAFCO proposals due to differences in land use designations and other factors. The approved property tax transfer agreement between the City and County covers all three areas and assumes that all areas will be annexed to the City. Furthermore, LAFCO assumes that all three areas will be annexed.

Given that Areas 1 and 2B were annexed to the City, Area 2A now constitutes an island, which is surrounded by the City of Antioch to the west and south, the City of Oakley to the east, and the San Joaquin River to the north. LAFCO law (Gov. Code §56744) precludes LAFCO from creating an island; however, Gov. Code section 56375(m) allows LAFCO to waive the restrictions of Section 56744 if LAFCO finds both "that the application of the restrictions would be detrimental to the orderly development of the community, and that the area that would be enclosed by the annexation or incorporated as a new city."

It is not feasible for LAFCO to make these findings, given that annexation of the Area 2A would enhance the orderly development of the area, that the City of Antioch can provide sewer collection and retail water service to the area, and that Area 2A is contiguous to the City of Oakley, and could potentially be annexed Oakley.

#### 14. Environmental Justice:

One of the factors LAFCO must consider in its review of an application is the extent to which the proposal will promote environmental justice. As defined by statute, "environmental justice" means the fair treatment of people of all races, cultures, and incomes with respect to the location of public facilities and the provision of public services. The proposed annexation is not expected to promote or discourage the fair treatment of minority or economically disadvantaged groups.

#### 15. Disadvantaged Communities:

In accordance with recent legislation (SB 244), local agencies and LAFCOs are required to plan for disadvantaged unincorporated communities (DUCs). Many of these communities lack basic infrastructure, including streets, sidewalks, storm drainage, clean drinking water, and adequate sewer service. LAFCO actions relating to Municipal Service Reviews, SOI reviews/amendments, and annexations must take into consideration DUCs, and specifically the adequacy of public services, including sewer, water, and fire protection needs or deficiencies, to these communities. According to the County and City Planning Departments, the annexation area does not meet the criteria of a DUC.

#### 16. *Comments from Affected Agencies/Other Interested Parties:*

Throughout the LAFCO hearing process, members of the Sportsman Yacht Club and several landowners in the area have expressed their opposition to the annexation.

Previously, LAFCO received a testimony and a letter from Steve Klee, Chairman and General Manager of the New Bridge Marina, Inc., expressing support for the annexation.

#### 17. Regional Transportation and Regional Growth Plans:

In its review of a proposal, LAFCO shall consider a regional transportation plan adopted pursuant to Section 65080 [Gov. Code section 56668(g)]. Further, the commission may consider the regional growth goals and policies established by a collaboration of elected officials only, formally representing their local jurisdictions in an official capacity on a regional or subregional basis (Gov. Code section 56668.5).

Regarding these sections, LAFCO looks at consistency of the proposal with the regional transportation and other regional plans affecting the Bay Area.

SB 375, a landmark state law, requires California's regions to adopt plans and policies to reduce the generation of greenhouse gases (GHG), primarily from transportation. To implement SB 375, in July 2013, ABAG and the Metropolitan Transportation Commission (MTC) adopted Plan Bay Area as the "Regional Transportation Plan and Sustainable Communities Strategy" for the San Francisco Bay Area through 2040. Plan Bay Area focuses on where the region is expected to grow and how development patterns and the transportation network can work together to reduce GHG emissions. The Plan's key goals are to reduce GHG emissions by specified amounts; and to plan sufficient housing for the region's projected population over the next 25 years.

The Plan Bay Area directs future development to infill areas within the existing urban footprint and focuses the majority of growth in self-identified Priority Development Areas (PDAs). PDAs include infill areas that are served by transit and are located close to other amenities, allowing for improved transit, bicycle and pedestrian access thereby reducing the amount of transportation related GHG generated. Plan Bay Area supports infill development in established communities and protects agricultural and open space lands. The Plan assumes that all urban growth boundaries are held fixed through the year 2040 and no sprawl-style development is expected to occur on the regions' open space or agricultural lands.

Plan Bay Area includes projections for the region's population, housing and job growth and indicates that the region has the capacity to accommodate expected growth over the next 25 years without sprawling further into undeveloped land on the urban fringe.

ABAG and MTC are in the process of updating the Plan Bay Area. "Plan Bay Area 2040" is currently a work in progress that will be updated every four years to reflect new priorities. Recently, a series of public open houses were held to present "Alternative Scenarios" which show different options for how the Bay Area can grow based on local land use development patterns and transportation investment strategies. These scenarios take into consideration jobs, housing, population, travel needs and funding for Transportation Improvements. Three scenarios were presented (i.e., Main Street, Connected Neighborhood, Big Cities), each showing a different combination of housing development, commercial growth and transportation investments. Based on public input and feedback from local jurisdictions, a "preferred scenario" will be constructed from these three alternatives.

The draft preferred scenario will go through a series of committee reviews and refinement. In September 2016, ABAG and MTC will be asked to adopt the final preferred scenario at a joint meeting. All of this work, in turn, will form the foundation for Plan Bay Area 2040, to be adopted in summer 2017.

The 2013 Plan Bay Area "aims to protect open space and agricultural land by directing 100 percent of the region's growth inside the year 2010 urban footprint, which means that all growth occurs as infill development or within established urban growth boundaries or urban limit lines. As the plan assumes that all urban growth boundaries/urban limit lines are held fixed through the year 2040, no sprawl-style development is expected to occur on the region's scenic or agricultural lands."

The proposed reorganization is within the City's ULL and surrounded by the City of Antioch to the west and south, the City of Oakley to the east, and the San Joaquin River to the north. The land use designations in the area include "Marina/Support Uses" and "Commercial", and the area has access to the local transit network. The area is not designated as a "Priority Conservation Area" or a "Priority Development Area", and does not appear to conflict with the regional transportation or growth plans.

#### ALTERNATIVES FOR COMMISSION ACTION

After consideration of this report and any testimony or additional materials that are submitted, the Commission should consider taking one of the following options:

- <u>Option 1</u> Reopen the public hearing to accept public comment, if any; close the public hearing and *approve the reorganization as submitted by the City*.
  - A. Find that, as a Responsible Agency under CEQA, the Commission has reviewed and considered the information contained in the Northeast Antioch Area Reorganization Initial Study/Mitigated Negative Declaration as prepared and adopted by the City of Antioch.

- B. Adopt this report and the attached resolution (Attachment 5) approving the proposal to be known as Northeast Antioch Reorganization (Area 2A) Annexations to the City of Antioch and Delta Diablo Zone 3 and detachment from County Service Area P-6 subject to the following:
  - 1. This annexation will not change the County's existing rights and responsibilities with regard to the drainage easement and pipeline in the private road partially owned by Marterm Holdings, LLC, and partially owned by Sportsmen, Inc. However, LAFCO urges the City and County to continue to work together to share the repair obligations with the goal of the eventual transfer of the storm drain line in the area (DA 29G Line A) to the City.
  - 2. The territory being annexed shall be liable for the continuation of any authorized or existing special taxes, assessments and charges comparable to properties presently within the annexing agency.
- C. Find that the subject territory is inhabited, and the reorganization is subject to a subsequent conducting authority (protest) hearing.
- <u>Option 2</u> Reopen public hearing to accept public comment, if any; close the public hearing and take the following actions:
  - A. Certify that LAFCO, as a Responsible Agency under CEQA, has reviewed and considered the information contained in the City's Mitigated Negative Declaration.
  - B. Adopt this report and DENY the proposal.
- <u>Option 3</u> If the Commission needs more information, CONTINUE this matter to a future meeting.

#### **<u>RECOMMENDED ACTION</u>**: Option 1

# LOU ANN TEXEIRA, EXECUTIVE OFFICER CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION

#### c: Distribution

#### Attachments

- 1. Map of Area 2A Reorganization
- 2. Letter from the City of Antioch dated May 23, 2016
- 3. Map of Northeast Antioch (Areas 1, 2A and 2B)
- 4. LAFCO Protest Proceeding Flowchart
- 5. Draft LAFCO Resolution

Attachment 1

# LAFCO No. 13-08 Northeast Antioch Area 2A Reoganization Annexations to City of Antioch and Delta Diablo Detachment from CSA P-6



Map created 05/16/2016 by Contra Costa County Department of Conservation and Development, GIS Group 30 Muir Road, Martinez, CA 94553 37:59:41.791N 122:07:03.756W This map or dataset was created by the Contra Costa County Conservation and Developmen Department with data from the Contra Costa County CIS Program. Some base data, primarly City Lumits, is derived from the CA State Board of Equalization's tax rate areas. While oblgated to use this data the County assumes no responsibility for its accuracy. This map contains copyrighted information and may not be altered. It may be reproduced in its current state if the source is cited. Users of this map agree to read and accept the County of Contra Costa disadamer of liability for geographic information.

250 500

Feet

1,000



August 31, 2016

Lou Ann Texeira, Executive Officer Contra Costa LAFCO 651 Pine Street, 6th Floor Martinez, CA 94553

RE: NE Annexation Area 2A - City of Antioch

Ms. Texeira,

The purpose of this letter is to advise you and Contra Costa LAFCO Board about the status of the annexation of Northeast Annexation Area 2A into the City of Antioch.

As the LAFCO Board may be aware, the annexation of this area has been delayed for a number of reasons over the prior few years. Most recently, the City of Antioch was informed about the conditions of a significant storm drain line that was installed by the Contra Costa County Flood Control District in the early 1990s. Apparently, the materials and/or installation were deficient and, as a result, the storm drain line has experienced multiple failures and has necessitated extensive and costly repairs over time. Even with these past efforts, the storm drain line currently needs significant attention at a very high estimated cost.

The City of Antioch generally assumes complete responsibility for the infrastructure, including storm drains, within areas that it annexes, particularly when such infrastructure is located within a public right-of-way. Such was assumed for this storm drain line and the City of Antioch was greatly concerned about its ability to adequately repair or replace the deficient storm drain line. It is important to note that the condition of this storm drain line was not known by the City of Antioch when the annexation efforts were initiated.

However, the City of Antioch has recently been informed that the entire line, including the problematic sections are contained wholly on private property within an easement granted to the Contra Costa County Flood Control District/Contra Costa County. It is our understanding and contention that the annexation of Northeast Annexation Area 2A into the City of Antioch would not change this relationship. The ownership and responsibility to maintain the storm drain line would remain with the Flood Control District/Contra Costa County following the annexation because the easement would not be conveyed.

Ms. Texeira August 31, 2016 Page 2

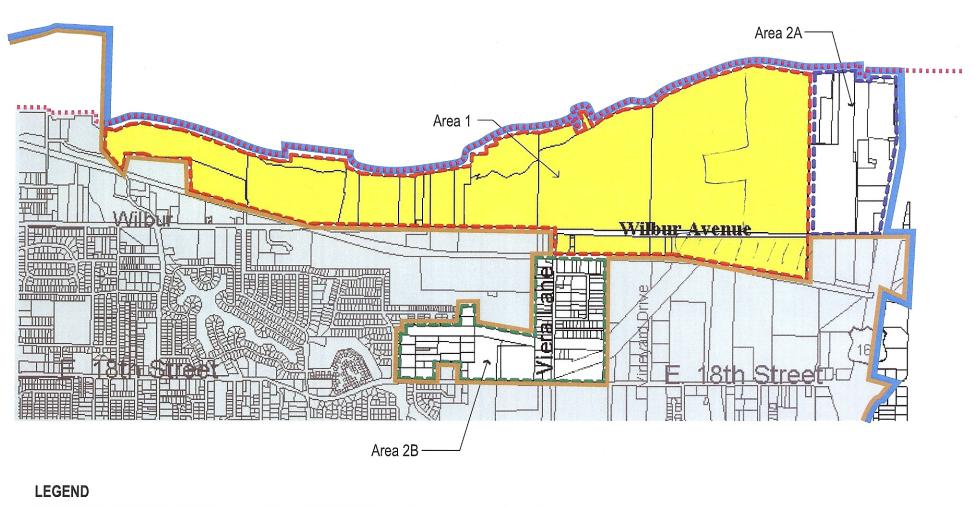
Even with this understanding, the City of Antioch needs written documentation from LAFCO that the storm drain line will remain in Contra Costa County ownership and maintenance until repairs deemed acceptable to the City of Antioch are made and the line is accepted by the Antioch City Council. The City of Antioch will continue to work with the Flood Control District to explore solutions to replace the failing sections of this storm drain line.

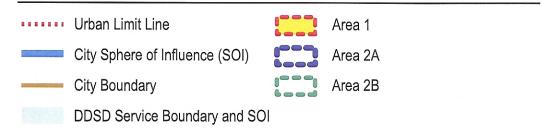
In closing, the City of Antioch appreciates the patience and understanding of Contra Costa County LAFCO. The City of Antioch is committed to providing a high level of service to its residents and takes the very important step of annexation very seriously. At this point, we would request that the LAFCO Board act favorably on the application for annexation of Annexation Area 2A provided the Flood Control District/Contra Costa County continue to own and maintain the storm drain line and written concurrence of same is provided by LAFCO.

We look forward to working with you all in the future.

Sincerely,

Forrest Ebbs, AICP Community Development Director City of Antioch





**EXHIBIT 2** Current Administrative Boundaries Industrial Areas Along Wilbur Avenue – Administrative Reorganization

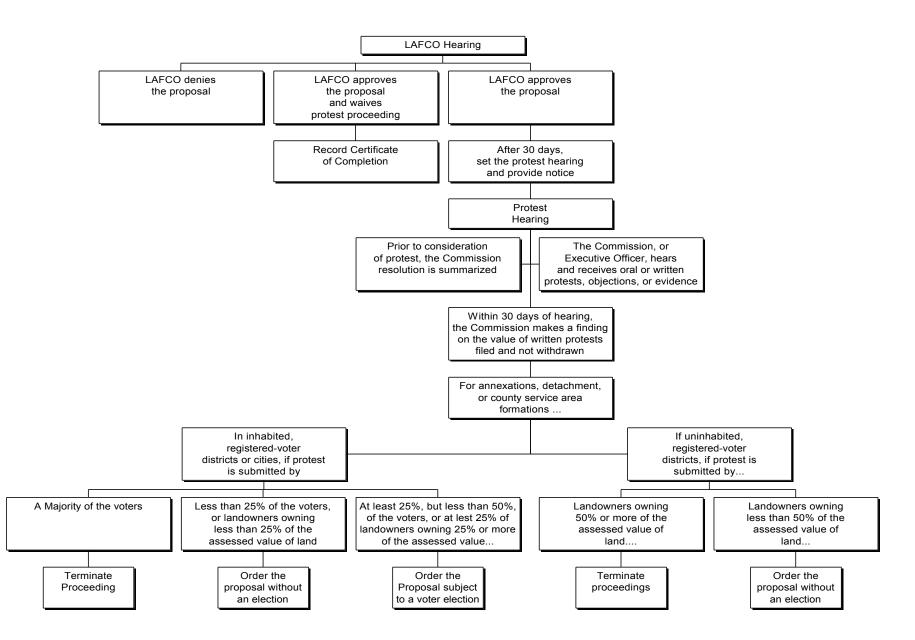
Attachment 3

ES082007009BAO\_Ex2\_CurrentAdminBoundary\_090607\_lho

CH2MHILL

# LAFCO PROTEST PROCEEDINGS -- §57075

(FOR ANNEXATIONS, DETACHMENTS, OR COUNTY SERVICE FORMATIONS IN REGISTERED-VOTER DISTRICTS OR CITIES)



#### **RESOLUTION NO. 13-08**

#### RESOLUTION OF THE CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION MAKING DETERMINATIONS AND APPROVING NORTHEAST ANTIOCH REORGANIZATION AREA 2A: ANNEXATIONS TO THE CITY OF ANTIOCH AND DELTA DIABLO SANITATION DISTRICT ZONE 3 AND DETACHMENT FROM COUNTY SERVICE AREA P-6

WHEREAS, the Area 2A reorganization (marina area) proposal has been filed with the Executive Officer of the Contra Costa Local Agency Formation Commission pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act (Section 56000 et seq. of the Government Code); and

WHEREAS, at the time and in the manner required by law the Executive Officer has given notice of the Commission's consideration of the Area 2A proposal; and

WHEREAS, the Commission held public hearings on February 12, 2014, March 12, 2014, April 9, 2014, June 11, 2014, June 10, 2015, June 8, 2016 and September 14, 2016 on the Area 2A proposal; and

WHEREAS, the Commission heard, discussed and considered all oral and written testimony related to the Area 2A proposal including, but not limited to, the Executive Officer's report and recommendation, the environmental document or determination, Spheres of Influence and applicable General and Specific Plans; and

WHEREAS, the Local Agency Formation Commission determines the Area 2A proposal to be in the best interests of the affected area and the total organization of local governmental agencies within Contra Costa County;

NOW, THEREFORE, the Contra Costa Local Agency Formation Commission DOES HEREBY RESOLVE, DETERMINE AND ORDER as follows:

- 1. The Commission finds that as a Responsible Agency under the California Environmental Quality Act (CEQA), it has reviewed and considered the information contained in the Northeast Antioch Area Reorganization Initial Study/Mitigated Negative Declaration as prepared and adopted by the City of Antioch.
- 2. Said reorganization is hereby approved.
- 3. The subject proposal is assigned the distinctive short-form designation:

NORTHEAST ANTIOCH REORGANIZATION AREA 2A: ANNEXATIONS TO THE CITY OF ANTIOCH AND DELTA DIABLO SANITATION DISTRICT ZONE 3 AND DETACHMENT FROM COUNTY SERVICE AREA P-6

- 4. The boundaries of the affected territory are found to be definite and certain as approved and set forth in Exhibit A, attached hereto and made a part hereof.
- 5. Approval of the Northeast Antioch Reorganization (Area 2A) Annexations to the City of Antioch and Delta Diablo Zone 3 and detachment from County Service Area P-6 is subject to the following:

Contra Costa LAFCO Resolution No. 13-08

- a. Ownership and maintenance of storm drain line in the area (DA 29G Line A) is the responsibility of Contra Costa County. LAFCO encourages the City and County to continue to work together to resolve future repair/replacement of this pipeline.
- b. The territory being annexed shall be liable for the continuation of any authorized or existing special taxes, assessments and charges comparable to properties presently within the annexing agency.
- c. The City of Antioch has delivered an executed indemnification agreement between the City and Contra Costa LAFCO providing for the City to indemnify LAFCO against any expenses arising from any legal actions challenging the Area 2A reorganization.
- 6. The territory proposed for reorganization is inhabited and is subject to conducting authority (protest) proceedings.
- 7. All subsequent proceedings in connection with the Area 2A reorganization shall be conducted only in compliance with the approved boundaries set forth in the attachments and any terms and conditions specified in this resolution.

PASSED AND ADOPTED THIS 12<sup>th</sup> day of September 2016, by the following vote:

AYES: NOES:

ABSTENTIONS:

ABSENT:

## MARY N. PIEPHO, CHAIR, CONTRA COSTA LAFCO

I hereby certify that this is a correct copy of a resolution passed and adopted by this Commission on the date stated.

Dated: September 14, 2016

Lou Ann Texeira, Executive Officer

## CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION EXECUTIVE OFFICER'S REPORT

September 14, 2016 (Agenda)

September 14, 2016 Agenda Item 7

LAFCO 16-05Montreux Residential Subdivision Boundary Reorganization: Annexations to the<br/>City of Pittsburg ("City"), Contra Costa Water District (CCWD) and Delta<br/>Diablo Zone 2 (DD) and Detachment from County Service Area (CSA) P-6PROPONENTCity of Pittsburg by Resolution No. 15-13128 adopted November 2, 2015SYNOPSISThe applicant proposes to annex 161± acres including four parcels (APNs 089-<br/>020-009/011/014/015) located on the east and west sides of Kirker Pass Road,<br/>south of the Pittsburg city limits (Attachment 1). Annexation would bring the<br/>properties within the city limits of the City of Pittsburg and within the service<br/>boundaries of CCWD and DD. A corresponding detachment of the same area<br/>from CSA P-6 is also proposed.

#### **DISCUSSION**

The reorganization proposal encompasses a  $161\pm$  acre site, including a  $148.3\pm$  acre main project site, a  $5.45\pm$  acre portion of Kirker Pass Road, and a  $7.19\pm$  acre parcel located east of Kirker Pass Road. (outside the City limits). In addition, the project includes a  $16.8\pm$  acre off-site area which is already within the boundaries of the City, CCWD and DD.

The site is currently vacant and utilized as grazing land. There are no buildings on the site, only hightension overhead power lines and associated towers. The proposed changes in land use include development of 351 single-family homes on  $77\pm$  acres with lots averaging 7,668 sq. ft.; the remaining  $71\pm$  acres and the  $7.19\pm$  acre parcel on the east side of Kirker Pass Road will be set aside for open space. The proposed project would also include a partially buried water tank at the top of the hill (northern boundary), along with a greenwall (southern boundary), two storm water retention basins (eastern boundary), and a small open space area (northeastern corner). In addition, an offsite storm water retention basin will be constructed to serve the project (northwest of the project site). This area is already within the City.

Government Code §56668 sets forth factors that the Commission must consider in evaluating a proposed boundary change as discussed below. In the Commission's review, no single factor is determinative. In reaching a decision, each is to be evaluated within the context of the overall proposal.

## 1. Consistency with the Sphere of Influence (SOI) of Any Local Agency:

The area proposed for annexation is within the SOIs of the City of Pittsburg, CCWD and DD, as approved by LAFCO in 2009. The subject area is within the City of Pittsburg's 2005 voter approved Urban Limit Line (ULL) - Measure P, and inside the County's ULL.

## 2. Land Use, Planning and Zoning - Present and Future:

Contra Costa County's General Plan and zoning designations for the main project site are AL (Agricultural Land), and A-4 (Agricultural Preserve), respectively. The City of Pittsburg's General Plan designations for the area include Low Density Residential and Open Space. The Land Use element of the City's General Plan includes the proposal site in the Woodlands Subarea. In November 2015, the Pittsburg City Council amended the prezoning of the main site from HPD (Hillside Planned Development) to RS-6 (Single Family Residential, 6,000 sq. ft. minimum lot size). The  $71\pm$  acres and the  $7.19\pm$  acre parcel are zoned OS (Open Space). Measure P prezoned the main project site for HPD and OS. Measure P provided that the prezoning could be changed by either a subsequent vote of the voters or by a majority vote of the

Pittsburg City Council. The proposed uses conform to existing City of Pittsburg land use designations, as amended.

No subsequent change may be made to the general plan or zoning for the annexed territory that is not in conformance to the prezoning designations for a period of two years after the completion of the annexation, unless the legislative body for the city makes a finding at a public hearing that a substantial change has occurred in circumstances that necessitate a departure from the prezoning in the application to the Commission [Government Code §56375(e)];

The City's application includes a consistency analysis relating to ridgelines, wetlands, creek channels, valley oaks, rock outcrop, view shed, storm water detention basins, and street grades. Consistent with the Woodland Subarea policies, the project includes  $43.4\pm$  acres along the southern portion of the site that will remain undeveloped and provide the required greenbelt. This feature also eliminates the potential for development on any designated "Minor" or "Major" ridgelands and preserves a seasonal wetland swale in this portion of the main project site. The City's analysis concludes that the project is consistent with the City's General Plan Goals and Policies.

The project site is within the bounds of the City's ULL; and the proposed southern greenwall is also within the bounds of the City's ULL and includes open space as a buffer between the proposed residential development and the undeveloped open space lands to the south of the ULL, further ensuing that no service would be extended beyond the ULL.

The project site is bounded on the west by undeveloped hillside grazing that includes a PG&E transmission line and natural gas pipeline corridor; bounded on the east by Kirker Pass Road, with undeveloped hillside grazing land; bounded on the south by hillside grazing land; and to the north is a grassy ridgeline with older residential subdivisions beyond.

# 3. The Effect on Maintaining the Physical and Economic Integrity of Agricultural Lands and Open Space Lands:

The project site is currently used for grazing. A Land Conservation Agreement (Williamson Act Contract) previously existed on the site, and expired in January 2016.

The City concludes in its Final EIR that due to the grazing activity, the project site meets the definition of "Prime Agricultural Land" as defined in the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH) - Government Code §56064. Consequently, the project will result in the conversion of prime agricultural land to an urban use. *There are no measures contained in the City's Mitigation Monitoring and Reporting Program (MMRP) to address the impacts to Prime Agricultural Land*.

Regarding open space, there were numerous comments and concerns submitted by agencies (i.e., Contra Costa Water District, San Francisco Bay Regional Water Quality Control Board, East Bay Regional Park District), organizations (Save Mount Diablo) and individuals in response to the City's EIR. Many of these concerns focus on impacts to wetlands, hillsides, view shed, wildlife, and open space. Additional concerns were raised relating to hydrology, traffic, bike and pedestrian access, cumulative impacts, and consistency with the City's General Plan.

In response to some of these comment and concerns, the City recirculated its Draft EIR to respond to new information relating to biological resources on the project site. The EIR found that there were significant and unavoidable impacts relating to aesthetics, air quality, and public services (fire), as well as significant and unavoidable cumulative impacts relating to air quality.

Ultimately, the City adopted a Statement of Overriding Considerations, and an MMRP for the project.

Included in the MMRP are measures to address scenic views, visual character, biological resources, wildlife, historic resources, cultural resources, and other impacts.

In conjunction with adoption of a new ULL for the City of Pittsburg (November 2005), the City and Altec Homes, Inc., Albert D. Seeno III and Albert D. Seeno Jr. entered into an MOU that includes the following provisions:

- The parties desired a permanent new City ULL, beyond which no development can occur in the future and to provide maximum public benefit for the residents of the City of Pittsburg for its housing, transportation, open space and park needs.
- Following passage of the City's ULL in 2005, the City will commence a General Plan study which, among other things, will 1) prevent the ability of urban utilities and services to extend beyond the ULL, and 2) establish guidelines for the development of permanent green belt areas between new development and areas outside the ULL, including a green belt area generally encompassing the southerly 1/5 (approximately) of the Montreux area.
- Developer and Albert D. Seeno III agree to a mitigation plan of their own providing at no cost to the parties hereto three acres of mitigation land replacement for one acre of land of development that is affected by resource agency required mitigations such mitigations can be provided on the development site if possible, and if not, off site.
- Developer and Albert D. Seeno III agree to pay \$2,000 per dwelling unit to the East Bay Regional Park District (EBRPD) for additional public open space acquisition or for the maintenance of public open space. Payment of these fees will in no way affect any legal obligation to fund park improvement or to pay park-related fees to the City.
- The City shall study and enact, if supportable, a fee ordinance for EBRPD to acquire and maintain public open space in conjunction with the \$2,000 fee described above. The City will require that EBRPD, in spending the fees, give priority to spending such fees in and around the City of Pittsburg open space south of the City and within the City's planning area.
- Albert Dr. Seeno Jr. agrees to protect the 800<u>+</u> acre property commonly known as Southport in accordance with specified terms and conditions.
- Developer, Albert D. Seeno Jr., and Albert D. Seeno III shall dedicate a green wall within their properties being brought inside the City's new ULL on the same properties as the development, including the Montreux property. Green wall is defined as a buffer or greenbelt through which no urban services (water, sewer) may penetrate.

Regarding the project, the City has zoned  $71\pm$  acres and the  $7.19\pm$  acre parcel on the east side of Kirker Pass Road as Open Space, and will require that these areas be set aside for open space. In accordance with the City's project EIR and MMRP, and pursuant to the 2006 MOU, the City will require the developer to permanently preserve  $43.4\pm$  acres in the southern portion of the site, as a greenbelt buffer through a recordation of deed restriction or some other appropriate mechanism, prior to acceptance of the Final Map. Although the City has designated  $71\pm$  acres plus the  $7.19\pm$  acres parcel as "open space," City staff indicates that the permanent preservation of the  $43.4\pm$  acres is

consistent with the City's General Plan and with a Memorandum of Understanding (MOU) between the City and the developer. In addition to land dedication, the project applicant will pay a development fee and wetland fee in accordance with the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCCHCP/NCCP). The City's conditional approval of the Vesting Tentative Map and MMRP provide for the following:

- In order to receive coverage under the ECCCHCP/NCCP, the project applicant shall pay a Development Fee and a Wetland Mitigation Fee, as described below:
- Development Fee: This fee will cover the development of approximately 123 acres of upland habitat that primarily includes annual grassland. Included within this area is approximately 2.8-acre of exposed rock area, approximately 0.5-acre stand of valley oaks, and approximately 1.3acre of coastal scrub.
- Wetland Mitigation Fee: This fee shall be paid for the filling of the Waters of the US and any Waters of the State. This fee will cover the filling of 0.003 acres of the Waters of the US, as delineated on the Approved Jurisdictional Determination. If any waters on the project site are determined by the RWQCB to be Waters of the State (currently estimated at approximately 0.119 acres), then the project applicant shall also pay this fee as may be required by the HCP/NCCP, for the filling of the Waters of the State.
- Payment of the Development Fee would address the loss of potential habitat of special-status plant species (e.g., big tarplant, round-leaved filaree) associated with grasslands, while payment of the Wetland Mitigation Fee would specifically address the loss of up to 0.016 acre of potentially suitable seasonal wetland habitat for adobe navarettia. The fees would be used in part to protect these affected special status plant species by bringing existing populations of the species under protection.
- Alternately, the project applicant may, in accordance with the terms of PMC Chapter 15.108, offer to dedicate land or create and restore wetlands in lieu of some or all of the mitigation fees.
- All applicable mitigation fees shall be paid, or an "in-lieu-of fee" agreement executed, prior to the issuance of a grading permit for the project.

Given that the proposed project impacts prime agricultural land as defined in the CKH, and that there are no measures contained in the City's MMRP to address these impacts, the LAFCO staff recommendation includes a condition to address the impact of the proposed development on prime agricultural land and open space.

# 4. Topography, Natural Features and Drainage Basins:

Both the main project site and the offsite parcel are characterized as undeveloped hilly terrain. The main project site includes several natural hills and ridges that frame a broad Y-shaped valley in the center that is open to the eastern project frontage along Kirker Pass Road. The lowest existing valley elevation is  $250\pm$  feet above mean sea level (MSL). The existing ridgeline on the southern portion of the site reaches an elevation of 780+ feet above MSL, and the ridgeline along the northern boundary reaches an elevation of 655 feet above MSL.

The proposed project will involve extensive grading and excavation and reconfiguration of the northern ridgeline, which is not designated as a Major or Minor ridgeline. The City indicates that although the northern ridgeline will be excavated and reduced in its elevation by  $75\pm$  feet to accommodate the water tank, the grading will mimic the existing character of the ridge and will

maintain the natural appearance of the hillside. Even with the proposed grading, there will be significant and unavoidable impacts to the view shed.

The project proposes a greenbelt along the southern ridgeline; however, the project also calls for grading the eastern portion of this ridgeline, which is designated a Major Ridgeline.

Surrounding the site, there is undeveloped hillside grazing land (which includes a PG&E transmission line and natural gas corridor) to the west, and the Keller Canyon open space beyond; Kirker Pass Road with undeveloped hillside grazing land beyond to the east; and undeveloped hillside grazing land along with protected open space areas to the south. North of the site, there is undeveloped grassy ridgeland with older residential development beyond.

## 5. Population:

Development of 351 single family homes is planned for the annexation area. The estimated population increase for the annexation area is approximately 1,225 based on the 2014 American Community Survey data which estimates an average of 3.49 persons per household for the City of Pittsburg.

# 6. Fair Share of Regional Housing:

In its review of a proposal, LAFCO must consider the extent to which the proposal will assist the receiving entity in achieving its fair share of the regional housing needs as determined by the regional council of governments. Regional housing needs are determined by the State Department of Housing and Community Development; the councils of government throughout the State allocate to each jurisdiction a "fair share" of the regional housing needs (Gov. Code §65584).

In Contra Costa County, the Association of Bay Area Governments (ABAG) determines each city's fair share of regional housing needs. Each jurisdiction is required, in turn, to incorporate its fair share of the regional housing needs into the housing element of its General Plan. In July 2013, ABAG adopted the 2014-2022 Regional Housing Needs Allocation (RHNA) Plan for the San Francisco Bay Area. The RHNA Plan includes the following allocations for the City of Pittsburg: total RHNA is calculated at 2,025 units, including 1,063 above moderate, 316 moderate, 254 low and 392 very low income units. The proposed annexation includes a total of 351 residential units which would help the City meets its current regional housing obligation for moderate or above moderate units.

To satisfy the City's Inclusionary Housing requirements, the developer will construct secondary dwelling units on 35 residential lots in the project, and will require purchasers to enter into regulatory agreements restricting rental charges for the secondary dwelling units to ensure affordability. The City reports that the income restricted accessory dwelling units will allow extended families to live near each other, increase the City's affordable housing stock, and provide opportunities for homeowners to generate additional income.

# 7. Governmental Services and Controls - Need, Cost, Adequacy and Availability:

Whenever a local agency submits a resolution of application for a change of organization or reorganization, the local agency shall also submit a plan for providing services within the affected territory (Gov. Code §56653). The plan shall include all of the following information and any additional information required by the Commission or the Executive Officer:

(1) An enumeration and description of the services to be extended to the affected territory.

- (2) The level and range of those services.
- (3) An indication of when those services can feasibly be extended to the affected territory.
- (4) An indication of any improvement or upgrading of structures, roads, sewer or water facilities, or other conditions the local agency would impose or require within the affected territory if the change of organization or reorganization is completed.
- (5) Information with respect to how those services will be financed.

The proposal before the Commission is to annex the property to the City of Pittsburg, CCWD and DD for the provision of municipal services, including water and sanitary sewer services. The level and range of services will be comparable to those services currently provided within the City. City services will be needed to support future development in the area. As part of the reorganization proposal, the City and County will rely on the master tax sharing agreement. The annexation area is currently served by various local agencies including, but not limited to, Contra Costa County and the Contra Costa County Fire Protection District (CCCFPD).

Following annexation, the City will provide a range of municipal services to subject territory, including drainage, streets and roads, police, parks & recreation, street lighting, sanitary sewer, water and other services. Fire services will continue to be provided by the CCCFPD.

Following annexation, the City will provide sewer collection, and DD will provide sewer treatment and disposal. The City will provide retail water, and Contra Costa Water District (CCWD) will provide wholesale water as summarized below.

**Drainage Services** – The City will provide drainage services to the subject area. Three storm drains are included in the preliminary grading plan for the project, with two large basins located on the east side of the main project site along Kirker Pass Road, and a third small basin located on the off-site parcel to the northwest of the main project site. The two large basins will serve 90 percent of the main project site, and the small basin will serve the western 10 percent of the project site. The cost associated with the drainage infrastructure will be borne by the developer; ongoing maintenance will be funded by the City, homeowners through a Community Facilities District (CFD) or other funding mechanism, and through local taxes.

*Streets and Roads* – The existing roadway network includes State Route 4, Kirker Pass Road, Railroad Avenue, Buchanan Road, Harbor Street, Loveridge Road, East Leland Road, Somersville Road, and James Donlon Boulevard. The most significant roadway improvements associated with the proposal include the proposed James Donlon Boulevard Extension, along with construction of interior roads and streets to serve the project and provide access to the local road network. The proposed project would add approximately 2.5 miles of public streets to the City's existing road inventory following annexation.

*Police Services* – Law enforcement services are currently provided to subject area by the Contra Costa County Sheriff's Department. Upon annexation, police services will be provided by the City, and the area will be detached from the County's police services district (CSA P-6).

The Pittsburg Police Department (PPD) operates from its headquarters located at 65 Civic Avenue, approximately 2.5 miles north of the project site. The PPD has an authorized staffing level of 81 sworn officers and 19 non-sworn employees. The City's General Plan policy establishes a goal of 1.8 sworn officers per 1,000 residents. Based on the City's current population, the current service ratio is 1.18 sworn officers per 1,000 residents. The City is

divided into six beats. The beat system is designed to assure rapid response to emergency calls within each beat. The City's goal is to maintain an 8-10 minute response time for Priority 1 calls, and under 30 minutes for priority non-emergency calls. Police response times are dependent on the agency's staffing level and size of the jurisdiction served. The PPD reports that the average response times in 2015 were 12 minutes (Priority 1 calls) and 25 minutes (non-emergency calls). The estimated population increase for the annexation area is approximately 1,225. The City's CEQA document indicates that while no new police facilities will be required to serve the annexation area, additional sworn police officers will be needed to serve the subject area. The City's standard conditions of approval require that the developer annex into the City's CFD for Public Safety Services. The CFD collected fees are intended to provide funding for police services in the annexation area.

*Parks & Recreation* – The City of Pittsburg has 24 City parks ranging from half-acre mini-parks to the 190-acre Stoneman Park. In addition, Pittsburg residents have access to trails and regional parks near the project site, including the Black Diamond Mines Regional Preserve. The City's General Plan Performance Standards provide a ratio of five acres of community and neighborhood parkland per 1,000 residents, and ensure that residential developers dedicate parkland in accordance with this standard.

The City operates a comprehensive recreation and leisure time program including aquatics, sports, leisure time activities, community events, Small World Park, Senior Center, youth activities, and excursions. The City also sponsors cultural events, festivals, concerts and art shows centered in Old Town.

The proposed development does not involve construction or expansion of neighborhood parks. The development agreement provides for partial fee credit for certain trails and trail improvements constructed by the developer, along with City park in lieu fees; payment to the EBRPD for the purpose of acquiring additional public open space and/or the maintenance of open space areas; and annexation into the City Park Maintenance CFD for ongoing landscape and related maintenance.

*Street Lighting* – The developer will use decorative street lighting within the subdivision, which will be designed to City standards. Ongoing maintenance will be the responsibility of the City and funded by homeowners through collection of local taxes and a Lighting and landscape District.

*Other Services* – The City provides a multitude of other services, including code enforcement, landscape maintenance, library, refuse collection and special services which will be extended to subject area following annexation.

*Fire Protection* – Fire and emergency medical services are, and will continue to be, provided by CCCFPD following annexation. Within the Pittsburg area, there are four fire stations: Station 84 located at 1903 Railroad Avenue and approximately 2.2 miles from the project site; Station 85 located at 2331 Loveridge Road and approximately 1.75 miles from the project site; and Station 86 located at 3000 Willow Pass Road and approximately 3.7 miles from the project site. Station 87 is currently closed.

The City's EIR finds that the proposed project would be located outside the 1.5-mile response radius of an existing or planned fire station, and would not meet the National Fire Protection Association response time guideline of 5 to 6 minutes 90 percent of the time. The City's EIR

includes a number of mitigation measures to address the concerns regarding fire service to the project site, including the following:

- required fire facility impact fee of \$591 per single-family unit (We understand that the CCCFPD receives nearly the full \$591, less a small City administrative fee; and that this is one-time and not ongoing funding)
- submittal of a fire protection plan that includes details for a fuel modification zone around the subdivision
- required use of fire resistant exterior building materials
- required fire-rated roof assembly of not less than a Class "A"
- minimum fire flow of 1,500 gallons per minute
- restrictions regarding flammable or combustible liquid storage tanks
- deed disclosures notifying all property owners/buyers of proximity of the subdivision to the closest fire station

Nonetheless, the EIR concludes that even with implementation of these mitigation measures, inadequate fire protection service is identified as a significant and unavoidable impact. The City adopted a Statement of Overriding Considerations, in which it concludes that specific economic, legal, social, technological, and other anticipated benefits of the project outweigh the unavoidable adverse impacts, and therefore justify the approval of the Montreux Residential Subdivision. Further, the City finds that the project will result in substantial benefits, which justify approval of the project, as summarized below:

- 1. The project would further Pittsburg General Plan goals and policies relating to Low Density Residential and new high-end single family residential neighborhoods in the southern hills;
- 2. The project would further Pittsburg Housing Element goals and policies;
- 3. The project would assist in meeting the City's current regional fair share housing obligations for the development of moderate and above moderate-income residents, including 35 income restricted accessory dwelling units;
- 4. The project would further orderly growth, in that the project site is adjacent to the existing City limits, within the City's SOI and ULL, and will result in a logical extension of urban development consistent with good zoning practice, while also limiting future development beyond the project's southern boundary; and
- 5. The project would provide short term and long term economic benefits. Short-term benefits include providing construction and other related interim jobs and services during the anticipated four-year construction period. Long-term economic benefits include providing executive level housing that may attract new employers to Pittsburg. The project will also generate new revenues for the city in the form of fees, exactions and other fiscal benefits.

*Fire service to the project site remains a concern for LAFCO*. In August 2016, Contra Costa LAFCO completed its 2<sup>nd</sup> round Municipal Service Review (MSR) covering Fire and Emergency Medical Services. The MSR report noted that fire service providers continue to face challenges, including the following:

Many fire service providers are unable to meet "best practices" for response times and staffing.

- In 2009, when LAFCO completed its 1<sup>st</sup> round MSR, and still today, fire agencies are unable to meet national and state guidelines for fire response times 90% of the time.
- Nearly half of the fire stations in the County are over 40 years old and a significant number are in poor condition, needing repair or replacement.
- Continued population growth, job creation, and changes in health care services affect the volume and location of service calls, creating the need for new facilities and staff resources in order to sustain services. While recovery in real estate and development has benefits, it also has costs in terms of increases in service demands.

Regarding financing, the 2016 MSR notes the following:

- Fire service providers rely primarily on property tax to fund services
- Fire districts face limited sources of revenue, including inability to charge for most services, low property tax shares as many agencies evolved from volunteer agencies, high insurance costs due to the risky nature of the profession, and significant pension liabilities from past underfunding
- The lack of requirements for special taxes from new development increases the burden on fire agencies to obtain a two-thirds special tax voter approval once an area is populated

Included in the Development Agreement (DA) between the City of Pittsburg and Altec Homes, Inc. (Montreux Property), there is a provision (Section 5.08) which provides that "In the event the City forms a City Community Facilities District (CFD) to provide for fire services in the City for the CCCFPD and acquisition or replacement of equipment primarily situated in the fire stations located in the City, Developer agrees to take all necessary steps necessary to include the Project Site into the district." The DA specifics that the levy to be assessed on each legal residential lot in the project area shall be no greater than \$75, and increased annually by the CPI for the San Francisco-Oakland area.

We understand that CCCFPD is engaged in conversation with the cities regarding the establishment of CFDs within the nine cities served by the District. Further, that CCCFPD and the City of Pittsburg are currently working together on a CFD.

In support of these efforts, the LAFCO staff recommendation includes a condition to address the impact of the proposed development on the CCCFPD.

*Sewer Services* – The City provides wastewater collection services, while DD provides conveyance, treatment and disposal services to the City. DD serves the cities of Antioch and Pittsburg and the unincorporated Bay Point community. DD serves 190,567 residents in a service area of 49+ square miles. DD has over 49 miles of sewer main and five pump stations.

The DD treatment plant has an average dry weather flow capacity of 19.5 million gallons per day (mgd). During the reporting period (2010), the average dry weather flow was 13.4 mgd. In 2012, 2013, and 2014, the average dry weather flows at the plant were 13.2, 13.1 and 12.5 mgd, respectively.

The subject area is located in Zone 2 of DD's service area. DD estimates that the proposed 351unit residential subdivision will generate approximately 77,000 gpd of wastewater discharge. The City's Plan for Service includes details regarding the City's wastewater system, the infrastructure needed to serve the proposed project, and the method to finance wastewater service to the subject area. DD has provided a "will serve" letter agreeing to serve the project area.

#### 8. **Timely Availability of Water and Related Issues:**

Pursuant to the CKH, LAFCO must consider the timely and available supply of water in conjunction with a boundary change proposal. Contra Costa LAFCO policies state that any proposal for a change of organization that includes the provision of water service shall include information relating to water supply, storage, treatment, distribution, and waste recovery; as well as adequacy of services, facilities, and improvements to be provided and financed by the agency responsible for the provision of such services, facilities and improvements.

The City of Pittsburg is a retail water purveyor that obtains the majority of its potable water supply under a wholesale contract with CCWD. This water is diverted as raw water from CCWD's Contra Costa Canal. The remainder of the potable water supply is obtained from the City's two groundwater wells. In 2015, 87% of the City's potable supply was provided by CCWD and 13% was from local groundwater wells.

Raw water from the canal and the groundwater wells is treated at the Pittsburg Water Treatment Plant before distribution throughout the City's service area. The service area is bounded by the City limits, which is currently  $15.49 \pm$  square miles.

Service area population has shown steady growth over the last 20 years, but its future growth rate will be limited by available open and developable land. The City's 2015 population was estimated at 67,628 (DOF, 2015) and is projected to grow to 91,600 by 2040 (Pittsburg, City of Pittsburg 2015-2023 Housing Element, 2015).

According to the City's 2015 Urban Water Management Plan (UWMP), the City's potable water use for 2015 was 8,772 acre-feet per year (AFY), more than 7% lower than the projected water use from the 2010 UWMP. It is anticipated that the City's initiatives in decreasing water use to meet urban water use targets, as well as the State-mandated drought restrictions, have been the biggest factors leading to this lower than previously anticipated water use.

CCWD's boundary encompasses  $220\pm$  square miles in central and eastern Contra Costa County. CCWD's untreated water service area includes Antioch, Bay Point, Oakley, Pittsburg, and portions of Brentwood and Martinez. The District's treated water service area includes Clayton, Clyde, Concord, Pacheco, Port Costa, and parts of Martinez, Pleasant Hill, and Walnut Creek. CCWD also treats and delivers water to the City of Brentwood, Golden State Water Company (Bay Point), Diablo Water District (Oakley), and the City of Antioch. CCWD serves approximately 500,000 (61,085 water connections). The primary sources of water are the U.S. Bureau of Reclamation (USBR) Central Valley Water Project and delta diversions. One of CCWD's prerequisites for service, including annexation, is inclusion in the Central Valley Project (CVP) Service Area. The CVP inclusion review is a separate process, and requires specific environmental documents. The City, the developer and CCWD will work together to complete the CVP process.

The City's Plan for Services provides details regarding the City's water system, the water supply infrastructure needed to serve the proposed project, the water sources, and the method to finance water service to the subject area. CCWD estimates that the Montreux development, once fully developed, will utilize up to 175 AFY of treated water. CCWD indicates that based on the

District's most recent Future Water Supply Study and UWMP, CCWD has sufficient supplies to serve the proposed project.

#### 9. Assessed Value, Tax Rates and Indebtedness:

The annexation area is within tax rate area 86010. The assessed value for the annexation area is \$946,217 (2015-16 roll). The territory being annexed shall be liable for all authorized or existing taxes and bonded debt comparable to properties presently within the annexing agencies.

The City and the County have agreed to use the Master Property Tax Transfer Agreement for the proposed reorganization.

#### **10. Environmental Impact of the Proposal:**

In November 2013, the City of Pittsburg, as Lead Agency, released for public review the Draft Environmental Impact Report (EIR) for the Montreux Residential Subdivision. In December 2014, the City released Recirculated Sections of the 2013 Draft EIR (i.e., relating to impacts on biological resources that the City determined were deficient in the original Draft EIR). On August 17, 2015, the City of Pittsburg, as Lead Agency, certified the EIR for the project; and on November 2, 2015, the City approved CEQA Findings, adopted a Statement of Overriding Considerations, and adopted a MMRP for the project. The EIR found that there were significant and unavoidable impacts relating to Aesthetics, Air Quality and Public Services (fire). Further, the EIR found that while there is no impact to agricultural land based on the Farmland Mapping and Monitoring Program, there is an impact to Prime Agricultural Land as defined in the CKH. Copies of the City's environmental documents were previously provided to the Commissioners and are available for review in the LAFCO office.

LAFCO staff provided comment letters to the City in response to the various CEQA documents. In our letters, we provided questions and comments covering various issues, including impacts to agricultural land (based on LAFCO's definition) and to fire service, noting that the provision of fire service to the proposed development remains a concern to LAFCO. The recommended option to approve the proposed reorganization includes LAFCO terms and conditions to address these issues.

#### 11. Landowner Consent and Consent by Annexing Agency:

According to County Elections, there are fewer than 12 registered voters in the area proposed for annexation; thus, the area proposed for annexation is considered uninhabited.

The City indicates that 100% of the affected landowners have provided written consent to the annexation. Thus, if the Commission approves the annexation, the Commission may waive the protest hearing (Gov. Code §56662). All landowners and registered voters within the proposal area(s) and within 300 feet of the exterior boundaries of the area(s) have received notice of the September 14, 2016 hearing.

#### 12. Boundaries and Lines of Assessment:

The annexation area is within the SOIs of the City of Pittsburg, CCWD and DD and is contiguous to the city and district service boundaries. A corresponding detachment from CSA P-6 of the same area is also proposed. A map and legal description to implement the proposed boundary changes have been received and are subject to final approval by the County Surveyor.

#### **13.** Environmental Justice:

LAFCO is required to consider the extent to which proposals for changes of organization or reorganization will promote environmental justice. As defined by statute, "environmental justice" means the fair treatment of people of all races, cultures, and incomes with respect to the location of public facilities and the provision of public services. The proposed annexation is not expected to promote or discourage the fair treatment of minority or economically disadvantaged groups.

#### 14. Disadvantaged Communities:

In accordance with recent legislation (SB 244), local agencies and LAFCOs are required to plan for disadvantaged unincorporated communities (DUCs). Many of these communities lack basic infrastructure, including streets, sidewalks, storm drainage, clean drinking water, and adequate sewer service. LAFCO actions relating to Municipal Service Reviews, SOI reviews/ amendments, and annexations must take into consideration DUCs, and specifically the adequacy of public services, including sewer, water, and fire protection needs or deficiencies, to these communities. According to the County's Department of Conservation and Development, the annexation area does not meet the criteria of a DUC.

#### 15. Comments from Affected Agencies/Other Interested Parties:

On September 7, 2016, Contra Costa LAFCO received a letter from Save Mount Diablo (SMD) stating their opposition to the Montreux Residential Subdivision Project, and asking that LAFCO deny the proposal for reasons numerous outlined in their comment letters (available on the LAFCO website), including that the project violates California planning and zoning law and the Subdivision Map Act, and that the project EIR is inadequate under CEQA. Further, SMD notes an inconsistency in the project EIR as it concludes that there is an impact to prime agricultural land based on LAFCO's definition; however, the Final EIR contains no section on Agriculture and no agriculture impact analysis.

SMD also indicates that if LAFCO is inclined to approve the proposal, it should defer recording the annexation until there is assurance that the full  $78.2\pm$  acres of open space are permanently protected.

#### 16. Regional Transportation and Regional Growth Plans:

In its review of a proposal, LAFCO shall consider a regional transportation plan adopted pursuant to Section 65080 [Gov. Code section 56668(g)]. Further, the commission may consider the regional growth goals and policies established by a collaboration of elected officials only, formally representing their local jurisdictions in an official capacity on a regional or subregional basis (Gov. Code section 56668.5).

Regarding these sections, LAFCO looks at consistency of the proposal with the regional transportation and other regional plans affecting the Bay Area.

SB 375, a landmark state law, requires California's regions to adopt plans and policies to reduce the generation of greenhouse gases (GHG), primarily from transportation. To implement SB 375, in July 2013, ABAG and the Metropolitan Transportation Commission (MTC) adopted Plan Bay Area as the "Regional Transportation Plan and Sustainable Communities Strategy" for the San Francisco Bay Area through 2040. Plan Bay Area focuses on where the region is expected to grow and how development patterns and the transportation network can work together to reduce GHG emissions. The Plan's key goals are to reduce GHG emissions by specified amounts; and to plan sufficient housing for the region's projected population over the next 25 years.

The Plan Bay Area directs future development to infill areas within the existing urban footprint and focuses the majority of growth in self-identified Priority Development Areas (PDAs). PDAs include infill areas that are served by transit and are located close to other amenities, allowing for improved transit, bicycle and pedestrian access thereby reducing the amount of transportation related GHG generated. Plan Bay Area supports infill development in established communities and protects agricultural and open space lands. The Plan assumes that all urban growth boundaries are held fixed through the year 2040 and no sprawl-style development is expected to occur on the regions' open space or agricultural lands.

Plan Bay Area includes projections for the region's population, housing and job growth and indicates that the region has the capacity to accommodate expected growth over the next 25 years without sprawling further into undeveloped land on the urban fringe.

ABAG and MTC are in the process of updating the Plan Bay Area. "Plan Bay Area 2040" is currently a work in progress that will be updated every four years to reflect new priorities. Recently, a series of public open houses were held to present "Alternative Scenarios" which show different options for how the Bay Area can grow based on local land use development patterns and transportation investment strategies. These scenarios take into consideration jobs, housing, population, travel needs and funding for Transportation Improvements. Three scenarios were presented (i.e., Main Street, Connected Neighborhood, Big Cities), each showing a different combination of housing development, commercial growth and transportation investments. Based on public input and feedback from local jurisdictions, a "preferred scenario" will be constructed from these three alternatives.

The draft preferred scenario will go through a series of committee reviews and refinement. In September 2016, ABAG and MTC will be asked to adopt the final preferred scenario at a joint meeting. All of this work, in turn, will form the foundation for Plan Bay Area 2040, to be adopted in summer 2017.

The 2013 Plan Bay Area "aims to protect open space and agricultural land by directing 100 percent of the region's growth inside the year 2010 urban footprint, which means that all growth occurs as infill development or within established urban growth boundaries or urban limit lines. As the plan assumes that all urban growth boundaries/urban limit lines are held fixed through the year 2040, no sprawl-style development is expected to occur on the region's scenic or agricultural lands."

As noted above, a Land Conservation Agreement (Williamson Act Contract) previously existed on the site, and expired in January 2016. The project site is currently used for grazing, and qualifies as "Prime Agricultural Land" as defined in the CKH. Consequently, the project will result in the conversion of prime agricultural land to an urban use, with no specific mitigations measures to address the impacts to Prime Agricultural Land.

The proposed Montreux residential subdivision is within the City's ULL, and is not designated as a "Priority Conservation Area" or a "Priority Development Area." This proposal does not focus growth within the urbanized area of the City. To the contrary, it extends the urban footprint into an undeveloped area, predominately used for grazing. Further, the project area has minimal access to the local or regional transit network. As such, this proposal would not appear to minimize GHG emissions. The goals and strategies contained in Plan Bay Area encourage compact development in existing downtowns, main streets and neighborhoods with transit access, and discourage urban edge development in open space and/or agricultural lands. *It is debatable whether the Montreux project is consistent with Plan Bay Area.* 

#### ALTERNATIVES FOR COMMISSION ACTION

After consideration of this report and any testimony or additional materials that are submitted the Commission should consider taking one of the following actions:

#### **<u>Option 1</u>** Approve the reorganization.

- A. Find that, as a Responsible Agency under CEQA, the Commission has reviewed and considered the information contained in the Montreux Residential Subdivision EIR as certified by the City of Pittsburg on August 17, 2015 (Resolution No. 15-13097), and in the City's CEQA Findings, Statement of Overriding Considerations, and MMRP for the Montreux Residential Subdivision as certified by the City of Pittsburg on November 2, 2015 (Resolution No. 15-13123).
- B. Adopt this report, approve LAFCO Resolution No. 16-05 (Attachment 2), and approve the proposal, to be known as the Montreux Residential Subdivision Boundary Reorganization: Annexations to the City of Pittsburg, Contra Costa Water District and Delta Diablo Zone 2 and Detachment from County Service Area P-6 subject to the following terms and conditions:
  - 1. The territory being annexed shall be liable for the continuation of any authorized or existing special taxes, assessments and charges comparable to properties presently within the annexing agencies.
  - 2. The City of Pittsburg has delivered an executed indemnification agreement providing for the City to indemnify LAFCO against any expenses arising from any legal actions challenging the annexation.
  - 3. Water service is conditional upon CCWD receiving acceptance for inclusion of the annexed area from the USBR, pursuant to the requirements in CCWD's contract with USBR for supplemental water supply from the CVP.
  - 4. Prior to LAFCO issuing a Certificate of Completion, a Community Facilities District (CFD) bond or similar revenue instrument shall be passed by the property owners and/or voters of the area proposed for annexation. The financing shall be used to support additional fire and ambulance services to the area proposed for annexation. The City of Pittsburg, CCCFPD, and the developer shall work together to develop and implement a CFD or similar revenue instrument.
  - 5. The recordation of LAFCO's Certificate of Completion is conditioned on the City providing LAFCO with a certified copy of a recorded grant deed of development rights, from the developer to the City, that restricts development on the 43.4+ acres designated as Open Space, and remains in effect until the 43.4+ acres are permanently preserved as a greenbelt buffer, in accordance with the City of Pittsburg's General Plan Policy 2-P-73 and Mitigation Measure LUP-1, through the recordation of an easement, a deed restriction, or other instrument or mechanism approved by the City.

- C. Find that the subject territory is uninhabited, the proposal has 100% landowner consent, and the conducting authority (protest) proceedings are hereby waived.
- **<u>Option 2</u>** Accept this report and DENY the proposal.

**Option 3** If the Commission needs more information, CONTINUE this matter to a future meeting.

**RECOMMENDED ACTION:** 

#### **Approve Option 1.**

### LOU ANN TEXEIRA, EXECUTIVE OFFICER CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION

Attachments

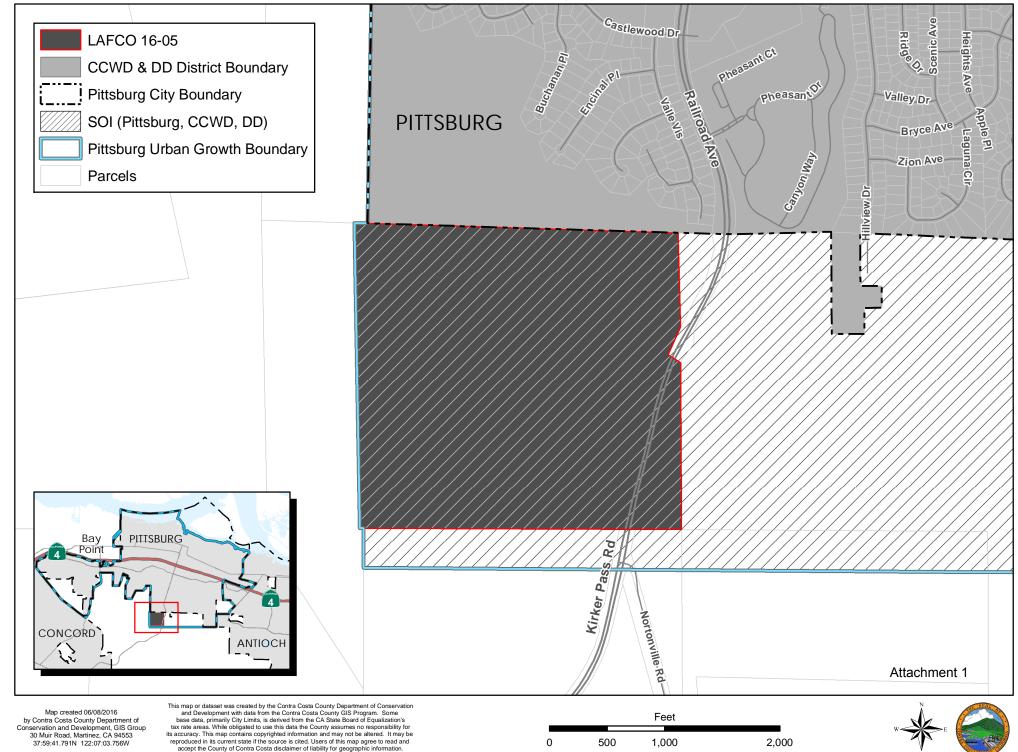
1 – Montreux Residential Subdivision Boundary Reorganization Map

2 - Letter dated September 7, 2016 from Save Mount Diablo

3 - Draft LAFCO Resolution 16-05

c: Distribution

LAFCO No.16-05 - Montreux Reorganization: Annexations to City of Pittsburg, Contra Costa Water District (CCWD) and Delta Diablo (DD) Zone 2; Detachment from CSA P-6





Board of Directors Scott Hein

President

Amara Morrison *Secretary* 

Burt Bassler *Treasurer* 

Heath Bartosh Joe Canciamilla John Gallagher Liz Harvey Claudia Hein Bob Marx Sue Ohanian Malcolm Sproul Jeff Stone *Directors* 

#### **Staff Directors**

Edward Sortwell Clement Jr. *Executive Director* Seth Adams *Land Conservation Director* 

Meredith Hendricks Land Programs Director

Monica E. Oei *Finance & Administration Director* 

Deborah Toll White Development Director

Founders

Arthur Bonwell Mary L. Bowerman

**Proud Member of** 

Land Trust Alliance California Council of Land Trusts Bay Area Open Space Council



September 7<sup>th</sup>, 2016

Supervisory Mary Piepho LAFCO Chair 651 Pine St., 6<sup>th</sup> Floor Martinez, CA

### **RE:** Comments on the Contra Costa Local Agency Formation Commission (LAFCO) Annexation Request for the Proposed Montreux Residential Subdivision

Dear Supervisor Piepho,

Save Mount Diablo (SMD) is a non-profit conservation organization founded in 1971 which acquires land for addition to parks on and around Mount Diablo and monitors land use planning which might affect protected lands. We build trails, restore habitat, and are involved in environmental education. In 1971 there was just one park on Mount Diablo totaling 6,778 acres; today there are almost 50 parks and preserves around Mount Diablo totaling 110,000 acres. We include more than 8,000 donors and supporters.

We are writing this letter to state our opposition to the Montreux Residential Subdivision (Project) annexation request. We believe that LAFCO should deny this application request due to the numerous reasons that we and our legal representation have cited in previous comment letters (attached here as appendices). These letters show in great detail that the Project violates California planning and zoning law as well as the Subdivision Map Act, and that the Project Environmental Impact Report (EIR) is inadequate under the California Environmental Quality Act.

However, if LAFCO does decide to approve the Project annexation, it should, at the least, withhold recordation of the annexation until after mitigation for Project impacts has been secured in the form of a binding easement that will permanently protect the 78.2 acres of open space detailed in the annexation application. The applicant currently proposes the permanent protection via deed restriction of only the 42 acre so-called "greenwall" portion of the Project site. Given that 77 acres of agricultural land used to graze cattle will be lost to development if this annexation request is approved, a larger mitigation requirement is appropriate.

There is an important inconsistency with regard to agricultural impacts between the Project EIR documents and the annexation application materials. The Project's final EIR states in the last sentence of the first paragraph on page 2.0-4 that, "As the project site is currently used for grazing, it does meet the definition of prime agricultural land under this definition." [Gov. Code section 56064]. However, there is no agricultural impact section in the EIR and the Project annexation application materials repeatedly state that there are no impacts to agricultural land.



Attachment 2

Since both the EIR and annexation application materials recognize that the area proposed for annexation is currently grazed by cattle, and until very recently was protected under Williamson Act contract, we submit that this area qualifies as agricultural land and is worthy of mitigation from Project impacts.

The annexation application for the Project states that 351 single-family houses will be constructed on approximately 77 acres and that an additional 78.2 acres will be set aside for open space. However, no easement is proposed to protect these 78.2 acres. The only proposed protection is a recordation of a deed restriction over 42 acres of proposed open space on the southern side of the property, the proposed "greenwall." If 77 acres will be developed, the proposed protection of 42 acres on the south side of the main Project site is both weak and inadequate.

The Project proponent has proposed to protect areas as open space several times in the past, only to come back some time in the future and seek to develop these same areas. A clear example of this is the Pointe project in Antioch, since renamed Black Diamond Ranch Unit 4.

Given the proponent's record of developing areas formerly identified as protected or as "open space", the significant disparity between the acreage of the Project to be developed and the area currently proposed for protection, and the stated intention that 78.2 acres of the Project site serve as open space, it is appropriate and fully within LAFCO's power to require a binding conservation easement be placed over the entire 78.2 acres that would not be developed as part of the Project before recordation of the annexation, in order to ensure the permanent protection of this land.

We encourage LAFCO to deny this annexation request, but if LAFCO decides to approve, we strongly encourage it to withhold recordation of the annexation until after binding mitigation for Project impacts has been secured in the form of a permanent conservation easement over the 78.2 acres of the Project area that would not be developed.

Appendices:

- Appendix A SMD Comments on Montreux final EIR; August 14<sup>th</sup> 2015
- Appendix B Shute, Mihaly and Weinberger Comments on Montreux recirculated draft EIR; February 6<sup>th</sup> 2015
- Appendix C Shute, Mihaly and Weinberger Comments on Montreux draft EIR; January 10<sup>th</sup> 2014
- Appendix D SMD Comments on Montreux draft EIR; January 9th 2015
- Appendix E SMD Comments on Montreux Notice of Preparation; April 29th 2013

Sincerely,

Juan Pablo Galván Save Mount Diablo

CC: Meredith Hendricks, Save Mount Diablo Seth Adams, Save Mount Diablo Ted Clement, Save Mount Diablo Joel Devalcourt, Greenbelt Alliance Brian Holt, East Bay Regional Park District

#### **RESOLUTION NO. 16-05**

#### RESOLUTION OF THE CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION MAKING DETERMINATIONS AND APPROVING MONTREUX RESIDENTIAL SUBDIVISION REORGANIZATION: ANNEXATIONS TO THE CITY OF PITTSBURG, CONTRA COSTA WATER DISTRICT AND DELTA DIABLO ZONE 2, AND DETACHMENT FROM COUNTY SERVICE AREA P-6

WHEREAS, the Montreux Residential Subdivision Boundary Reorganization proposal has been filed with the Executive Officer of the Contra Costa Local Agency Formation Commission pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act (Government Code §56000 et seq.); and

WHEREAS, at the time and in the manner required by law the Executive Officer has given notice of the Commission's consideration of the Montreux Residential Subdivision Boundary Reorganization proposal; and

WHEREAS, the Commission held a public hearing on September 14, 2016 on the Montreux Residential Subdivision Boundary Reorganization proposal; and

WHEREAS, the Commission heard, discussed and considered all oral and written testimony related to this proposal including, but not limited to, the Executive Officer's report and recommendation, the environmental documents and determinations, Spheres of Influence and applicable General and Specific Plans; and

WHEREAS, no subsequent change may be made to the general plan or zoning for the annexed territory that is not in conformance to the prezoning designations for a period of two years after the completion of the annexation, unless the legislative body for the city makes a finding at a public hearing that a substantial change has occurred in circumstances that necessitate a departure from the prezoning in the application to the Commission [Government Code §56375(e)];

NOW, THEREFORE, the Contra Costa Local Agency Formation Commission DOES HEREBY RESOLVE, DETERMINE AND ORDER as follows:

- 1. Find that, as a Responsible Agency under CEQA, the Commission has reviewed and considered the information contained in the Montreux Residential Subdivision EIR as certified by the City of Pittsburg on August 17, 2015 (Resolution No. 15-13097), and in the City's CEQA Findings, Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program for the Montreux Residential Subdivision as certified by the City of Pittsburg on November 2, 2015 (Resolution No. 15-13123).
- 2. Said reorganization is hereby approved.
- 3. The subject proposal is assigned the distinctive short-form designation:

MONTREUX RESIDENTIAL SUBDIVISION BOUNDARY REORGANIZATION: ANNEXATIONS TO THE CITY OF PITTSBURG, CONTRA COSTA WATER DISTRICT AND DELTA DIABLO ZONE 2, AND DETACHMENT FROM COUNTY SERVICE AREA P-6

- 4. The boundaries of the affected territory are found to be definite and certain as approved and set forth in Exhibit A, attached hereto and made a part hereof.
- 5. Approval of the Montreux Residential Subdivision Boundary Reorganization Annexations to the City of Pittsburg, Contra Costa Water District and Delta Diablo Zone 2, and detachment from County Service Area P-6 is subject to the following:

- a. The territory being annexed shall be liable for the continuation of any authorized or existing special taxes, assessments and charges comparable to properties presently within the annexing agency.
- b. The City of Pittsburg has delivered an executed indemnification agreement between the City and Contra Costa LAFCO providing for the City to indemnify LAFCO against any expenses arising from any legal actions challenging the Montreux Residential Subdivision Reorganization.
- c. Water service is conditional upon CCWD receiving acceptance for inclusion of the annexed area from the USBR, pursuant to the requirements in CCWD's contract with USBR for supplemental water supply from the CVP.
- d. Prior to LAFCO issuing a Certificate of Completion, a Community Facilities District (CFD) bond or similar revenue instrument shall be passed by the property owners and/or voters of the area proposed for annexation. The financing shall be used to support additional fire and ambulance services to the area proposed for annexation. The City of Pittsburg, CCCFPD, and the developer shall work together to develop and implement a CFD or similar revenue instrument.
- e. The recordation of LAFCO's Certificate of Completion is conditioned on the City providing LAFCO with a certified copy of a recorded grant deed of development rights, from the developer to the City, that restricts development on the 43.4+ acres designated as Open Space, and remains in effect until the 43.4+ acres are permanently preserved as a greenbelt buffer, in accordance with the City of Pittsburg's General Plan Policy 2-P-73 and Mitigation Measure LUP-1, through the recordation of an easement, a deed restriction, or other instrument or mechanism approved by the City.
- 6. The territory proposed for reorganization is uninhabited, the proposal has 100% landowner consent, and the conducting authority (protest) proceedings are hereby waived.
- 7. All subsequent proceedings in connection with the Montreux Residential Subdivision Boundary Reorganization shall be conducted only in compliance with the approved boundaries set forth in the attachments and any terms and conditions specified in this resolution.

PASSED AND ADOPTED THIS 14<sup>th</sup> day of September 2016, by the following vote:

AYES: NOES: ABSTENTIONS:

ABSENT:

#### MARY N. PIEPHO, CHAIR, CONTRA COSTA LAFCO

I hereby certify that this is a correct copy of a resolution passed and adopted by this Commission on the date stated.

Dated: September 14, 2016



**Board of Directors** Scott Hein

President

Amara Morrison *Secretary* 

Burt Bassler *Treasurer* 

Heath Bartosh Joe Canciamilla John Gallagher Liz Harvey Claudia Hein Bob Marx Sue Ohanian Malcolm Sproul Jeff Stone *Directors* 

#### **Staff Directors**

Edward Sortwell Clement Jr. *Executive Director* Seth Adams *Land Conservation Director* 

Meredith Hendricks Land Programs Director

Monica E. Oei *Finance & Administration Director* 

Deborah Toll White Development Director

Founders

Arthur Bonwell Mary L. Bowerman

**Proud Member of** 

Land Trust Alliance California Council of Land Trusts Bay Area Open Space Council



September 7<sup>th</sup>, 2016

Supervisory Mary Piepho LAFCO Chair 651 Pine St., 6<sup>th</sup> Floor Martinez, CA

### **RE:** Comments on the Contra Costa Local Agency Formation Commission (LAFCO) Annexation Request for the Proposed Montreux Residential Subdivision

Dear Supervisor Piepho,

Save Mount Diablo (SMD) is a non-profit conservation organization founded in 1971 which acquires land for addition to parks on and around Mount Diablo and monitors land use planning which might affect protected lands. We build trails, restore habitat, and are involved in environmental education. In 1971 there was just one park on Mount Diablo totaling 6,778 acres; today there are almost 50 parks and preserves around Mount Diablo totaling 110,000 acres. We include more than 8,000 donors and supporters.

We are writing this letter to state our opposition to the Montreux Residential Subdivision (Project) annexation request. We believe that LAFCO should deny this application request due to the numerous reasons that we and our legal representation have cited in previous comment letters (attached here as appendices). These letters show in great detail that the Project violates California planning and zoning law as well as the Subdivision Map Act, and that the Project Environmental Impact Report (EIR) is inadequate under the California Environmental Quality Act.

However, if LAFCO does decide to approve the Project annexation, it should, at the least, withhold recordation of the annexation until after mitigation for Project impacts has been secured in the form of a binding easement that will permanently protect the 78.2 acres of open space detailed in the annexation application. The applicant currently proposes the permanent protection via deed restriction of only the 42 acre so-called "greenwall" portion of the Project site. Given that 77 acres of agricultural land used to graze cattle will be lost to development if this annexation request is approved, a larger mitigation requirement is appropriate.

There is an important inconsistency with regard to agricultural impacts between the Project EIR documents and the annexation application materials. The Project's final EIR states in the last sentence of the first paragraph on page 2.0-4 that, "As the project site is currently used for grazing, it does meet the definition of prime agricultural land under this definition." [Gov. Code section 56064]. However, there is no agricultural impact section in the EIR and the Project annexation application materials repeatedly state that there are no impacts to agricultural land.



Since both the EIR and annexation application materials recognize that the area proposed for annexation is currently grazed by cattle, and until very recently was protected under Williamson Act contract, we submit that this area qualifies as agricultural land and is worthy of mitigation from Project impacts.

The annexation application for the Project states that 351 single-family houses will be constructed on approximately 77 acres and that an additional 78.2 acres will be set aside for open space. However, no easement is proposed to protect these 78.2 acres. The only proposed protection is a recordation of a deed restriction over 42 acres of proposed open space on the southern side of the property, the proposed "greenwall." If 77 acres will be developed, the proposed protection of 42 acres on the south side of the main Project site is both weak and inadequate.

The Project proponent has proposed to protect areas as open space several times in the past, only to come back some time in the future and seek to develop these same areas. A clear example of this is the Pointe project in Antioch, since renamed Black Diamond Ranch Unit 4.

Given the proponent's record of developing areas formerly identified as protected or as "open space", the significant disparity between the acreage of the Project to be developed and the area currently proposed for protection, and the stated intention that 78.2 acres of the Project site serve as open space, it is appropriate and fully within LAFCO's power to require a binding conservation easement be placed over the entire 78.2 acres that would not be developed as part of the Project before recordation of the annexation, in order to ensure the permanent protection of this land.

We encourage LAFCO to deny this annexation request, but if LAFCO decides to approve, we strongly encourage it to withhold recordation of the annexation until after binding mitigation for Project impacts has been secured in the form of a permanent conservation easement over the 78.2 acres of the Project area that would not be developed.

Appendices:

- Appendix A SMD Comments on Montreux final EIR; August 14<sup>th</sup> 2015
- Appendix B Shute, Mihaly and Weinberger Comments on Montreux recirculated draft EIR; February 6<sup>th</sup> 2015
- Appendix C Shute, Mihaly and Weinberger Comments on Montreux draft EIR; January 10<sup>th</sup> 2014
- Appendix D SMD Comments on Montreux draft EIR; January 9th 2015
- Appendix E SMD Comments on Montreux Notice of Preparation; April 29th 2013

Sincerely,

Juan Pablo Galván Save Mount Diablo

CC: Meredith Hendricks, Save Mount Diablo Seth Adams, Save Mount Diablo Ted Clement, Save Mount Diablo Joel Devalcourt, Greenbelt Alliance Brian Holt, East Bay Regional Park District





August 14<sup>th</sup>, 2015

**Board of Directors** 

Scott Hein *President* 

Amara Morrison *Secretary* 

Burt Bassler *Treasurer* 

Heath Bartosh Joe Canciamilla John Gallagher Claudia Hein Scott Hein Gary Johnson Frank Martens Doug Knauer Sue Ohanian Marty Reed Malcolm Sproul *Directors* 

#### **Staff Directors**

Ronald Brown Executive Director

Seth Adams Land Conservation Director

Monica E. Oei *Events & Volunteers Director* 

Meredith Hendricks Land Programs Director

Doug Jalen *Finance & Administration Director* 

**Founders** Arthur Bonwell Mary L. Bowerman

Proud Member of Land Trust Alliance California Council of Land Trusts

Bay Area Open Space Council

Kristin Pollot Planning Manager Community Development Department – Planning Division 65 Civic Av. Pittsburg, CA 94565

# **RE:** Comments on the Final Environmental Impact Report (fEIR) for the Proposed Montreux Residential Subdivision – SCH # 2013032079

Dear Ms. Pollot,

Save Mount Diablo (SMD) is a non-profit conservation organization founded in 1971 which acquires land for addition to parks on and around Mount Diablo and monitors land use planning which might affect protected lands. We build trails, restore habitat, and are involved in environmental education. In 1971 there was just one park on Mount Diablo totaling 6,778 acres; today there are almost 50 parks and preserves around Mount Diablo totaling 110,000 acres. We include more than 8,000 donors and supporters.

We appreciate the opportunity to submit comments on the fEIR for the Montreux Residential Subdivision (Project), proposed by Altec Homes Inc. and Seecon Financial Inc. (Applicants). The Project would entail, among other things, construction of 356 singlefamily houses, annexation of approximately 165 acres into the City of Pittsburg (City) and massive grading of a valley floor and the grading of two ridges.

Our review of the fEIR confirms that many of the inadequacies of the previous two EIR documents (the draft EIR (dEIR) and recirculated draft EIR (rdEIR) remain unresolved.

For example, visual simulations of the Project from Black Diamond Mines Regional Preserve that were requested in previous comment letters submitted by SMD and Shute, Mihaly and Weinberger on behalf of SMD were not included. Therefore, the aesthetic impacts of the Project that will be apparent from a highly popular recreation area remain unanalyzed.

In addition, throughout the fEIR's discussion of the supposed adherence of the Project to the goals and policies of the City's General Plan, the explanations provided resort to literal word-by-word interpretations of key policy elements in order to dismiss commenter's concerns over the Project's agreement with the General Plan.



One clear example is the fEIR's assertion that the "encouragement" of certain project design elements in the General Plan, such as those related to clustering, shared driveways, and placement of houses in locations that would minimize the need for grading, does not conflict with the Project designs because the General Plan does not "require" such design elements.

If the General Plan only encourages Projects to follow certain guidelines, without stating such guidelines are formal requirements, then there is no conflict even if the Project runs entirely counter to what the General Plan encourages. Such reasoning is the definition of using the literal interpretation of the words in the City's "constitution for development" in order to escape its intent.

Another example which is repeatedly encouraged in the General Plan is the concept of "clustering". The fEIR correctly points out that no definition of clustering exists in the General Plan. Which is exactly why the comment letters submitted include visual graphics from the General Plan and Project site plan to allow a direct comparison of the type of development the Project proposes and what the General Plan aims for in development in the City's southern hills.

The fEIR maintains that mass grading of the valley in the Project site and placement of the housing units throughout the valley is clustering because the ridges to the north and south of the Project remain open space. This is like saying that the suburban development that characterizes the whole of east and central Contra Costa County is clustered because it is concentrated in valleys and leaves steep highlands intact. Such obfuscation of scale renders the intent of the policies of the General Plan meaningless.

With regard to biological impacts, mitigation, and the inadequacy of the analyses carried out for the Project thus far, we refer to the comments on the rdEIR that have previously been submitted.

The Project remains inconsistent with the City's General Plan and would lead to numerous significant and unmitigated environmental impacts. Despite the explanations provided in the fEIR, the City's environmental review remains deficient and inadequate under CEQA. As a result, we strongly encourage the City to deny certification of the Project fEIR.

Thank you for the opportunity to provide comments.

Sincerely, Juan Pablo Galván Land Use Planner

Cc: Meredith Hendricks, Save Mount Diablo Seth Adams, Save Mount Diablo Ron Brown, Save Mount Diablo Joel Devalcourt, Greenbelt Alliance





396 HAYES STREET, SAN FRANCISCO, CA 94102 T: (415) 552-7272 F: (415) 552-5816 www.smwlaw.com WINTER KING Attorney king@smwlaw.com

February 6, 2015

#### Via E-Mail and U.S. Mail

Kristin Pollot Associate Planner City of Pittsburg, Planning Department 65 Civic Avenue Pittsburg, CA 94565

E-Mail: kpollot@ci.pittsburg.ca.us

#### Re: <u>Montreux Residential Subdivision and Recirculated Draft</u> Environmental Impact Report

Dear Ms. Pollot:

On behalf of Save Mount Diablo ("SMD"), we have reviewed the City of Pittsburg's December 2014 Recirculated Draft Environmental Impact Report ("RDEIR") for the proposed Montreux Residential Subdivision Project ("Project"). Our firm submitted extensive comments on the 2013 DEIR for the Project. The City subsequently revised the DEIR with respect to the Project's impacts on biological resources only. We submit this letter to reiterate our earlier, unaddressed comments and to provide additional, new comments on the revised portions of the RDEIR. The RDEIR continues to violate the California Environmental Quality Act ("CEQA") and the CEQA Guidelines for the reasons stated below.

#### BACKGROUND

After receiving new information on biological resources in response to its November 2013 DEIR, the City decided to revise and recirculate the document pursuant to the CEQA Guidelines. *See* CEQA Guidelines § 15088.5. The City made the RDEIR available for public comment in December 2014, and explicitly limited the scope of the RDEIR to "only those sections of the previously circulated Draft EIR that have been affected by the additional information related to biological resources." RDEIR at 1.0-2. The City also asked that reviewers submit new comments "related to the revised

information on biological resources . . . only." *Id.* Comments on the DEIR that were not addressed in the RDEIR would be responded to in the Final EIR, according to the City. *Id.* 

It is unclear to us why the City took the time and energy to develop an RDEIR but failed to address most of the DEIR's inadequacies. As described in our previous comment letter (attached here), the DEIR lacked basic information regarding the Project description, elements of the development agreement, impacts to aesthetic, historic, and hydrologic resources, and the Project's public services, public safety, and growth inducing effects.

Even the revised portions of the EIR remain deficient. The Project's anticipated impacts to biological resources are a manifest violation of the City's General Plan, and the RDEIR takes a blinkered approach to its analysis of those resources. It plays down the Project area's recognized sensitivity and understates its importance as habitat for endangered, threatened, and sensitive species. The RDEIR fails to analyze the cumulative impacts of nearby and anticipated future development projects on these resources.

These flaws render the RDEIR inadequate. CEQA requires that an EIR provide the analysis and detail about environmental impacts that is necessary to enable decision-makers to make intelligent decisions in light of the environmental consequences of their actions. See CEQA Guidelines § 15151; King County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692. The EIR is also the "primary means" of ensuring that public agencies "take all action necessary to protect, rehabilitate, and enhance" the environment. Laurel Heights Improvement Ass'n v. Regents of the University of California (1988) 47 Cal.3d 376, 392. Thus, CEQA incorporates a substantive requirement that the lead agency adopt feasible mitigation measures or alternatives that can substantially lessen the project's significant environmental impacts. Pub. Resources Code § 21002; CEQA Guidelines § 15002(a)(3). Finally, the EIR is a "document of accountability," intended to demonstrate to the public that the agency has considered the environmental implications of its action. Laurel Heights, 47 Cal.3d at 392. The RDEIR does not comply with CEQA's objectives because it fails to (1) provide sufficient information for informed decision-making; (2) provide substantive mitigation requirements; and (3) demonstrate that the City has fully grappled with the environmental implications of the Project. To comply with these requirements, the City must revise the RDEIR to address the issues raised below and in our prior comments.

## I. The Recirculated DEIR Fails to Adequately Identify and Mitigate the Project's Inconsistencies with the Applicable General Plan.

As we noted in our previous letter, the City's General Plan calls for development that is compatible with the environment and sensitive habitats, "particularly habitats that support special status species." Resources Conservation Element Goals 9-G-1 and 9-G-2 and Policies 4-P-14, 4-P-15, 9-P-13. The City acknowledges the existence of some of these goals and policies in the RDEIR (see RDEIR at 5.3-45 and 46), but nonetheless presents a Project that would result in significant and unmitigated adverse impacts to sensitive habitats and species on and adjacent to the Project site. See section II below. Perhaps sensing that the Project's impacts are incompatible with the General Plan, the RDEIR begins by noting that the southern portion of the Project area will "provide a greenwall (defined as open space with no water or sewer services passing through) as required by General Plan Policy 2-P-73." RDEIR at 5.3-1. Policy 2-P-73 requires "[p]ermanent greenbelt buffers." General Plan Land Use Element, Woodlands, 2-P-73. No mention is made of whether the proposed "greenwall" is protected by a conservation easement or any other mechanism that could provide the "permanent" protection required by the General Plan. As a result, the land remains vulnerable to future development.

Not only do these unmitigated inconsistencies render the RDEIR inadequate, they also make the Project unapprovable. Under the Subdivision Map Act and the City's own code, the City cannot approve a tentative map unless it is consistent with the City's General Plan. *See* Gov't Code §§ 66473.5 & 66474 (prohibiting approval of tentative maps that are inconsistent with general plan policies); *see also Friends of "B" Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 998 (Subdivision Map Act expressly requires consistency with general plan); City of Pittsburg Municipal Code § 17.20.060 (to approve a tentative map, the following findings must be made, among others: 1) the proposed map is consistent with the general plan and any applicable specific plan, or other applicable provisions of [the municipal] code; 2) the site is physically suitable for the proposed density of development; and 3) the design of the subdivision or the proposed improvements will not cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat). Because the City cannot make these required findings, it cannot approve the requested rezoning and tentative map.

## II. The Recirculated DEIR Fails to Analyze and Mitigate the Project's Significant Impacts to Biological Resources.

The RDEIR's purported analysis of biological impacts achieves a result exactly opposite from what CEQA requires. Under CEQA, decision-makers and the public are to be given sufficient information about impacts and mitigation to come to their own judgments and decisions. *See* Pub. Res. Code § 21061 ("The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project."). Where, as here, the environmental review document fails to fully and accurately inform decision-makers, and the public, of the environmental consequences of proposed actions, it does not satisfy the basic goals of CEQA.

It appears this RDEIR's strategy is to withhold information and to encourage the public and decision makers to trust that the applicant will ultimately mitigate the Project's impacts. The Project's critical discussion of biological impacts must explain exactly what will happen on the Project site and the surrounding ecosystem if the Project goes forward. *See Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 568 ("[T]he EIR must contain facts and analysis, not the agency's bare conclusions . . . ."). The RDEIR must offer some specific information about the consequences of this Project. It cannot, as the RDEIR does over and over again, merely acknowledge that the Project will have consequences and then assert that those consequences will be mitigated without providing evidentiary support. Thus, this document, like its predecessor, remains inadequate under CEQA.

## A. The Recirculated DEIR Continues to Employ a Faulty Methodology.

Despite the opportunity to correct previously identified deficiencies in the DEIR's methodology, the RDEIR continues to rely upon a flawed methodology and incorrect assumptions about the project setting. The RDEIR describes surveys that involved visiting "representative habitat locations" and "generally" mapping plant communities, suggesting that the City failed to perform thorough surveys for special status species despite the known presence of those species in the project area. RDEIR at 5.3-2. Moreover, much of the limited surveying took place between October and January during "the driest winter on record," conditions that would make it difficult to accurately identify plant species. RDEIR at 5.3-1 and 5.3-3. The likelihood of missing special status plants is particularly worrisome given the RDEIR's conclusion that a variety of



special status plants could occur in the project site but are unlikely to occur because they were not "observed during the surveys." RDEIR at 5.3-15. As the RDEIR notes, certain species may have been missed given that the "surveys were not conducted during the peak blooming period . . . ." RDEIR at 5.3-24.

Other conclusions appear flawed due to the timing of the surveys. For example, during the discussion of California Tiger Salamander habitat, the RDEIR concludes that the seasonal wetlands on the site do not pond for an adequate duration or depth to support the species. RDEIR at 5.3-36. The RDEIR never explains whether this conclusion remains true during a normal rainy season or if the conclusion is based on the present drought.

As a result, the survey information still fails to provide an accurate description of the environmental setting and thereby underestimates the Project's biological impacts. The EIR cannot be approved without properly timed surveys that accurately determine the presence of special status species rather than reliance on "general" mapping.

## B. The Recirculated DEIR Continues to Present an Inaccurate Description of the Project's Biological Setting.

Our previous letter noted that an EIR "must include a description of the environment in the vicinity of the project, as it exists before the commencement of the project, from both a local and a regional perspective." Guidelines § 15125; *see also Environmental Planning and Info. Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354. Special emphasis should be placed on rare or unique resources that will be affected by the Project. Guidelines § 15125(c). Curiously, the City undertook the additional time and effort to prepare an RDEIR, yet that document continues to present an inaccurate description of the environmental resources in the Project area. This failure makes it impossible for the public and decision-makers to accurately assess the Project's environmental effects.

The RDEIR characterizes the Project site as containing a "limited variety of wildlife species," (RDEIR at 5.3-11), but the data presented in the document undercut that characterization. For example, the RDEIR contains a long list of potentially occurring special status animal species. RDEIR at 5.3-25, 26. Aerial photographs in the RDEIR depict a project site within an regional open space area home to a panoply of special status species. RDEIR Figure 5.3-5. Yet as explained above, the RDEIR

employs a faulty methodology to measure the richness of this biodiversity, and the document never presents an accurate picture of the resources on the project site.

The RDEIR incorrectly characterizes the dispersal patterns of the California Red-legged Frog ("CRF"). The document refers to a study by Zeiner et al. for the proposition that the CRF might travel "up to 300 feet away" from breeding ponds during rainy nights. RDEIR at 5.3-34. The Zeiner study, however, reached no such conclusion about the maximum dispersal range of the CRF. According to a biologist familiar with the study, it concluded simply that CRF might travel 300 feet from breeding ponds on a nightly basis in order to forage. Other studies confirm that the maximum dispersal distance of the CRF is much higher. Gary M. Fellers and Patrick M Kleeman, California Red-legged Frog (Rana draytonii) Movement and Habitat Use: Implications for Conservation, 41 Journal of Herpetology 276, 283-84 (2007) (observing "a wide range of migration distances (30-1400 m[eters])" and concluding that average dispersal distances have limited value to land management decisions and that "[a] herpetologist familiar with [the species'] ecology needs to assess the local habitat requirements"). With a seasonal pond 100 feet from the project site and known breeding habitat 550 feet from the site, it is likely that there is non-temporary, terrestrial estivation habitat in the project area. At a minimum, a herpetologist familiar with the CRF should have examined this possibility.

The document reaches similarly unfounded conclusions regarding the movements of California Tiger Salamander ("CTS"). The RDEIR cites a U.S. Fish and Wildlife study finding CTS dispersal is generally less than 1.24 miles when suitable estivation habitat occurs in proximity to a pond, but it ignores newer research suggesting that larger numbers of CTS travel farther from breeding ponds than previously believed. See, e.g., Susan G. Orloff, Movement Patterns and Migration Distances in an Upland Population of California Tiger Salamander (Ambystoma californiense), 6 Herpetological Conservation Biology 266, 273 (2011) (noting that large numbers of CTS were captured at least 800 meters from a breeding pond in one study). In light of these studies, concluding that it is unlikely that a "large number of CTS" would disperse onto the project site when there are two confirmed breeding ponds within one mile of the site and a possible breeding pond within 100 feet of the site is pure conjecture. The RDEIR underlines its own deficiencies in this regard by imposing a mitigation measure that the project proponent should conduct additional biological surveys. RDEIR, MM BIO-1b. These surveys need to be included in the RDEIR's description of the existing setting, not postponed until after CEQA review.

## C. The Recirculated DEIR Fails to Analyze the Extent and Severity of Impacts and to Mitigate Those Impacts to Less Than Significant Levels.

Despite acknowledging the Project's potentially adverse impacts to special status species, the RDEIR fails to disclose the extent of those adverse impacts. Compounding this deficiency, the RDEIR then relies on the payment of mitigation fees in many instances where more direct and effective mitigation could be employed. See California Native Plant Society v. County of El Dorado (2009) 170 Cal.App.4th 1026, 1055 (holding payment of fees into county habitat preserve program insufficient mitigation, and noting that "payment of the fee does not obviate the need for projectspecific analysis of impacts"). While it is true that CEQA permits payment of fees as mitigation for cumulative impacts, see Save Our Peninsula Committee v. Monterey County Bd. Of Supervisors (2001) 87 Cal.App.4th 99, 140-41, that does not permit the RDEIR to rely on fees to mitigate direct impacts where more direct avoidance or mitigation is available. Ultimately the RDEIR depends on fees and other mitigation measures without providing evidence that those measures will actually mitigate impacts to less than significant levels. The RDEIR must quantify the Project's effects on biological resources rather than relying on programmatic analysis in the regional habitat conservation plan ("HCP") and must disclose the efficacy of the proposed mitigation so that the public and decision-makers may reach their own conclusions. Id. at 130.

For example, the RDEIR reveals that "most of the plants listed in Table 5.3-2 [i.e. special status species] as occurring within clay soils have potential to occur on Diablo clay soils." RDEIR at 5.3-7. This is the type of soil existing on the site on steep slopes that will be impacted by the Project. *Id.* The RDEIR does not discuss how the predominance of this soil type relates to the Project design and the foreseeable impacts associated with the Project. Given that the Project includes extensive grading and filling on these steep slopes, the RDEIR's oversight is particularly problematic.

Where the RDEIR identifies potentially significant impacts, the proposed mitigation measures do nothing to avoid or minimize those impacts. The proposed mitigation measure for impacts to wetlands, MM BIO-1a, relies on HCP fees alone. RDEIR at 5.3-50. The RDEIR never presents any evidence that this type of mitigation will reduce impacts to less than significant levels, and indeed admits that with respect to certain protected species the "HCP/NCCP does not include or recommend any avoidance or minimization measures . . . ." RDEIR at 5.3-54. Instead the fees compensate for expected loss to species and habitat by funding a "regional strategy." *Id.* This sort of mitigation does not address the site-specific impacts that must be analyzed and mitigated



pursuant to CEQA. The HCP itself expresses an expectation that future project-level analysis of biological resources will occur. East Contra Costa County HCP/NCCP at 6-6 (Oct. 2006) ("Some avoidance and minimization is still required at the project level . . . ."). Avoidance and minimization is a standard way to mitigate project-level impacts and is understood as best practice. The RDEIR itself incorporates avoidance and minimization measures. *See, e.g.*, RDEIR, MM BIO-2b and MM BIO-2c (applying avoidance and minimization undermines the RDEIR's purpose as an informational document, making it difficult for the public to determine the efficacy of the mitigation measures that rely on fees alone. *Save Our Peninsula Committee*, 87 Cal.App.4th at 130.

Even assuming that HCP fees were adequate mitigation for project-specific impacts here, the Project proposes density in this area that exceeds the amount of density contemplated by the HCP. *Compare* RDEIR at 1.0-1 (assuming an average lot size of 7,668 square feet) *with* HCP/NCCP Signed Implementing Agreement, Exhibit B n.4 (basing development fees on an assumption of 4 units per acre, or lot sizes of roughly 10,890 square feet). Therefore, the Project appears to be inconsistent with the HCP, and fees established by the HCP might not provide adequate mitigation for the Project. CEQA requires site-specific analysis of impacts for precisely this type of situation.

Other mitigation measures are based on incomplete analyses of the Project site. As noted in our previous comment letter, the EIR neither includes nor references any hydrologic or hydraulic engineering reports regarding the Project's expected hydraulic and flood risks. *See* Letter from SWM to Kristin Pollot at 8 (January 10, 2014) (citing the Baseline Report at 1 and 2). Yet the RDEIR contains mitigation measures that are tied directly to potentially significant "hydrological interruption." RDEIR at 5.3-65. Without a proper hydrological analysis, whether the proposed mitigation (MM BIO-1a) will be effective is nothing more than a guess.

Finally, many of the mitigation measures in the RDEIR are unenforceable. For example, measures MM BIO-7a through 7d rely on deed disclosures and recommendations to future homeowners. Even if these measures were enforceable, the RDEIR provides no evidence to support its conclusion that they will reduce indirect impacts to nearby sensitive species to less than significant levels. RDEIR at 5.3-71 and 72.



## D. The Recirculated DEIR Fails to Adequately Analyze Cumulative Impacts and Mitigate Them to Less Than Significant Levels.

According to the RDEIR, this Project "would extend suburban development into an area which is currently undeveloped and provides largely unrestricted access to wildlife, and could thus create a barrier to wildlife movement." RDEIR at 5.3-66. Incoherently, the RDEIR simultaneously concludes that the Project would contribute to the preservation of high quality habitat. *See* RDEIR at 5.3-72. It is absurd to suggest that by developing presently undeveloped land, the Project will actually enhance habitat. The Project does the opposite. While the payment of in-lieu fees may protect other areas, the Project area will be permanently disturbed. Moreover, development in this area will set a precedent for further urban and suburban sprawl into open space. Without providing an assessment of how this development will affect biological resources when considered alongside other proposed and approved developments in the region, the RDEIR continues to provide an impoverished and unhelpful analysis of the Project's cumulative impacts.

#### CONCLUSION

As currently designed, the Montreux Residential Subdivision Project remains inconsistent with the City's General Plan and would lead to numerous significant and unmitigated environmental impacts. The City's environmental review—even as presented in the RDEIR—remains deficient and inadequate under CEQA. Therefore Save Mount Diablo urges the City to delay further consideration of the Montreux Residential Subdivision until the City prepares and recirculates a revised draft EIR that fully complies with CEQA and the CEQA Guidelines.



Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Winter King

But

Benjamin J. Brysacz

Attachments: January 10, 2014 Letter re Montreux Residential Subdivision and DEIR

Bruce Abelli-Amen, Comments on Draft Environmental Impact Report and Initial Study, Baseline Environmental Consulting, Jan. 8, 2014

Gary M. Fellers and Patrick M Kleeman, *California Red-legged Frog* (Rana draytonii) *Movement and Habitat Use: Implications for Conservation*, 41 Journal of Herpetology 276 (2007)

Susan G. Orloff, *Movement Patterns and Migration Distances in an Upland Population* of California Tiger Salamander (Ambystoma californiense), 6 Herpetological Conservation Biology 266 (2011)

655059.2



# Attachment 1



396 HAYES STREET, SAN FRANCISCO, CA 94102 T: (415) 552-7272 F: (415) 552-5816 www.smwlaw.com WINTER KING Attorney

January 10, 2014

#### Via Email and U.S. Mail

Kristin Pollot Associate Planner City of Pittsburg, Planning Department 65 Civic Avenue Pittsburg, CA 94565 E-Mail: kpollot@ci.pittsburg.ca.us

#### Re: <u>Montreux Residential Subdivision and Draft Environmental Impact</u> <u>Report</u>

Dear Ms. Pollot:

This firm represents Save Mount Diablo ("SMD") with regard to the Montreux Residential Subdivision Project ("Project"). SMD is a non-profit organization dedicated to preserving Mount Diablo's peaks, surrounding foothills and watersheds through land acquisition and preservation strategies designed to protect the mountain's natural beauty, biological diversity and historic and agricultural heritage. To advance this goal, SMD regularly participates in land use planning processes for projects that could impact Mount Diablo and its surrounding foothills, such as the Montreux Project. We submit these comments on the Project and associated draft Environmental Impact Report ("DEIR") on SMD's behalf.

As described below, SMD has serious concerns about the impacts of the Project, which proposes to transform 77 acres of largely untouched open space lands in the Woodlands subarea, immediately adjacent to the open spaces of the South Hills subarea, into a residential subdivision with 356 estate homes, onsite access roadways, drainage basins, and a water storage tank. DEIR at 3.0-8 and 9. The urban-scale Project is currently outside the City limits, outside the service areas for the Delta Diablo Sanitation District and the Contra Costa Water District Service Area boundary, and therefore lacks a certain water supply. The Project is patently inconsistent with the City's general plan and requires rezoning to permit development at the proposed density. In short, the Project has all the hallmarks and adverse environmental impacts of leapfrog development. It is

therefore perhaps unsurprising that it directly conflicts with numerous general plan policies that discourage such development.

In addition, the DEIR for the Project fails to provide the public and decision makers with crucial information about the Project, its impacts, and feasible mitigation measures, in direct violation of the California Environmental Policy Act ("CEQA").<sup>1</sup> For example, the Project description lacks sufficient detail for the public to determine what the impacts of the Project will be. Although the City is apparently contemplating a development agreement as part of the Project, the agreement itself is not included as an attachment to the DEIR or otherwise made available to the public, and the description of the agreement's terms is cursory at best. Similarly, consultant reports on various impact areas are referred to in the DEIR but not provided for public review. At the very least, the DEIR must be revised and recirculated to include these documents and information.

The DEIR's analysis of specific environmental impacts is similarly lacking. As discussed in this letter and the attached report from consulting hydrologist Bruce Abelli-Amen of Baseline Environmental Consulting ("Baseline Report"), developing the Project on the area's the steep terrain will require extensive cut and fill, which, in turn, will drastically affect the hydrology of the area and could even damage downstream properties. Baseline Report attached as Exhibit 1. Yet the DEIR contains *no discussion whatsoever* of these potential impacts, relying solely on the Initial Study's cursory discussion of the issue. Similar flaws are found in other impact analysis, including aesthetics, biological resources, public services, and public safety. More is required of an adequate EIR.

In sum, after reviewing the DEIR and other Project documents, it is our opinion that the Project conflicts with the City of Pittsburg's General Plan and Municipal Code in violation of State Planning and Zoning Law, Gov't Code § 65000 et seq. For this and other reasons, the City cannot make the findings necessary to approve the Project's requested rezoning and tentative map. *See* Gov't Code §§ 66473.5 & 66474. In addition, the DEIR for the Project violates the minimum standards of adequacy under CEQA. As a result, the City cannot approve the Project as currently proposed and must, at a minimum, recirculate a revised DEIR that addresses the inadequacies identified in this letter.

<sup>&</sup>lt;sup>1</sup> Public Resources Code § 21000 et seq. (hereinafter "CEQA"); Cal. Code of Regulations, tit. 14, § 15000 et seq. (hereinafter "Guidelines").



## I. Approval of the Project Would Violate California Planning and Zoning Law and the Subdivision Map Act.

The State Planning and Zoning Law (Gov't Code § 65000 et seq.) requires that development decisions be consistent with the jurisdiction's general plan. *See* Gov't Code §§ 65860 (requiring consistency of zoning to general plan), 66473.5 & 66474 (requiring consistency of subdivision maps to general plan), and 65359 and 65454 (requiring consistency of specific plan and other development plan and amendments thereto to general plan). Thus, "[u]nder state law, the propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements." *Resource Defense Fund v. County of Santa Cruz* (1982) 133 Cal.App.3d 800, 806. Accordingly, "[t]he consistency doctrine [is] the linchpin of California's land use and development laws; it is the principle which infuses the concept of planned growth with the force of law." *Families Unafraid to Uphold Rural El Dorado County v. Board of Supervisors* (1998) 62 Cal.App.4th 1332, 1336.

It is an abuse of discretion to approve a project that "frustrate[s] the General Plan's goals and policies." *Napa Citizens for Honest Gov't v. Napa County* (2001) 91 Cal.App.4th 342, 379. The project need not present an "outright conflict" with a general plan provision to be considered inconsistent; the determining question is instead whether the project "is compatible with and will not frustrate the General Plan's goals and policies." *Napa Citizens*, 91 Cal.App.4th at 379.

Here, the proposed Project does more than just frustrate the General Plan's goals. It is directly inconsistent with numerous provisions in the General Plan. Consequently, the Project cannot be approved in its current form.

# A. The Project Is Inconsistent with Numerous General Plan and Municipal Code Provisions.

The City's General Plan and Municipal Code contains several provisions intended to ensure that development occur in an environmentally sensitive manner. As discussed below, the Project is inconsistent with many important Plan and Code provisions.

///

///

///



## 1. General Plan and Code Provisions Relating to the Preservation of Hillsides

The Project site is designated and pre-zoned for Hillside Plan Development. DEIR at 3.0-8. The General Plan requires that development in the hills be sensitive to the natural terrain, minimize cut-and-fill, and incorporate natural features (*e.g.*, topography and creeks) into the design of residential neighborhoods. General Plan Land Use Element Policies 2-P-21, 2-P-23, 2-P-24, 2-P-25, 4-P-9. General Plan Land Use Element Policy 2-P-21. The General Plan also indicates that the City must "ensure that all General Plan policies apply to hillside land irrespective of zoning –whether Planned Development or any other base district." General Plan Land Use Element Policy 2-P-22.

General Plan provisions specific to the Woodlands sub-area where the Project is located are even more protective. For example, the General Plan specifies a goal to support new residential development in locations that do not significantly impact the natural setting." General Plan Goal: Woodlands 2-G-27 and 2-G-28. As discussed below and throughout this letter, the Project proposes mass grading that fills a natural drainage and denudes the site of natural vegetation. Other Woodlands-area specific provisions require that the "natural topography be retained to the *maximum extent feasible*, and large-scale grading discouraged" and that development be minimally visible from Kirker Pass Road. General Plan Policy: Woodlands 2-P-73.

The Municipal Code accordingly establishes regulations for development in hillside areas that establish several goals to protect hillsides. For example, the Code establishes the goal "to protect natural topographic features, aesthetic view, vistas, and prominent ridges." It also calls for the City to "protect adjacent properties from potential adverse impacts of grading and drainage associated with hillside development," and "encourage the use of development techniques and alternatives that will be compatible to the terrain of the hillside areas." Municipal Code § 18.56.02.

The Municipal Code contains provisions requiring topographic maps indicating the steepness of the site's slopes. Municipal Code § 18.56.070.K. The Code also requires landscape plans indicating the location of existing and proposed trees and other plant materials, and before and after grading details. *Id.* But neither the DEIR nor technical appendix actually include these details.

Despite the lack of information in the DEIR, it is clear that the Project would be inconsistent with these provisions. The DEIR concludes that the Project is consistent with the General Plan because the Project proposes to preserve the southernmost portion of the site. DEIR at 4.0-2. However, the development plan



proposed for the remainder of the site would be anything but sensitive to the natural terrain. Rather than follow the natural topography and minimize grading, the Project site's steep slopes would be cut away to create unnaturally "flat" areas for building pads where steep slopes and drainage areas, including wetlands, previously existed. The Project requires a staggering 1.4 million cubic yards of excavation and fill material. DEIR at 3.0-12. Grading involving an estimated this level of excavation would result in the removal of trees and other natural vegetation throughout the development area and would also change much of the site's natural landform. Moreover, as made clear in the DEIR, the development would be very visible from Kirker Pass Road and would stand in stark contrast to the surrounding hillsides. DEIR at Figures 5.1-5 and 5.1-6.

# 2. General Plan Provisions Relating to the Protection of Natural Resources.

The General Plan encourages development that is compatible with the environment and sensitive habitats, "particularly habitats that support special status species" and calls for development that preserves significant ecological resources. Resources Conservation Element Goals 9-G-1 and 9-G-2 and Policies 4-P-14, 4-P-15, 9-P-13. The DEIR again concludes that the Project is consistent with the General Plan because the Project proposes to preserve the southernmost portion of the site and because the site's resources were "considered and documented." DEIR at 4.0-6. However, as discussed below, the DEIR's documentation of natural resources is seriously flawed. See section II.B.3 below. The Project is inconsistent with these provisions because, as discussed below, it will result in significant adverse impacts to sensitive habitats and species on and adjacent to the Project site. The DEIR has failed to provide a complete analysis of these impacts. *Id.* As a result, the Project will result in significant impacts related to direct and indirect impacts to special status species in contravention of the General Plan. *Id.* 

### **3.** General Plan Provisions Relating to the Protection of Drainages

The General Plan includes provisions that protect drainages and prevent erosion. Resources Conservation Element Policies 9-G-4 and 9-G-5. The General Plan also includes provisions to require evaluation and implementation of Best Management Practices to protect against creek bank destabilization and require assessments of downstream drainage impacts. Policies 9-P-15, 9-P-17, and 9-P-21. The DEIR fails to mention these General Plan provisions let alone analyze consistency with them. As discussed further below, and in the attached Baseline Report, the DEIR fails to evaluate these impacts. As a result, the Project is inconsistent with these General Plan provisions.



## 4. General Plan Provisions Relating to the Provision of Public Services.

The DEIR discloses that the Project would add school children to area schools that are already over capacity. DEIR at 5.6-8. The Project is inconsistent with General Plan provisions that specify the City is to "ensure that school facilities maintain adequate capacity to provide for current and projected enrollment." General Plan Policy 8-G-10. The Project is inconsistent with the General Plan in that it would approximately 277 new students to a school system already over-capacity.

The General Plan specifies that the City is to provide 1.8 *sworn officers* per each 1,000 residents. The DEIR discloses that the Project would add to the City's population so that additional police officers would be needed to serve the community. DEIR at 5.6-8. As the DEIR makes clear, there is "no guarantee that the General Fund revenues provided by the new development would fully fund the new positions." DEIR at 5.6-8. Thus, the Project conflicts with the General Plan requirements for police protection.

For all of these reasons, the Project is inconsistent with the General Plan and the Municipal Code. Because of the Project's inconsistencies with these planning documents, approval of this Project would violate State Planning and Zoning Law and the County's Development Code.

### **B.** Approval of this Project Would Violate the Subdivision Map Act.

The proposed Project requires approval of a tentative subdivision map. *See* DEIR at 3.0-13. As a result, the City must comply with the Subdivision Map Act. This statute requires that a tentative map approval be consistent with the local general plan. *See* Gov't Code §§ 66473.5; 66474; *see also Friends of "B" Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 998 (Subdivision Map Act expressly requires consistency with general plan). Approval of a project that is inconsistent with the general plan violates the Subdivision Map Act and may be enjoined on that basis. *See Friends of "B" Street*, 106 Cal.App.3d at 998 ("City approval of a proposed subdivision … may be enjoined for lack of consistency of the subdivision map with the general plan."); *see also* City of Pittsburg Municipal Code § 17.20.060 (to approve a tentative map, the following findings must be made, among others: 1) the proposed map is consistent with the general plan and any applicable specific plan, or other applicable provisions of [the municipal] code; 2) the site is physically suitable for the proposed density of development; and 3) the design of the subdivision or the proposed improvements will not cause substantial



environmental damage or substantially and avoidably injure fish or wildlife or their habitat).

As detailed throughout this letter, the Project is inconsistent with various goals and policies set forth in the City's General Plan. *See e.g.*, Section I(A), *supra*. Because approval of the Project would violate the general plan consistency requirements of the Subdivision Map Act and the City's own municipal code, the Project application must be denied.

### II. The DEIR Is Inadequate Under CEQA.

The environmental impact report is "the heart of CEQA." *Laurel Heights Improvement Ass'n v. Regents of University of California* (1988) 47 Cal.3d 376, 392 (citations omitted) ("*Laurel Heights I*"). It "is an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return. The EIR is also intended 'to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.' Because the EIR must be certified or rejected by public officials, it is a document of accountability." Id. (citations omitted). Where, as here, an EIR fails to fully and accurately inform decision makers, and the public, of the environmental consequences of proposed actions, it does not satisfy the basic goals of the statute. *See* CEQA § 21061("The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect that a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.").

As discussed in detail below and in the attached technical report, the DEIR is replete with serious flaws. *See* Baseline Report. It lacks a legally defensible description of the Project and contains so little information about the Project's potential environmental impacts that, in many instances, it is difficult to evaluate the accuracy of the environmental analysis. Nor does the DEIR provide the necessary evidence or analysis to support its conclusions that environmental impacts would be less than significant. Many of the so-called mitigation measures proposed in the DEIR are nothing more than general assertions that something will be done in the future about the Project's significant environmental impacts. Such deferral is prohibited by CEQA. Consequently, the City must prepare and recirculate a revised EIR if it chooses to proceed with the proposed Project.



#### A. The DEIR Fails to Adequately Describe the Project.

#### 1. The DEIR's Project Description Omits Critical Information.

Under CEQA, the inclusion in the EIR of a clear and comprehensive description of the proposed project is critical to meaningful public review. *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193. The court in *Inyo* explained why a thorough project description is necessary:

"A curtailed or distorted project description may stultify objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance." d. at 192-93. Thus, "[a]n accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR." *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818, 830.

Here, the description of the Project is inadequate. The DEIR fails to identify key components of the Project that have the potential to result in significant environmental impacts. For example, the DEIR entirely omits critical information about the improvements that would be needed to resolve the area's hydraulic and flood risks. *See* Baseline Report at 1 and 2. Additionally, the DEIR fails to adequately describe the Project's stormwater system and fails to include a Stormwater Control Plan. The proposed Project will result in a substantial increase in impermeable surfaces, which will, in turn, increase runoff from the site, yet the document does not include any detail about where drainage features (inlets, piping, culverts, etc.) would be located and how these systems, including the detention basins, would be operated. The DEIR does not appear to include, nor does it reference, any hydrologic or hydraulic engineering that supports the drainage plan. The reader of the DEIR has no idea how the detention basins were sized or how they would be operated. Without detailed information regarding the location and design of the drainage facilities, it is impossible for decision makers and the public to evaluate the accuracy of the DEIR's conclusions.



The DEIR also fails to include the following crucial information about the Project:

- Number and type of trees to be removed;
- Location of the Project staging areas;
- Location of spoils sites and haul routes;
- Construction-related activities (including timeline, location, number of construction employees, types of equipment, etc.);
- Other Project features such as fences, bridges, gates or other proposed improvements.

All of this information must be included in a revised EIR so that the impacts associated with these features and activities can be analyzed.

# 2. The Project Description Avoids Any Meaningful Discussion of the Proposed Development Agreement.

The DEIR notes that the Project will include a development agreement, and states that the agreement's primary purpose is to vest the applicant's entitlements. DEIR at 3.0-12. The DEIR also states that the development agreement will include provisions regarding integration of the project entrance with the future Donlon Boulevard extension, requirements for payment of fees related to open space and compliance with the City's inclusionary housing ordinance. *Id.* However, no information is provided about the conditions, terms, restrictions and requirements for subsequent actions. The text of this development agreement is not included anywhere in the DEIR. And the development agreement was not included among the publicly available environmental documents for the project. Without any more detailed information about the terms of the agreement, key elements of the project description are omitted and cannot be analyzed in the EIR, in direct violation of CEQA. *See, e.g., Laurel Heights Improvement Ass'n v. Regents of the University of California* (1993) 6 Cal.4th 1112, 1123 ("*Laurel Heights II*") (the purpose of CEQA "is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made").

This omission is particularly disturbing as development agreements typically seek to "lock in" development rights – including existing regulations and the density and intensity of development – over an extended period of time. As such, development agreements have the potential to greatly exacerbate the potential impacts of



a project by limiting the lead agency's permitting authority and ability to impose additional mitigation measures or reduce the intensity of development at later discretionary phases of the project. This problem is only compounded where, as here, the development of critical mitigation measures is deferred to the indefinite future.

The DEIR's failure to provide any specifics regarding the development agreement constitutes a fatal shortcoming in the Project Description and the subsequent analysis of Project impacts. To comply with CEQA, the DEIR must be recirculated with a more detailed description of the development agreement or with the draft agreement attached.

# **3.** The DEIR Minimizes the Extent of the Project By Failing to Describe and Analyze Full Build-Out Conditions.

Courts have held that, when analyzing the environmental impacts of a general plan or other planning document, the lead agency must analyze "the future development *permitted* by the [plan]... Only then can the ultimate effect of the [plan] upon the physical environment be addressed." *Christward Ministry v. Superior Court of San Diego County* (1986) 184 Cal.App.3d 180, 194 (emphasis added); *see also City of Redlands v. County of San Bernardino* (2002) 96 Cal.App.4th 398, 409 (quoting same).

Here, the Project proposes rezoning not only for the 77-acre portion of the site designated for residential development but for entire site. DEIR at 3.0-8. Nowhere does the DEIR analyze the impacts of a potential increase in density on the entire site. The DEIR proposes that the 71-acre area proposed for open space will be subject to "recordation of a deed restriction or some other appropriate mechanism, prior to the acceptance of the last Final Map for the site (should it be broken into phases)." DEIR at 2.0-21. This approach is not adequately protective of the open space. First, recording the deed restriction prior to the last Final Map (rather than prior to the *first* Final Map) leaves the open space area vulnerable to damaging uses during construction. Second, deferring recordation of the deed restriction to such a late date leaves the open space vulnerable to future proposals for alteration of the open space area to other uses.

Alternatively, the DEIR could have specified use of a conservation easement on the open space area, conveyed to a land trust capable of managing and enforcing it, to preserve and protect the area in perpetuity. Such an easement should be recorded prior to acceptance of the first Final Map. As proposed, the open space area is vulnerable to future proposals for alteration of the open space area to other uses, and therefore, the DEIR must analyze the potential impacts at full build-out should the City approve the change in zoning.



### **B.** The DEIR Fails to Analyze and Mitigate the Project's Significant Environmental Impacts.

CEQA requires that an EIR be detailed, complete, and reflect a good faith effort at full disclosure. Guidelines § 15151. The document should provide a sufficient degree of analysis to inform the public about the proposed project's adverse environmental impacts and to allow decision-makers to make intelligent judgments. *Id.* Consistent with this requirement, information regarding the project's impacts must be "painstakingly ferreted out." *Environmental Planning & Info. Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 357 (finding an EIR for a general plan amendment inadequate where the document did not make clear the effect on the physical environment).

Meaningful analysis of impacts effectuates one of CEQA's fundamental purposes: to "inform the public and responsible officials of the environmental consequences of their decisions before they are made." *Laurel Heights II*, 6 Cal.4th at 1123. To accomplish this purpose, an EIR must contain facts and analysis, not just an agency's bare conclusions. *Citizens of Goleta Valley*, 52 Cal.3d at 568. Nor may an agency defer its assessment of important environmental impacts until after the project is approved. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 306-07. An EIR's conclusions must be supported by substantial evidence. *Laurel Heights I*, 47 Cal.3d at 409.

As documented below, the DEIR fails to identify, analyze, or support with substantial evidence its conclusions regarding the Project's significant environmental impacts. These deficiencies render the DEIR inadequate under CEQA.

# 1. The DEIR Fails to Analyze and Disclose Significant Aesthetic Impacts of the Project.

The proposed Project will alter and adversely impact the visual landscape of the site and the surrounding area by completely transforming this scenic, hilly area into a dense, residential one. As discussed above, the Project will cut and fill large swaths of hillside and excavate an enormous amount of soil: 1.4 million cubic yards. DEIR at 3.0-12. (Assuming a dump truck holds 10 cubic yards, the proposed excavation equates to 140,000 truckloads of soil.) The DEIR acknowledges that the Project would result in significant and unavoidable impacts relating to a the degradation of the existing visual character of the area. DEIR 2.0-6. Despite this assessment, the DEIR concludes that the Project's other aesthetic impacts will be less than significant because of certain landscaping and design features. However, landscaping and design features cannot reduce



the significant topographic impacts of the Project to a level of insignificance. Furthermore, the DEIR's conclusion that aesthetic impacts will be insignificant flies in the face of established CEQA precedent.

Under CEQA, it is the state's policy to "[t]ake all action necessary to provide the people of this state with . . . enjoyment of *aesthetic*, natural, scenic, and historic environmental qualities." CEQA § 21001(b) (emphasis added). "A substantial negative effect of a project on view and other features of beauty could constitute a significant environmental impact under CEQA." *Ocean View Estates Homeowners Assn., Inc. v. Montecito Water District* (2004) 116 Cal.App.4th 396, 401. No special expertise is required to demonstrate that the Project will result in significant aesthetic impacts. *Ocean View Estates*, 116 Cal.App.4th at 402 ("Opinions that the [project] will not be aesthetically pleasing is not the special purview of experts."); *The Pocket Protectors v. City of Sacramento* (2005) 124 Cal.App.4th 903, 937 ("[N]o special expertise is required on this topic.").

As explained by the court in *Quail Botanical Gardens Foundation, Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1606, it is "self-evident" that replacing open space with a subdivision will have an adverse effect upon "views and the beauty of the setting." Instead of addressing and analyzing the Project's visual effects, the DEIR employs contorted logic to mask its clear impacts. For example, the DEIR acknowledges that the General Plan identifies views of the "rolling, grassy hills to the south," which characterize the site, as important visual resources for the City and that the development will be visible from area parks. DEIR at 5.1-8. The DEIR also acknowledges that the Project site "could be considered an element of broad scenic vistas of hills and open space visible from Kirker Pass Road, a designated scenic route in the General Plan. *Id.* The DEIR even states that the Project could have a substantial adverse effect on a scenic vista. *Id.* Surprisingly, the DEIR then concludes that impacts to scenic vistas would be less than significant because design guidelines included in Mitigation Measure AES-1 would mitigate these significant impacts. DEIR at 5.1-9.

Such a conclusion is misguided and unsupported by evidence. The guidelines and standards that the DEIR relies on address the colors and materials to be used in the development but in reality they do nothing to reduce the height, mass, or location of structures or to ensure that the development is less visible from public viewpoints. The DEIR fails to provide any specific information or analysis, as to how the proposed measure would mitigate significant impacts to existing views from parks and other public viewpoints. A neutral color palette will not camouflage this large subdivision.

Moreover, the DEIR fails to provide evidence to support its conclusion that the Project's impacts to area scenic vistas would be less than significant. Specifically, the EIR fails to evaluate the Project's impacts to views from East Bay Regional Park District ("EBRPD") trails and from open space areas in Stoneman Park to the north. *See* DEIR Figure 5.1-3 indicating visual simulations performed only for views from Kirker Pass Road. The DEIR also fails to evaluate impacts to planned parklands to the south and southwest of the project site. As pointed out by during the scoping process, the EBRPD has acquired the "Thomas North" parcel to the south of the Project site and the "Land Waste Management" and "Affinito" parcels to the southwest. A revised EIR must be prepared to evaluate the Project's impacts to views from these parcels.

The Project will transform an undeveloped, rural area framed by rolling hills into a large residential subdivision. This change substantially degrades not only the existing visual character and quality of the site and its surroundings but the quality of scenic vistas enjoyed from area roadways, parks, and trails. These impacts are considered significant impact under CEQA. Guidelines, Appendix G(I)(c). Thus, the DEIR's conclusion that the Project's impact on scenic vistas would be less than significant cannot be sustained.

### 2. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Hydrology and Water Quantity.

The DEIR includes absolutely no discussion of the potential impacts to hydrology and water quality, having concluded in the Initial Study ("IS") that the Project's impacts in these areas would be less than significant. As explained in the attached Baseline Report, this conclusion is not supported by substantial evidence and, in fact, the Project would substantially alter site drainage and the stream channel that runs through the property. While the IS provides a general discussion of these potential impacts, it contains no supporting studies or data and relies entirely on future preparation of a Storm Water Pollution Prevention Plan ("SWPPP") and compliance with existing regulations to reduce the Projects impacts to a level of insignificance. As discussed in detail below, this approach does not comport with CEQA. In very steep terrain like this, it is virtually impossible for projects to comply with National Pollutant Discharge Elimination System ("NPDES") requirements, which is evidenced by the Project's proposed detention basins. Thus, relying on compliance with existing requirements is particularly unacceptable in this situation. In addition, steep terrain such as this makes remediation of unstable soils very challenging.



### (a) The DEIR Fails to Adequately Describe the Existing Hydrological Setting.

The DEIR/IS provides no information on the hydrology and water quality setting. Without describing the hydrology of the on-site drainage and that of Kirker Creek downstream, the reader of the DEIR/IS has no context within which to evaluate potential project impacts. Perhaps most important, the DEIR/IS does not provide any discussion of the hydrology of Kirker Creek and its susceptibility to flooding. The DEIR must be revised to include a Hydrology and Water Quality section that adequately describes the hydrologic setting.

#### (b) The Project Does Not Comply with Applicable Requirements Under the NPDES

The IS states that the project would treat stormwater runoff "as required by provision C.3 of the Contra Costa County municipal stormwater NPDES permit by directing all site runoff into three detention basins." IS at 59. However, this statement appears to refer to an old (and superseded) NPDES permit. The current NPDES permit that the project would be required to comply with is the Municipal Regional Stormwater NPDES Permit, Order No. R2-2009-0074, NPDES Permit No. CAS612008, adopted October 14, 2009 and revised November 28, 2011 ("MRP"). Not only does the Initial Study refer to the wrong NPDES permit, it wrongly interprets what C.3 provisions would be required. Baseline Report at 3. The C.3 portion of the MRP, which refers to post-construction stormwater management for new development and redevelopment projects, requires Low Impact Development ("LID"). The Project as proposed includes centralized detention basins, which are not LID features.

The goal of LID is to reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and biotreatment through rain gardens, bioretention units, bioswales, and planter/tree boxes. LID also limits disturbance of natural water bodies and drainage systems; minimizes compaction of highly permeable soils; protects slopes and channels; and minimizes impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies. Baseline Report at 3 and 4.

Here, the Project would result in massive grading, moving approximately 1.4 million cubic yards of soil. DEIR at 3.0-12. No LID designs or feathers appear to be

incorporated or required. Instead, several large detention basins are proposed to collect the site's stormwater before discharging it into Kirker Creek. Incorporation of LID designs and features into the project would require extensive modifications to the grading plan and overall site plan. These design changes to the project should be made by the applicant and the revised project evaluated in a recirculated DEIR.

### (c) The Project Would Result in Flooding and Erosion Impacts Downstream

Based on a review of available mapping and aerial photographs, the Baseline Report concludes that Kirker Creek appears to have reaches that are highly incised with oversteepened creek banks. Baseline Report at 4. This indicates that portions of the creek may be unstable. *Id.* There are areas in the City of Pittsburg (e.g., Brush Creek Drive, Canyon Way), where homes are located within 20 to 30 feet of the top of the creek bank. Any change to the hydrology of flows in Kirker Creek could result in hydromodification and cause increased erosion and creek bank failure, which may jeopardize existing structures. *Id.* 

The DEIR/IS fails to provide any explanation as to how the detention basins would be operated to prevent "erosion of existing stream banks and flooding downstream along Kirker Creek," and it is not clear that they can be so operated. IS at 60. Simply delaying flows in detention basins is not an effective approach to preventing downstream hydromodification of Kirker Creek. Baseline Report at 4. The Project would result in a substantial amount of new impervious surfaces conveying increased flows to centralized basins. This would in turn increase total discharge volume to Kirker Creek. *Id.* Even moderate flows to the creek, if sustained for longer periods of time than would occur without the project, could cause significant downstream erosion. *Id.* This is a potentially significant impact that must be fully analyzed under CEQA.

In sum, the DEIR lacks sufficient evidentiary support for its conclusion that the Project's impacts on hydrology and water quality would be less than significant. A revised DEIR that comprehensively evaluates and mitigates the proposed Project's hydrology and water quality impacts must be prepared and recirculated.

# **3.** The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Biological Resources

The DEIR presents an incomplete—and hence inadequate—discussion of the Project's potential impacts to biological resources. As detailed below, the DEIR underestimates Project-related impacts to biological resources as a result of a series of



errors, including: (1) faulty methodology; (2) the failure to describe accurately the environmental setting; (3) the failure to analyze the extent and severity of impacts to sensitive species and habitats; and (4) the failure to analyze the Project's cumulative effects. The DEIR's treatment of biological impacts does not meet CEQA's well established legal standard for impacts analysis. Given that analysis and mitigation of such impacts are at the heart of CEQA, the DEIR will not comply with the Act until these serious deficiencies are remedied.

### (a) The DEIR Appears to Employ Faulty Methodology.

The DEIR employs faulty methodology and incorrect assumptions in its analysis of Project impacts to biological resources. It appears that the DEIR's analysis is not based on focused surveys tailored to determine the likelihood that particular species would be present. In fact, the DEIR never describes the methodology employed for site surveys. Aside from one sentence that indicates the surveys consisted of "driving and walking around the site" (DEIR Appendix 5.3 at pdf page 4), the DEIR provides no description of the survey methods at all. The DEIR should have included focused surveys for all special status with the potential to occur on site. These surveys should have included surveys for grassland birds, rare plant surveys, and, as discussed below, appropriately timed protocol level surveys for species likely to occur on-site.

The survey information as it stands does not provide an adequate basis for determinations about the individual and cumulative impacts of this Project on either special-status species or rare habitats. The DEIR's inadequate analysis of the species and habitats on the site results in an understatement of the Project's biological impacts.

# (b) The DEIR Fails to Adequately Describe the Project's Biological Setting.

An EIR also "must include a description of the environment in the vicinity of the project, as it exists before the commencement of the project, from both a local and a regional perspective." Guidelines § 15125; *see also Environmental Planning and Info. Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354. CEQA requires that special emphasis be placed on environmental resources that are rare or unique to that region and that would be affected by the Project. Guidelines § 15125(c). Here, the DEIR's discussion of environmental setting is sorely deficient.

The DEIR fails to provide a complete description of the Project's biological setting and, in some cases, presents conflicting information. For example, the DEIR states that the Project site does not include alkali soils; an important distinction because some



special status plants occur solely in alkali soils. DEIR at 5.3-7. However, the DEIR also indicates that saltgrass (Distichlis spicata), a plant that is dependent on alkali soils, was observed on site. DEIR at Table 5.3-1.

In other cases, the DEIR simply presents erroneous information. For instance, the DEIR dismisses the potential occurrence of big tarplant stating that "the highly disturbed on-site grasslands do not provide suitable habitat . . . ." DEIR at Table 5.3-2. However, this species is found in annual grasslands, usually on slopes like the ones that characterize the Project site. Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014.

In other instances, the DEIR omits crucial information altogether. The DEIR fails to evaluate grassland birds likely to occur on site and entirely ignores the grasshopper sparrow, a California species of special concern. *Id.* and DEIR Table 5.3-2 (excludes grasshopper sparrow).

The DEIR also fails to analyze the presence and number of other special status species that it acknowledges may be present on the site and in the Project area. For example, although the DEIR acknowledges that California tiger salamander ("CTS"), a species protected by the federal Endangered Species Act, has been documented in the Project vicinity (DEIR at 5.3-18), the DEIR is dismissive of the potential for this species to occur on site. DEIR at 5.3-3 (lists species for which suitable habitat is found on the Project site but excludes CTS). The DEIR states that because there is no suitable breeding habitat for CTS within or near the project site and that the nearest occurrence is 0.5 miles away, the species is not likely to occur on the site. DEIR Table 5.3-2 at page 5.3-13.

However, the DEIR fails to evaluate potential upland habitat on site that may be used by CTS. As explained in the attached report, "Movement Patterns and Migration Distances in An Upland Population of California Tiger Salamander" (Orloff, 2011), CTS disperse over distances far greater than 0.50 miles. Orloff Report, attached as Exhibit 2. Thus, the Project site, which is within a half mile of a known breeding site, is very likely to provide aestivation habitat for CTS. Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014; biography attached as Exhibit 3. Moreover, it appears that other ponds providing potentially suitable habitat may be present in close proximity to the Project site. *See* map attached as Exhibit 4 and Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014. Accordingly, the DEIR's description of the biological setting (and the document's impact analysis) must be revised to include consideration of this species. *Id*.

Similarly, the DEIR acknowledges that burrowing owls are known to occur in the area, but dismisses their potential to occur onsite based on the fact that no owls were observed onsite and that the nearest occurrence of nesting burrowing owls is 2.5 miles west of the site. DEIR at Table 5.3-11. The DEIR's conclusion is not based on any evidence. In fact, burrowing owl have been observed nesting on the Thomas Home Ranch property located to the southwest of the Project site (between Nortonville Road and Kirker Pass Road) within the past year. Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014. Moreover, burrowing owl do not depend exclusively on ground squirrel burrows for nesting sites, as implied in the DEIR. DEIR at 5.3-11. Burrowing owls have been known to nest in shallow indentations such as those present in the rock outcroppings on site. DEIR at 5.3-1.

Moreover, the DEIR mischaracterizes the role of the Habitat Conservation Plan ("HCP") and its role in relation to environmental documentation for the project. First, the HCP is a conservation mechanism that includes a broad, programmatic review of resources throughout eastern Contra Costa County; it is not a project-specific, impactanalysis document. DEIR at 5.3-24. Thus, the information in the HCP cannot replace properly designed and implemented surveys of the project site to determine the biological resources there. Second, the DEIR states that the HCP's primary goal is to streamline review of development projects. DEIR at 5.3-24. This is incorrect. The HCP is intended to serve as a coordinated process for permitting and mitigating the incidental take of endangered species. It does not excuse the City from requiring site-specific analysis. Finally, the HCP is administered by the East Contra Costa County Habitat Conservancy ("Conservancy"). DEIR at 5.3-25. The Conservancy is not a land use agency and therefore is not tasked with making decisions about the appropriate location for siting land development. That responsibility falls to the City, which has the responsibility of completing site-specific analysis of the Project's significant impacts to special status species and habitat as part of the CEQA process. Therefore, the DEIR must be revised to include a thorough investigation of the site's existing biological setting and the Project's impacts on those resources.

The DEIR's perfunctory description of the sensitive species and habitats present in the Project area results in an incomplete description of the sensitive environmental setting of the Project. This failure to describe the Project setting violates CEQA. *See San Joaquin Raptor*, 27 Cal.App.4th at 724-25 (environmental document violates CEQA where it fails to completely describe wetlands on site and nearby wildlife preserve). The DEIR should have included surveys for these species as part of its assessment of biological resources. Accordingly, the DEIR's description of the biological setting must be revised to include consideration of these and other overlooked species.

(c) The DEIR Fails to Adequately Analyze the Project's Direct Impacts to Sensitive Species.

The DEIR's failure to describe the existing setting severely undermines its analysis of Project impacts. Despite the DEIR's acknowledgement that the Project would adversely affect potential habitat for several special status, the DEIR fails to adequately analyze adverse impacts to these species. For example, the DEIR acknowledges that the Project site includes potential habitat for burrowing owl, a California Species of Special Concern ("CSC"); San Joaquin kit fox, a federally endangered species and a California Threatened species; and vernal pool fairy shrimp, a federally Threatened species. DEIR at 5.3-26 and 27. Yet, rather than conduct appropriate surveys to evaluate the presence/absence of these species and analyze the extent and severity of the Project's impacts, the DEIR simply applies a laundry list of measures required by the Habitat Conservation Plan for the Project area and concludes that all impacts will be mitigated to less than significant levels. See, e.g., DEIR at 5.3-31 and 32. By failing to analyze the extent and severity of impacts to biological resources, the DEIR downplays the effects of the loss of open space on special status species. The end result is a document which is so crippled by its approach that decision makers and the public are left with no real idea as to the severity and extent of environmental impacts. See, e.g., Berkeley Keep Jets Over the Bay Com. v. Bd. of Port Comrs. (2001) 91 Cal.App.4th 1344, 1370-71; Galante Vineyards v. Monterey Peninsula Water management Dist. (1997) 60 Cal.App.4th 1109, 1123; Santiago County Water Dist. v. County of Orange (1981) 118 Cal.App.3d 818, 831 (a lead agency may not simply jump to the conclusion that impacts would be significant without disclosing to the public and decision makers information about how adverse the impacts would be).

Similarly the DEIR's analysis of impacts to raptors such as Swainson's hawk simply asserts that they would be affected by a reduction in nesting resources, ignoring altogether the impacts caused by loss of habitat. DEIR at 5.3-28. Urbanization has a profound effect on raptors because they require large areas to hunt and are disturbed by human activity near their nests. Moreover, the DEIR's sole mitigation proposal for raptors focuses exclusively on avoiding active nests. It ignores perch resources and the role that loss of habitat and urbanization have on raptors. In any event, the DEIR must quantify the Project's effects on raptors, and the efficacy of the proposed mitigation, so that the public and decision makers may reach their own conclusions. *Save Our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 130.

#### (d) Indirect Impacts on Wildlife

The DEIR ignores altogether the Project's indirect impacts on wildlife. Indirect impacts from low density residential development can be as devastating to wildlife as the direct loss of habitat. (*See generally* Exhibit 5 [Hansen, et al., Land Use Change in Rural America: Effects Of Exurban Development On Biodiversity: Patterns, Mechanisms, And Research Needs]). For example, toxic compounds from the residential activities could adversely impact wildlife that rely on Kirker Creek. The use of common fertilizers and pesticides associated with routine yard maintenance and landscaping can generate concentrations of pollutants that degrade water quality and harm wildlife.

It is also well established that noise—and even low ambient noise levels from typical residential activities adversely impacts wildlife species, causing them to flee their habitats and even abandon nests. Wildlife can also be quite sensitive to glare from ambient night lighting. Also, cats, unless they are kept indoors, are skilled predators on wildlife. Cats can radically decrease the potential for bird species and small reptiles to survive in sensitive habitats adjacent to project sites. *See* "Domestic Cat Predation on Birds and Other Wildlife" attached as Exhibit 6. These indirect impacts would be significant and therefore must be analyzed in an EIR.

In short, the DEIR's analysis of impacts to biological resources dramatically understates the Project's potential to significantly affect sensitive species and sensitive habitats. To comply with CEQA, the City must prepare a revised DEIR fully analyzing the Project's potential impacts to these resources and identifying effective mitigation measures. Given the substantial revisions that are necessary, the City must recirculate the revised DEIR. Guidelines 15088.5(a)(4).

### 4. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Cultural and Historic Resources.

The Project is located on the site of a former historic ranch complex considered a significant historic resource under CEQA (*i.e.*, Thomas Ranch complex). *See* DEIR Appendix 1.0; IS at 41. According to a historic resources survey performed in 1995, the complex consisted of a house and a number of small barns in a style typical of the period from the late 1800's through the turn of the century. *Id*. The IS indicates that the historic buildings were demolished and the area leveled, but that the ranch complex was never inventoried as recommended in the 1995 study. IS at 42. It also indicates that historic and/or prehistoric archaeological deposits may be present on the site. *Id*.

Nonetheless, while the DEIR acknowledges the likelihood of significant archaeological resources on the site, it fails to identify the extent of potential cultural resources, adequately analyze potential impacts to those resources, or adequately mitigate the project's potentially significant impacts to cultural resources. Instead, the DEIR relies on the IS analysis and incorporates the mitigation measures proposed in that document. DEIR at 2.0-19. These measures provide for monitoring during construction and data collection and recording should resources be discovered. Based on implementation of these measures, the DEIR concludes that resulting impacts would be less than significant.

However, the assertion that post-approval data collection will mitigate the project's impacts to known resources on the site to a less-than-significant level is not supported by substantial evidence, constitutes an inappropriate deferral of mitigation measures under *Sundstrom v. County of Mendocino*, 202 Cal.App.3d at 296, and is erroneous as a matter of law. In fact, "where a historic resource is to be demolished, documentation of the resources usually falls short of full mitigation."). *See* Discussion following Guidelines § 15126.4. Moreover, courts have explained that the mitigation of the effects of demolition of an historic resource (as defined by CEQA) through documentation of the resource and placement of commemorative markers is not adequate to reduce impacts to a level of insignificance. *League of Protection of Oakland's Architectural and Historic Resources v. City of Oakland* (1997) 52 Cal.App.4th 595.

Moreover, under CEQA, the preferred method of reducing impacts to cultural resources is avoidance. *See Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal.App.4th 48, 86-87. The only feasible way to avoid cultural resources with a development project like this is to conduct surveys before final project design is approved; identify all known historic properties that will be affected by the project; and consider redesigning the project to avoid them.

Here, given that the site includes known significant historical resources, and especially given the fact that known historical resources were destroyed without proper evaluation or documentation, the City should require a third party consultant to perform trenching tests now, as part of the CEQA process, to assess whether the Project would impact significant resources and what Project modifications could be incorporated to avoid the resources. Until such additional investigation and analysis of potential impacts to cultural resources is prepared, the DEIR cannot be certified under CEQA and the Project must not be approved.

Finally, the cultural resources evaluations prepared by Holman and Associates (1995, 1999, and 2000) were not included as appendices to the DEIR. Although it is customary to exclude location maps and specific language related to the



location of resources to protect potential resources on site, the DEIR omitted the studies altogether. Without these studies, it is impossible for the public and decision makers to evaluate the impacts the proposed project would have on cultural resources. Accordingly, for this and the other reasons discussed above, the DEIR's analysis of impacts to cultural resources is inadequate under CEQA.

### 5. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Public Services.

As the DEIR acknowledges, several schools within the Pittsburg Unified School District are currently operating at or near capacity. DEIR at 5.6-3. The Project will generate up to 277 Kindergarten through Twelfth grade students. DEIR at 5.6-8. The DEIR discloses that the Project would generate the need for new school facilities to be constructed. The DEIR concludes that school impacts will be mitigated to a less-thansignificant level, however, by payment of fees established by the school districts. DEIR at 5.6-9 (citing Gov't Code § 65996).

While it may be true that the payment of such fees is deemed mitigation under Government Code section 65996, this provision does not excuse the City from analyzing the impacts to the environment of sending 277 new students to schools that are already at or near capacity. Indeed, the DEIR's threshold of significance states that the Project could have a significant effect on the environment if it would: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios . . . for schools. DEIR at 5.6-7. With several schools already at capacity, the Project will necessarily require the construction of "new or physically altered" school facilities. Construction of these school facilities may have land use and planning impacts and, if sited on undeveloped open space lands, potential biological, agricultural, recreational, and other impacts as well. The DEIR must be revised to analyze these potential environmental impacts.

Moreover, the DEIR failed to consider cumulative impacts of school construction. The DEIR lists five Major Projects (DEIR at 5.0-4), most of which are residential projects, in its cumulative impacts analysis. In addition, the City of Pittsburg's Project Pipeline List includes at least a dozen residential projects. Considering that the Pittsburg Unified School District is already at or near capacity, the DEIR must analyze how this project, along with the related projects, will cumulatively affect school services in the District.

### 6. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Public Safety.

The Project site has an existing high-pressure petroleum pipeline within the area proposed as a buffer. DEIR at 3.0-9. The Project proposes to site residences within 1,000 feet of the pipeline, yet the DEIR provides no analysis of related safety impacts. *Id.* Although leaks, ruptures, and explosions may not be common for underground pipelines, the impacts from pipeline failures when they do occur can be catastrophic. *See* "Pipelines Explained: How Safe are America's 2.5 Million Miles of Pipelines?" attached as Exhibit 7. As explained in that article, pipelines are prone to failure as they age and corrode. Given the Project's proposal to locate housing in close proximity to the pipeline, the DEIR should have provided an analysis of the condition of the pipeline and the likelihood of failure or accidents.

Instead, the DEIR includes a mitigation measure (carried over from the IS) that only requires the developer to disclose the location of the pipeline to prospective homebuyers. DEIR at 2.0-2.0. However, this measure does nothing to minimize risks to homeowners. Indeed, the DEIR fails to provide any evidence to support its conclusion that risks associated with potential rupture of the pipeline would be reduced to a less-than-significant level with implementation of the measure.

# 7. The DEIR's Analysis of Growth Inducing Impacts Is Incomplete and Flawed.

CEQA requires that an EIR include a "detailed statement" setting forth the growth-inducing impacts of a proposed project. CEQA § 21100(b)(5); *City of Antioch v. City Council of Pittsburg* (1986) 187 Cal. App. 3d 1325, 1337. The statement must "[d]iscuss the ways in which the proposed project could foster economic growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Guidelines §15126.2(d). It must also discuss how the project "may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively" or "remove obstacles to population growth." *Id*.

Here, the DEIR's analysis of growth-inducing impacts is legally inadequate. As with other issues, the document relies on speculation instead of evidence to support its conclusions. The DEIR's conclusion that the Project will have no growthinducing impacts is not supported by substantial evidence.

The DEIR relies on the promise that the required facility upgrades necessary to serve the Project would only serve development on the main Project site to



conclude that there is little chance that the Project will cause adjacent, undeveloped land to be developed, and thus that the Project will not induce significant growth. DEIR at 7.0-5. With a growing population in the Bay Area, extending infrastructure to an area currently outside the City Limit will remove one barrier that currently keeps pressure for development in the area in check.

The City's General Plan specifies a goal of efficient land use patterns which reduce environmental impacts and minimize the potential for residential and commercial sprawl. Approval and development of the Montreux Project would expand development and extend utility infrastructure beyond the City's existing service area, effectively removing an obstacle to future development approvals in the area. That new development has yet to be approved does not excuse the requirement to analyze a project's environmental or growth inducing impacts. Guidelines § 15126.2(d); *City of Davis v. Coleman* (9th Circuit 1975) 521 F.2d 661,675-76.

The DEIR fails to conduct such an analysis. As the *City of Davis* court directed "the purpose of an EIS/EIR is to evaluate the possibilities in light of current and contemplated plans and to produce an informed estimate of the environmental consequences." *Id.* at 676. Accordingly, the DEIR must be revised to identify the extent and location of new development facilitated by removing the obstacle of limited existing infrastructure and to analyze the environmental impacts of the growth.

If the City has contrary data demonstrating that the Project will not induce growth – and there is no indication in the DEIR that it does – it must reference it in the document. However, it may not lawfully rely on unsupported assumptions to summarily conclude that no induced growth will occur. CEQA § 21080(e)(2) ("Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative").

### 8. The DEIR Fails to Provide an Adequate Analysis of the Project's Potentially Significant Cumulative Impacts.

CEQA requires lead agencies to disclose and analyze a project's "cumulative impacts," defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Guidelines § 15355. Cumulative impacts may result from a number of separate projects, and occur when "results from the incremental impact of the project [are] added to other closely related past, present, and reasonably foreseeable probable future projects," even if each project contributes only "individually minor" environmental effects. Guidelines §§ 15355(a)-(b). A lead agency must prepare an EIR if



a project's possible impacts, though "individually limited," prove "cumulatively considerable." CEQA § 21083(b); Guidelines § 15064(i).

Extensive case authority highlights the importance of a thorough cumulative impacts analysis. In *San Bernardino Valley Audubon Society v. Metropolitan Water Dist. of Southern Cal.* (1999) 71 Cal.App.4th 382, 386, 399, for example, the court invalidated a negative declaration and required an EIR for the adoption of a habitat conservation plan and natural community conservation plan. The court specifically held that the negative declaration's "summary discussion of cumulative impacts is inadequate," and that "it is at least potentially possible that there will be incremental impacts. . . that will have a cumulative effect." *See also Kings County Farm Bureau*, 221 Cal.App.3d at 728-729 (EIR's treatment of cumulative impacts on water resources was inadequate where the document contained "no list of the projects considered, no information regarding their expected impacts on groundwater resources and no analysis of the cumulative impacts").

In contravention of the above authorities, the DEIR provides no analysis of the Project's cumulative impacts on biological resources, but simply concludes that, because the applicant will pay permit fees under the Habitat Conservation Plan for the area, cumulative impacts are less than significant. DEIR at 5.3-37. The DEIR thus completely ignores the cumulative effects of recent development approvals and potential future approvals in the City. For example, as discussed earlier in this letter, the City's Project Pipeline List indicates that the City has approved, or is in the process of approving, at least a dozen residential development projects constructing thousands of residential units. See Exhibit 7. The DEIR lists only five projects considered in the cumulative analysis. DEIR at 5.0-4. Other projects that should have been considered in a cumulative analysis include projects that have been approved but not yet constructed (Alves Ranch (364 units); Bancroft Gardens II (28 units); the San Marco Development (1,588 units); and Vista del Mar (518 units). See generally Exhibit 8. These development projects, together with the present subdivision, would have a cumulatively significant impact on open space and natural resources in the Project area. Notwithstanding such evidence, the DEIR fails to provide any analysis of this potentially significant impact.

In another particularly glaring omission, the DEIR also neglects to analyze cumulative impacts on hydrological resources. Specifically, the DEIR contains no analysis of the Project's impacts together with the effects of other development projects proposed within the Project area that may contribute to changes in hydrology in Kirker Creek. Another major project, the James Donlon Boulevard Extension, which is currently under review by the City and would include massive grading and alteration of local drainage patterns and hydrology within the Kirker Creek watershed, is not considered in



the DEIR's hydrology analysis. The effects on water quality, flooding, and hydromofication from these two major projects, and others, on Kirker Creek must be analyzed in a revised DEIR.

### 9. The DEIR Fails to Adequately Analyze and Mitigate Alternatives to the Project.

The alternatives section, along with the mitigation section, is the core of an EIR. *Citizens of Goleta Valley*, 52 Cal.3d at 564. Every EIR must describe a range of alternatives to a proposed project, and to its location, that would feasibly attain the project's basic objectives while avoiding or substantially lessening the project's significant impacts. CEQA § 21100(b)(4); Guidelines § 15126(d). In preparing an EIR, the lead agency must ensure "that all reasonable alternatives to proposed projects are thoroughly assessed." *San Joaquin Raptor*, 27 Cal.App.4th at 717. An EIR's alternatives discussion must focus on alternatives that avoid or substantially lessen significant effects of the project. Guidelines § 15126.6(b); *Citizens of Goleta Valley*, 52 Cal.3d at 556 (EIR must consider alternatives that offer "substantial environmental advantages."). The range must be sufficient "to permit a reasonable choice of alternatives so far as environmental aspects are concerned." *San Bernardino Valley Audubon Soc'y v. County of San Bernardino* (1984) 155 Cal.App.3d 738, 750. The DEIR's discussion of alternatives fails to meet these standards.

Sound planning principles dictate that the City carefully consider alternatives in the present case because the proposed Project would require annexation of the Project site into the City limits and into service areas for water and sanitation districts and would result in admittedly significant impacts to air quality, visual resources, and public services. DEIR at 2.0-6, 2.0-8, 2.0-10, and 2.0-16. This DEIR's analysis of alternatives is insufficient under CEQA because the document fails to consider feasible alternatives that would reduce Project impacts. Guidelines § 15126.6(c); *Citizens of Goleta Valley*, 52 Cal.3d at 566.

As a preliminary matter, the DEIR's failure to disclose the extent and severity of the Project's broad-ranging impacts necessarily distorts the document's analysis of Project alternatives. As a result, the alternatives are evaluated against an inaccurate representation of the Project's impacts. Proper identification and analysis of alternatives is impossible until Project impacts are fully disclosed. Moreover, as discussed above, the document's analysis is incomplete and/or inaccurate so that it is simply not possible to conduct a comparative evaluation of the Project's and the alternatives' impacts.

The DEIR also fails to describe an alternative location for the Project, stating that because neither the developer nor the City owns or controls any other property in the vicinity of the site that is of sufficient size to accommodate the project, the ability of the developer to find and purchase an alternative site to develop the project is considered speculative. DEIR at 6.0-3. The DEIR goes on to state that "... the development of the same number of residential uses at a different location would result in similar visual character and construction air quality impacts. Thus, placing the proposed development at an alternative site would not avoid the significant impacts of the proposed project." *Id.* 

This approach fails to meet CEQA's requirements for the analysis of alternatives. It provides no information on the alternative sites that might be available or event the criteria for such a site search. Without this information and, if possible, a further identification of alternative sites, the DEIR is inadequate and cannot be certified under CEQA. Moreover, even if it is true that no alternative sites exist that could accommodate all of the Project in one location, a feasible alternative could break the Project up into two or more locations. Such an alternative could involve in-fill sites and would likely disperse some of the significant project impacts associated with the proposed Project. An alternative that examines dividing the Project among two or more locations should be included in a revised DEIR.

Contrary to CEQA, the DEIR also fails to explain why the proposed Project was selected over alternatives that are identified as environmentally superior. CEQA requires that the EIR explain why environmentally superior alternatives were rejected. Guidelines § 15126.6(d). As the California Supreme Court held in *Laurel Heights I*, 47 Cal.3d at 405, "[i]f the [lead agency] considered various alternatives and found them to be infeasible . . . those alternatives and the reasons they were rejected . . . must be discussed in the EIR with sufficient detail to enable meaningful participation and criticism by the public." The DEIR fails to include this analysis.

### **III. CONCLUSION**

To cure the many defects identified in this letter, the DEIR must be revised and recirculated. These steps are necessary to provide the public and decision makers with an opportunity to gauge the true impacts of this significant, proposed development. Moreover, the Project itself must be revised to comply with the City's general plan. Only then could the City make the findings necessary to approve this subdivision.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Winter King

1. Bong  $\bigcirc$ 

Carmen J. Borg, AICP Urban Planner

### **List of Exhibits**

Exhibit 1:	Bruce Abelli-Amen, Comments on Draft Environmental Impact Report and Initial Study, Baseline Environmental Consulting, Jan. 8, 2014.
Exhibit 2:	Susan Orloff, Movement Patters and Migration Distances in an Upland Population of California Tiger Salamander ( <i>Ambystoma Californiense</i> ), Ibis Environmental Inc., Apr. 1, 2011.
Exhibit 3:	Malcolm Sproul Biography, Retrieved Jan. 8, 2014.
Exhibit 4:	Potential Pond Site Image and Location, Retrieved on Jan. 8, 2014 from <u>http://earth.google.com</u>
Exhibit 5:	Andrew J. Hansen, et al, Effects of Exurban Development on Biodiversity: Patterns, Mechanisms, and Research Needs, Ecological Society of America, Dec. 1, 2005.
Exhibit 6:	Domestic Cat Predation on Birds and Other Wildlife, Cats Indoors and American Bird Conservancy.
Exhibit 7:	Lena Groeger, Pipelines Explained: How Safe are America's 2.5 Million Miles of Pipelines?, ProPublica, Nov. 15, 2012.
Exhibit 8:	City of Pittsburg, Project Pipeline List- Updated September 2013, Retrieved Jan. 8, 2014.

SHUTE, MIHALY O-WEINBERGER LP

# Attachment 2



8 January 2014 13316-00

Ms. Carmen Borg Shute, Mihaly, and Weinberger 396 Hayes Street San Francisco, CA 94102

#### Subject: Montreux Residential Subdivision Draft Environmental Impact Report

Dear Ms. Borg:

At your request, BASELINE Environmental Consulting ("BASELINE") has reviewed the CEQA analysis of the hydrology and water quality issues included in the November 2013 Montreux Residential Subdivision Draft Environmental Impact Report ("DEIR") and appended March 2013 Montreux Residential Subdivision Project Initial Study ("Initial Study"). Specifically, we reviewed the Hydrology and Water Quality section of the Initial Study only, because the DEIR does not include any analysis of hydrology or water quality (this topic was scoped out of the DEIR). In order to provide a meaningful context, we also reviewed the Project Descriptions included in the Initial Study and DEIR. Our comments are presented below.

#### COMMENTS ON DEIR AND INITIAL STUDY

#### **Project Description**

The Project Description does not include adequate details of the design and function of the stormwater drainage system to allow the reader of the DEIR to understand this important project element. The description of the stormwater drainage features is limited to the location of the detention basins and a mention that the stormwater system would use inlets and piping. As stated in the Project Description (DEIR page 3.0-9), the project would include grading to construct stormwater detention basins:

Three stormwater detention basins are included in the preliminary grading plan, with two large basins located on the east side of the main project site (Parcels C and D) along Kirker Pass Road, and a third small basin with a 12 foot access road located on the offsite parcel to the northwest of the main project site. Construction of these basins would require grading to re-contour the eastern end of the southern ridgeline on the main project site, and the north-facing slope above the proposed off-site basin located on the off-site parcel. While the entire off-site parcel totals approximately 72 acres, only 16.8 acres would be graded in order to accommodate the new off-site basin (which has an actual footprint of 0.83 acre).

Based on information included on Figure 3.0-6 (DEIR page 3.0-10) the parcels containing the large detention basins would be 5.91 and 3.75 acres. The off-site detention basin would have a



bottom area of 0.83 acres and approximately 16.8 acres of grading would be required to construct the off-site basin. In total, more than 26 acres of land would be graded to construct these three basins.

The project would convey runoff to the detention basins using drainage inlets and piping (DEIR page 3.0-9):

New storm drainage infrastructure, including drainage inlets and piping, would be installed in the proposed roadways on the main project site to connect developed areas to the stormwater detention basins.

The Project Description fails completely to describe where drainage features (inlets, piping, culverts, etc.) would be located and how these systems, including the detention basins, would be operated. The DEIR does not appear to include, nor does it reference, any hydrologic or hydraulic engineering that supports the drainage plan. The reader of the DEIR has no idea how the detention basins were sized or how they would be operated. The DEIR Project Description should be revised to include this information and appropriate hydrologic/hydraulic studies should be appended to the DEIR.

#### Hydrology and Water Quality Analysis

*Hydrologic Setting.* The DEIR/Initial Study provides no information on the hydrology and water quality setting. Without describing the hydrology of the on-site drainage and that of Kirker Creek downstream, the reader of the DEIR has no context within which to evaluate potential project impacts. The DEIR should be revised to include a Hydrology and Water Quality section that includes a detailed hydrologic setting.

*Stormwater Quality and NPDES Compliance.* The Hydrology and Water Quality section of the Initial Study indicates that (Initial Study page 59):

Postconstruction, the project would treat stormwater runoff from the new impervious surfaces created onsite, as required by provision C.3 of the Contra Costa County municipal stormwater NPDES permit by directing all site runoff into three detention basins where the runoff would be detained and released at a rate that does not exceed the current rate at which site runoff is discharged into receiving waters. The detention and slow release would allow pollutants, especially sediment to settle in the detention basins and not be discharged into the receiving waters. Therefore the site runoff would not exceed any water quality standards. This impact is considered less than significant.

The paragraph above represents the sum total of the Initial Study/DEIR analysis and discussion of post-construction stormwater management issues. This paragraph not only fails to convey the scope of post-construction stormwater management issues and potential impacts related to the proposed project, it misrepresents NPDES requirements.



The Initial Study states that the project would treat stormwater runoff "as required by provision C.3 of the Contra Costa County municipal stormwater NPDES permit by directing all site runoff into three detention basins." The actual NPDES permit that the project would be required to comply with is the Municipal Regional Stormwater NPDES Permit, Order No. R2-2009-0074, NPDES Permit No. CAS612008, adopted October 14, 2009 and revised November 28, 2011 ("MRP"). Not only does the Initial Study refer to the wrong NPDES permit, it wrongly interprets what C.3 provisions would be required. The C.3 portion of the MRP, which refers to post-construction stormwater management for new development and redevelopment projects, <u>requires</u> Low Impact Development ("LID").<sup>1</sup>

The goal of LID is to reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and biotreatment through rain gardens, bioretention units, bioswales, and planter/tree boxes. LID also limits disturbance of natural water bodies and drainage systems; minimizes compaction of highly permeable soils; protects slopes and channels; and minimizes impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies. The project would include the following (Initial Study page 60):

The project includes alteration of site drainage and the alteration of the unnamed intermittent and ephemeral stream channel that runs through the project site.

Under the project, the existing "unnamed intermittent and ephemeral stream channel" would be eliminated and placed in an underground pipe (contrary to LID principles and MRP requirements).

The basic design of the project, which includes mass grading, destruction of natural drainages, extensive new impervious surfaces, no small-scale distributed stormwater treatment features, conventional gutter and pipe collections systems, and centralized detentions basins is completely contrary to LID principles and therefore would be in violation of the MRP. The Initial Study/DEIR fails completely to identify and mitigate the flaws in project design related to post-construction stormwater management.

Incorporation of LID designs and features into the project would require extensive modifications to the grading plan and overall site plan. These design changes to the project

<sup>&</sup>lt;sup>1</sup> A stormwater management strategy aimed at maintaining or restoring the natural hydrologic functions of a site. LID design detains, treats, and infiltrates runoff by minimizing impervious area, using pervious pavements and green roofs, dispersing runoff to landscaped areas, and routing runoff to rain gardens, cisterns, swales, and other small-scale facilities distributed throughout a site (source: Contra Costa County C.3 Guidebook).



should be made by the applicant and the revised project should be subject to CEQA review (which should include an EIR-level analysis of Hydrology and Water Quality).

Centralized detention basins are not LID features and should be eliminated from the stormwater quality management plan for the project. However, it is possible that some sort of detention may be required to mitigate the potential for downstream flooding of Kirker Creek.

**Downstream Flooding and Erosion.** The following paragraph is the only Initial Study/DEIR discussion provided related to potential downstream flooding (Initial Study page 60):

A majority of stormwater runoff on the site would be channeled to two detentions basins located along Kirker Pass Road, which would delay the flow of water downstream in the event of a storm, thus preventing erosion of existing stream banks and flooding downstream along Kirker Creek.

The Initial Study/DEIR does not provide any discussion of the hydrology of Kirker Creek and its susceptibility to flooding, and therefore it is impossible for the reader to know if downstream flooding is an important issue. Based on review of available mapping and aerial photographs, Kirker Creek appears to have reaches that are highly incised with oversteepened creek banks. This indicates that portions of the creek may be unstable. There are areas in the City of Pittsburg (e.g., Brush Creek Drive, Canyon Way), where homes are located within 20 to 30 feet of the top of the creek bank. Any change to the hydrology of flows in Kirker Creek could cause increased erosion and creek bank failure, which may jeopardize existing structures. This is a potentially significant impact which must be fully analyzed under CEQA.

The Initial Study fails to provide any explanation as to how the detention basins would be operated so that "erosion of existing stream banks and flooding downstream along Kirker Creek" would be prevented. The concept of "hydromodification"<sup>2</sup> is not even mentioned in the Initial Study/DEIR. Simply delaying flows in detention basins is not an effective approach to preventing downstream hydromodification of Kirker Creek. By introducing widespread new impervious surfaces and conveying the increased flows to centralized basins (which tend to become sealed and do not infiltrate much water), the project would increase total discharge volume to Kirker Creek (i.e., with an increased volume of runoff, the detention basins may be able to limit increases in peak discharges, but the duration of flows would almost certainly increase). Even moderate flows to the creek, if sustained for longer periods of time than would occur without the project, could cause significant downstream erosion. The Initial Study/DEIR fails completely to analyze and mitigate this potential impact.

In summary, the project proposes mass grading, elimination of existing natural drainage channels, and drastic changes to site hydrology and flow discharge characteristics. The Initial

<sup>&</sup>lt;sup>2</sup> Hydromodification is generally defined as changes in channel form associated with alterations in flow and sediment due to past or proposed future land use alteration.



Study/DEIR includes no description of the hydrologic setting, provides no substantive analysis of the hydrology or water quality effects of the project, and provides no substantial evidence for the findings of less than significant for all hydrology and water quality impacts. For a project of this magnitude, located just upstream from a potentially unstable creek system, a full EIR-level analysis of hydrology and water quality issues must be completed.

*Cumulative Impacts.* The Initial Study/DEIR completely fails to evaluate (or even mention) cumulative impacts related to hydrology and water quality. For example, another major project, the James Donlon Boulevard Extension, which would include massive grading and alteration of local drainage patterns and hydrology within the Kirker Creek watershed is not mentioned in the DEIR analysis. The effects and water quality, flooding, and hydromofication of these two major projects on Kirker Creek should be analyzed in the DEIR.

Should you have any questions or comments, please contact us at your convenience.

Sincerely,

ulle

Bruce Abelli-Amen Senior Hydrogeologist Cert. Hydrogeologist No. 96

BAA:km

556803.1

# Attachment 3

#### California Red-Legged Frog (*Rana draytonii*) Movement and Habitat Use: Implications for Conservation

#### GARY M. FELLERS<sup>1</sup> AND PATRICK M. KLEEMAN

#### Western Ecological Research Center, USGS, Point Reyes National Seashore, Point Reyes, California 94956 USA

ABSTRACT.—Nonbreeding habitats are critically important for *Rana draytonii*, especially for individuals that breed in temporary bodies of water. We radiotracked 123 frogs to evaluate seasonal habitat use. Individual frogs were continuously tracked for up to 16 months. Some individuals remained at breeding ponds all year, but 66% of female and 25% of male frogs moved to nonbreeding areas, even when the breeding site retained water. Frogs at our main study site moved 150 m (median), roughly the distance to the nearest suitable nonbreeding area. The greatest straight-line distance traveled was 1.4 km, although the presumed distance traveled was 2.8 km. Females were more likely than males to move from permanent ponds (38% of females, 16% of males), but among dispersing frogs, males and females did not differ in distance moved. Some frogs left breeding sites shortly after oviposition (median = 12 days for females, 42.5 days for males), but many individuals remained until the site was nearly dry. Fog provided moisture for dispersal or migration throughout the summer. Our data demonstrate that maintaining populations of pondbreeding amphibians requires that all essential habitat components be protected; these include (1) breeding habitat, (2) nonbreeding habitat, and (3) migration corridors. In addition, a buffer is needed around all three areas to ensure that outside activities do not degrade any of the three habitat components.

Rana draytonii (California Red-Legged Frog) was once an abundant frog throughout much of central and southern California and is believed to have inspired Mark Twain's fabled story "The Celebrated Jumping Frog of Calaveras County." Now this frog is rare in both the Sierra Nevada foothills and the southern portion of its range (Jennings and Hayes, 1994). In parts of the central Coast Range, there are still large, vigorous populations, some of which probably rival those present 200 years ago (Fellers, 2005). Rana draytonii was federally listed as a Threatened species on 24 June 1996, and the recovery plan states that it "... has been extirpated from 70 percent of its former range . . . Potential threats to the species include elimination or degradation of habitat from land development and land use activities and habitat invasion by non-native aquatic species" (U.S. Fish and Wildlife Service, 2002:iv).

*Rana draytonii* use ponds or pools for breeding during the wet season (December through March) and ponds, riparian areas, or other aquatic habitats during the rest of the year. In Marin County, stock ponds are the most commonly used breeding sites. There is only one published report on migration or nonbreeding habitat requirements for this frog. Bulger et al. (2003) described movements of 56 *R. draytonii* in a coastal area about 100 km south of San Francisco. They found that 80–90% of the frogs remained at one breeding site all year. Frogs radiotagged at nonbreeding sites often moved in a straight-line between breeding and upland habitats without apparent regard to intervening vegetation or topography. Frogs traveled overland up to 2,800 m, and Bulger et al. (2003) recommended a 100 m buffer zone around breeding sites.

The California Red-Legged Frog recovery plan outlines the necessary actions for recovery. One task is to "conduct research to better understand the ecology of the California Red-Legged Frog including the use of uplands, dispersal habits, and overland movements" (U.S. Fish and Wildlife Service, 2002:84). This is a concern not only for *R. draytonii*, but also for many endangered and nonendangered vertebrates that migrate between breeding and nonbreeding areas. This includes salamanders (Ambystoma; Madison, 1997; Triturus; Joly et al., 2001), frogs (Rana; Richtor et al., 2001; Pope et al., 2000), snakes (Farancia; Gibbons et al., 1977), turtles (Burke and Gibbons, 1995; Bodie, 2001), and many species of passerine birds (Keast and Morton, 1980). Lamoureux and Madison (1999) made the point that studies need to examine amphibian habitat requirements at all times of the year not just during the breeding season. We designed our study to address this concern for R. draytonii.

#### MATERIALS AND METHODS

Study area.—Our study was conducted in Marin County, California, 45 km northwest of

<sup>&</sup>lt;sup>1</sup>Corresponding Author. E-mail: gary\_fellers@ usgs.gov

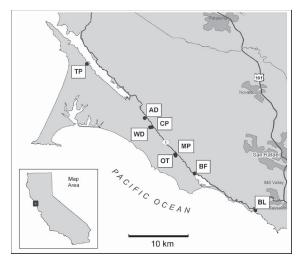


FIG. 1. Sites where California Red-Legged Frogs (*Rana draytonii*) were radiotagged at Point Reyes National Seashore and Golden Gate National Recreation Area, Marin County, California. Site descriptions are listed in Table 1.

San Francisco. All sites were within 6 km of the ocean and located at either Point Reves National Seashore or Golden Gate National Recreation Area (Fig. 1). The local climate is Mediterranean, with an average annual rainfall of 100 cm that largely occurs between November and March. Mean monthly temperatures range from 8.6°C (December) to 16.6°C (August/September) at the headquarters of Point Reyes National Seashore in Olema Valley (National Park Service weather records). Most frogs (N = 112)were tagged in the Greater Olema Valley (Olema Valley and Pine Gulch Valley; 38°01'41"N, 122°46'50"E). To evaluate movement and habitat use in areas with contrasting habitats, nine frogs were tagged at Big Lagoon (37°51′36″N, 122°34′29″E), and two were tagged at Tomales Point (38°09'19"N, 122°54'43"E; Fig. 1).

Most of the Greater Olema Valley was characterized by a mixture of grazed and ungrazed grasslands interspersed with seasonal drainages with California bay (Umbellularia californica) and coast live oak (Quercus agrifolia). The west side of the valley was predominantly a Douglas fir forest (Pseudotsuga menziesii). Olema and Pine Gulch Creeks had well-defined riparian zones composed of California bay, red alder (Alnus rubra), willow (Salix spp.), big-leaf maple (Acer macrophyllum), and Douglas fir, with an understory dominated by blackberry (Rubus discolor), poison oak (Toxicodendron diversilobum), stinging nettles (Urtica dioica), and western sword fern (Polystichum munitum). Within the valley, there were 24 R. draytonii breeding sites. Fourteen of these were artificial stock ponds, and the others were naturally occurring ponds or marshes. Aquatic vegetation was predominantly cattails (*Typha* spp.), pennywort (*Hydrocotyle verticillata*), and rushes (*Juncus* spp.). About half of the ponds were seasonal, whereas the others usually held water all year. Study sites within the Olema Valley were selected to represent a range of habitats and because there was a sufficiently large *R. draytonii* population at each of the study sites.

The Big Lagoon study site consisted of a cattail marsh with a seasonal creek (Green Gulch Creek) that flowed into it. The marsh had several small areas where water depth was 1.0-1.5 m during the winter, but most of the marsh was covered by < 0.25 m of water, even during the wet season. A levee on the north side separated the marsh from a permanent creek (Redwood Creek), but a set of culverts allowed water to enter the marsh during higher winter flows. Water retention in the marsh varied with rainfall but was also influenced by how much water the National Park Service allowed to pass through flood gates on the culverts. The Tomales Point study site was a nonbreeding site at a seasonal seep. The dominant vegetation was coyote brush (*Baccharis pilularis*), with a few wax myrtle (Myrica californica). The nearest breeding pond was 650 m away.

Field methods.—Frogs were caught at night either with a dip net or by hand. We marked each frog with a passive integrated transponder (PIT) tag (TX1400L, Biomark, Meridian, ID; www.biomark.com) for individual identification and recorded sex, snout-vent length (SVL), and mass. Each frog was radiotagged by attaching a transmitter (model BD-2G, Holohil Systems Ltd., Carp, Ontario, Canada; www.holohil.com) to a belt of aluminum beaded chain that was slipped over the frog's extended rear legs and up onto the waist (Rathbun and Murphey, 1996). The transmitters were either a dull green or light brown color. The aluminum belt was painted flat black to eliminate reflections. The smallest frog we radiotagged was 32 g, and the mass of the transmitter and belt was approximately 2.1 g (6% of the frog's mass). When possible, we recaptured frogs before the battery died (20week life) and fitted a new transmitter. We tagged frogs during all months of the year except August, with most being tagged just prior to, or during, the December to March breeding season.

A total of 123 individual frogs was radiotagged (47 females, 76 males) between 5 November 1997 and 1 May 2003 at eight sites (Table 1). Twenty-three frogs were consecutively fitted with two transmitters, six frogs with three transmitters, and one frog wore six

		Number of frogs tagged		Days tracked		
Site name	Habitat	М	F	Median $\bar{x} \pm SD$	Range	
Greater Olema	Valley					
СР	Permanent pond	44	31	86 89.6 ± 56.0	2–229	
MP	Seasonal pond	19	9	$76 \\ 80.5 \pm 47.3$	12–191	
AD	Seasonal pond	2	4	$127 \\ 139.0 \pm 75.0$	63–253	
BF	Seasonal pond	2	2	$112 \\ 109 \pm 74.9$	28–184	
WD	Permanent pond	0	1	134	134	
OT	Permanent pond	1	0	121	121	
All sites	_	68	47	$\begin{array}{r} 83\\91.3\pm56.1\end{array}$	5–253	
Big Lagoon						
BL	Permanent marsh	9	0	$\begin{array}{r} 68\\ 66.8 \pm 36.8\end{array}$	16–130	
Tomales Point						
TP	Seasonal seep and ditch	0	2	283	68–498	

TABLE 1. Sites where California Red-Legged Frogs (*Rana draytonii*) were fitted with radiotransmitters in Marin County, California. Figure 1 shows the geographic distribution of the sites.

consecutive transmitters. Seventy-eight percent of all transmitters (N = 166) were recovered. Three frogs (two females, one male) lost their transmitters but were subsequently recaptured and outfitted with new transmitters 54, 244, and 493 days later. This yielded 126 telemetry histories. We generally located radiotagged frogs twice weekly; more often when the frogs were making regular movements. We recaptured frogs every 3–4 weeks to check for injuries and ensure proper fit of the transmitter belt. Frogs were radiotagged for 91 days (median) at the Olema Valley study sites and for 67 and 283 days at the Big Lagoon and Tomales Point sites, respectively.

Frogs were located using a TR-2 receiver (Telonics, Mesa, AZ; www.telonics.com) or an R-1000 receiver (Communication Specialists, Inc., Orange, CA; www.com-spec.com) with a directional "H" or three-element yagi antenna. Fine scale location of transmitters was accomplished with a partially stripped coaxial cable inserted into a length of PVC pipe that was used as a probe (Fellers and Kleeman, 2003). Radio locations were only determined during the day.

Frog locations were plotted on a 7.5' USGS topographic map by noting proximity to a mapped feature or permanent local landmark (e.g., dead snag, fence corner). On a few occasions, locations were initially determined using a Garmin 12XL GPS unit (Garmin International Inc., Olathe, Kansas, www.garmin. com), but these locations were later visited and mapped on a topographic map using local

landmarks. Telemetry data were analyzed by plotting coordinates on digitized USGS topographic maps (1:24,000 scale) using Topo! software (National Geographic TOPO! Maps, San Francisco, California; maps.nationalgeographic. com/topo). Unless otherwise noted, movements represent straight-line distances between successive locations. For some frogs, we also calculated a longer distance moved based on locations between breeding and nonbreeding sites. For example, frogs found at several successively further distances along a riparian corridor were presumed to have followed the creek between sites. This typically resulted in a longer distance moved than would be obtained using a straightline distance and is referred to as presumed distance. Statistical analysis was conducted using Statistix (Version 7, Analytical Software, Tallahassee, Florida; www.statistix.com/home. html). We used  $\alpha = 0.05$  to evaluate statistical significance.

Olema Creek passed within 110 m of our main study site (CP) in Olema Valley (Fig. 1). To evaluate use of nonbreeding habitat, we conducted nocturnal surveys along all or part of a 4.8-km segment of Olema Creek where it flowed past our study area. One or two observers walked the creek while carefully searching both pools and stream banks for frogs. Observers used a combination of spotlights and binoculars to locate animals (Corben and Fellers, 2001). Radiotelemetry was not used as part of these nocturnal surveys. We believe that most of the frogs we located used the adjacent pond (CP) for breeding because (1) it

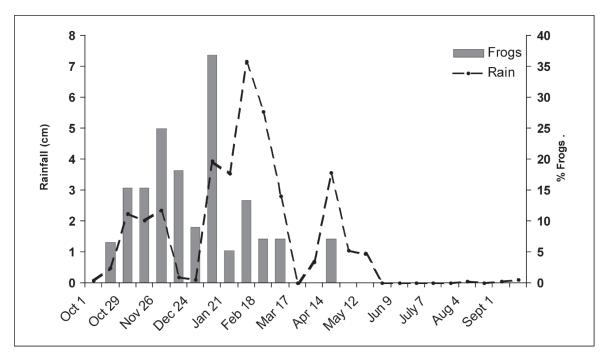


FIG. 2. Biweekly rainfall and the percent of radiotagged *Rana draytonii* that moved  $\geq$ 30 m between October 1999 and September 2000.

was the closest breeding site and (2) some of the frogs found along the creek had been fitted with radiotransmitters at the pond.

#### RESULTS

Frogs made small-scale movements (<30 m) throughout the year. Movements of <30 m could be made without leaving the breeding sites; hence, they were considered local, nondispersal. Movements  $\geq$  30 m generally coincided with winter rains, although some frogs did not move until their seasonal habitat was on the verge of completely drying. In general, frogs moved toward breeding ponds with the onset of heavy winter rains. Frogs departed from breeding ponds at varying times throughout the rainy season, with some frogs remaining at permanent ponds all year. Some frogs made largescale movements during the dry season (May through October), as seasonal breeding sites dried. A regression of the percent of frogs that moved  $\geq$  30 m versus rain showed that more frogs moved with higher amounts of rain (P =0.006). We show rainfall and movements for the 1999-2000 season (Fig. 2), the year we had the most frogs simultaneously radiotagged.

Frog movements in the greater Olema Valley.— One hundred fifteen frogs were tracked for a mean of 91 days each (range = 5–253, Table 1). Median distance moved from the breeding site was 0 m, but for the 36 frogs that moved  $\geq$ 30 m, the median was 150 m (range = 30-1400 m, Table 2, Fig. 3). In many cases, frogs almost certainly moved more than the straightline distance between sites. This was confirmed with individuals that were located in transit. Presumed distance moved for those frogs that moved ≥30 m was 185 m (median, range = 30-1400 m).

A higher proportion of radiotagged females moved  $\geq$  30 m than males (13 of 68 males, 23 of 47 females,  $\chi^2 = 11.49$ , df = 1, P < 0.01). For frogs that moved  $\geq$ 30 m, distance traveled was not significantly different for males (N = 13)and females (N = 23; median = 210 vs. 140 m, respectively; Wilcoxon rank sum T = 1.22, P =0.22). Because some frogs lost their transmitters or were killed by predators (see below), the median distance moved might be greater than what we measured. Of the 36 frogs that moved  $\geq$  30 m, 22 (11 males, 11 females) reached a destination where they remained for at least two weeks. For these frogs, median distance traveled was 175 m. The median for these males and females was not significantly different (210 vs. 120 m; Wilcoxon rank sum T = 0.56, P =0.58), in part because of the large variability in distance traveled.

A higher proportion of females left breeding sites than males. At our main study site (CP), nine of 21 (43%) females left the breeding site, whereas only four of 25 (16%) males departed. Females left the breeding site sooner than males (1, 5, 5, 5, 12, 55, 60, 76, 92 days for females [median = 12]; 31, 38, 47, 69 days for males

			Distance r	Frogs that moved <30 m				
	Sex	Minimum	Median	Maximum	Mean	SD	Ν	Ν
Olema V	alley							
CP	Males	200	240	490	293	135	4	31
CP	Females	100	320	1400	421	416	10	14
MP	Males	270	270	270	270	_	1	18
MP	Females	150	150	150	150	0	2	7
AD	Males	_	_	_	_	_	0	2
AD	Females	30	80	90	70	28	4	0
BF	Males	80	80	80	80	_	1	1
BF	Females	40	95	150	95	78	2	0
WD	Males	_	_	_	_	_	0	0
WD	Females	_	_	_	_	_	0	1
OT	Males	560	560	560	560	_	1	0
OT	Females	-	-	-	-	-	0	0
Big Lage	oon							
BL	Males	30	105	390	158	136	6	3
	Females	-	_	_	-	-	0	0
Tomales	Point							
TP	Males	_	_	_	_	_	0	0
TP	Females	30	40	50	40	14	2	0

TABLE 2. Distance moved for 110 California Red-Legged Frogs (*Rana draytonii*) with radiotransmitters at three study sites in Marin County, California. Sixteen frogs radiotagged at nonbreeding sites are not included in this tabulation.

[median = 42.5]), but the sample size was small, and the difference was not significant (T = 0.61, df = 11, P = 0.55).

Some of the dispersing frogs moved well away from the breeding site. One female (10.7 cm SVL) left the pond at our main study area (CP), crossed Olema Creek (the primary nonbreeding area) and stopped at a pond 320 m from the breeding pond. Two females (10.9 and 10.1 cm SVL) moved from CP, across Olema Creek and eventually resided in marshes, 0.88 and 1.02 km from the breeding site. Another female (10.6 cm SVL) moved down Olema Creek and up a small tributary for a total distance of 2.8 km (see individual case histories below).

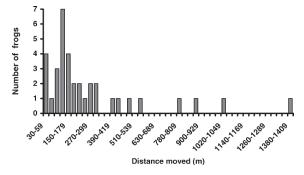


FIG. 3. Straight-line distance moved for all radiotagged Greater Olema Valley frogs that traveled  $\geq$ 30 m. Median = 185 m, N = 36.

Fourteen of the breeding sites in the Greater Olema Valley were stock ponds surrounded by pastures. At these sites, all frogs that left the breeding site had to cross heavily grazed grassland to reach another pond or the riparian area. Frogs moved directly across these fields, typically traveling the most direct route to their destination. Movements of 100-200 m across open grasslands were common. With one exception, movements taking more than one night were along riparian corridors. One frog, however, spent five days sitting in a small clump of rushes in an open grassland (45 m from the breeding pond) before moving another 100 m to a small riparian area where it spent the next 50 days.

In two instances, we radiotagged females that appeared to have recently laid eggs (i.e., gaunt sides, conspicuously loose skin). Both frogs left the breeding pond within two days and moved to a seasonal marsh 800 m away. One frog took 32 days (5 December 1997 to 5 January 1998), whereas the other took five days (14-19 January 2000). A gravid female was fitted with a transmitter at a seasonal pond on 29 January 2001. By 8 February 2001, she had moved to an adjoining swale dominated by rushes. When captured on 28 February 2001, she had laid her eggs, as indicated by a sudden drop in mass. By 3 April 2001, she had moved 150 m to a riparian area where she remained until the transmitter was removed on 1 August 2001.

Frog movements at Big Lagoon.—The nine male frogs at this site moved a median distance of 70 m (0-390 m, Table 2). Frogs made smallscale movements (<30 m) throughout the time they were radiotagged (26 December 2002 through 3 June 2003). Most movements were between three of the deeper parts of the marsh, but one frog moved 390 m up Green Gulch Creek (when part of the marsh dried), to a seasonal creek that flowed into the marsh system. The other frogs moved to the only remaining pool at the west edge of the marsh, 50-75 m away. Most frogs did not use the riparian zone along the adjacent Redwood Creek. One individual spent four weeks there, and another frog moved to the riparian zone just before it lost its transmitter. We found frogs in the riparian area during only one nocturnal survey, although we regularly found them in the marsh or adjacent cattails.

Frog movements at Tomales Point.-The two female frogs radiotagged at this site (6.7 and 10.6 cm SVL) were relatively sedentary and apparently did not move to a breeding site. They had transmitters for an average of 283 days (68 and 498 days). Both frogs moved >30 m, with a mean of 65 m (Table 2). Although it might have been possible for the female that we tracked for 498 days to have moved to a breeding pond, laid eggs, and returned to her nonbreeding site without our noticing her absence, the gradual increase in mass throughout the time we tracked her indicated that this did not happen, and she apparently did not breed during the time we radiotracked her.

Use of riparian habitat.-On six of the 21 nocturnal stream surveys, there were  $\geq$ 4 frogs per 100 m of stream, and one survey located seven frogs per 100 m (2 September 1999). Because radiotagged frogs known to be present (i.e., located during the same day by telemetry and also found along the creek on subsequent days) were frequently not seen during nocturnal surveys, the number of frogs along the creek was greater than what we observed, but it is not possible to determine by how much. For example, during a nocturnal survey on 5 July 2000, we observed one of the radiotagged frogs known to be along the creek, but we did not find two other radiotagged frogs whose presence had been confirmed earlier that day. Similarly, a nocturnal survey on 3 August 2000 did not detect either of two radiotagged frogs known to be present earlier that day; however, two untagged adults and nine subadults (<5.5 cm SVL) were observed. Nocturnal surveys also suggested that frogs tended to concentrate along portions of the creek nearest the breeding sites (Fig. 4).

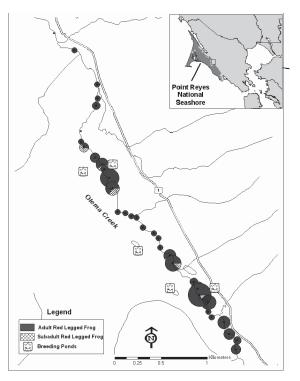


FIG. 4. Distribution of *Rana draytonii* along Olema Creek as detected during nocturnal surveys 4–6 October 1999. The distribution of frogs was similar during other surveys. Circles represent frogs, and size of each circle indicates relative number of frogs.

Diurnal behavior.—We conducted our radiotracking during the day and were frequently able to confirm visually the exact location of frogs with transmitters. This allowed us to evaluate diurnal microhabitat use. It was not unusual to find California Red-Legged Frogs basking in full sun, immediately adjacent to the water. Although we observed this behavior primarily at breeding ponds, occasionally frogs were found in similar situations in nonbreeding riparian areas.

Frogs that were not basking used a variety of cover. In permanent ponds, they sat entirely underwater in the deeper portions of the pond (>0.75 m), usually in association with the emergent vegetation. At sites with deeper water, R. draytonii sat on the bank in close proximity to the water. In shallow, seasonal ponds (<0.4 m deep), frogs were usually under vegetation (e.g., rushes, blackberries, hedge nettles [Stachys ajugoides]) at the edge of the pond. In seeps or seasonal streams, frogs were found under blackberry thickets interspersed with poison oak, covote brush, hedge nettles, stinging nettles, and mats of rushes. Along permanent streams, frogs were found in or near pools with a depth of >0.5 m and associated with structurally complex cover (e.g., root mass, logjam, or overhanging bank). When on stream

281

banks, frogs sat under dense vegetation as far as 2 m from the water's edge. Vegetation was predominantly western swordfern, blackberry, hedge nettle, and giant horsetail (*Equisetum telmateia*).

Predation.-We documented two predation events and had circumstantial evidence for three others. A Great Blue Heron (Ardea herodia) ate two radiotagged frogs sometime between 4 and 18 January 2000 (Fellers and Wood, 2004). Three other frogs appeared to have been killed by predators. The skin, bones, and transmitter of one frog were found at the base of a guanostained fence post, along with a number of raptor pellets. Two frogs appeared to have been killed by mammalian predators, although we have no definitive proof. We found the skin, internal organs, PIT tag, and transmitter of a frog in a riparian corridor, and we found pieces of skin, internal organs, and the transmitter of another frog. One frog appeared to have been stepped on by a large, hoofed animal, probably one of the cows that grazed in the pasture. We found the anterior two-thirds of the frog in a pasture; the posterior portion of the frog had been crushed into the ground. Although we did not observe any predation during our nocturnal surveys along Olema Creek, we regularly observed raccoons (Procyon lotor), Black-Crowned Night Herons (Nycticorax nycticorax), river otters (Lutra canadensis), and nonnative rats (Rattus spp.). At breeding sites, we observed Great Blue Herons, but other potential predators probably visited the ponds and marshes at times.

Injuries from transmitters.-Twenty frogs had injuries from transmitter belts (17% of radiotagged frogs). The most common injury consisted of small abrasions on the dorsum or, less frequently, a midventral abrasion. The wounds generally healed within two weeks if frogs were fitted with transmitter belts with one additional bead. Eleven of the injured frogs were reweighed at the time the wound was noticed, and all frogs had gained mass since their initial capture. We reweighed 23 uninjured frogs with transmitters; 18 (78%) gained mass after initial capture, two (9%) had no change, and three (13%) lost mass. The mean mass gain for these frogs was 21%, and mean mass loss was 8.5%. Overall, we do not believe that the minor injuries caused by the transmitter belt interfered with frog behavior.

*Individual case histories.*—The frog that was radiotagged for the longest time had a transmitter for 16 months. When first caught on 12 May 1999, the female frog weighed 42.5 g and was 7.3 cm SVL. It grew steadily and was 77.7 g and 8.9 cm when last captured on 14 June 2000.

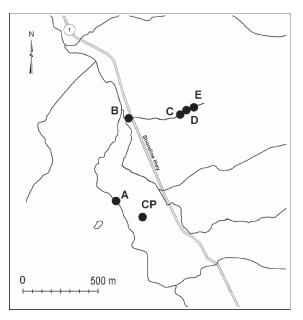


FIG. 5. Movements of a female radiotagged *Rana draytonii* that was captured at a breeding pond (CP) and subsequently moved to sites A–E. The frog was 10.5 cm (SVL) and was tagged during the breeding season (19 January 1999). The straight-line distance from CP to E was 1.4 km, but the presumed distance moved was 2.8 km.

The frog was caught in a puddle ( $1.0 \times 0.3$  m, 15 cm deep) that had formed in a rut created by a roadside seep along an abandoned dirt road on Tomales Point (site TP, Fig. 1). For 16 months, this frog made frequent, small (2-10 m) movements, within a 200-m<sup>2</sup> area surrounding the seep. The furthest the frog moved was 110 m. It used a variety of microhabitats: underwater in the puddle, underground in small mammal burrows, partially buried in duff beneath wax myrtle and coyote brush, and sitting in small clumps of grass. Although this frog was an adult female, it did not move to the nearest known breeding pond (650 m away) during the winter of 1999-2000. On 1 September 2000, the transmitter was found in the grass beneath a coyote brush, 6 m from where the frog had last been found. We could not determine whether the transmitter had fallen off or whether the frog had met a predator.

One frog moved at least 1.4 km. This was a female (10.5 cm SVL) tagged at a breeding pond (CP) during the breeding season (19 January 1999). On 23 January 1999, she was located under a fallen tree, 240 m away in Olema Creek. On 30 January 1999, she had moved a minimum of 650 m to a pool in a small tributary of Olema Creek (Fig. 5). It is quite likely that the frog followed Olema Creek to the tributary, which would have required a movement of 1.0 km to reach that point. By 14 February 1999, the frog had moved either across a two-lane, paved country road or under the road through a culvert. She then moved up a small, seasonal drainage, 430 m from her previous location. The presumed distance traveled by this frog was 2.8 km. The frog stayed in this drainage and was often found under blackberry brambles and thickets of poison oak along the stream. The transmitter and remains of the frog were found on 14 June 1999, apparently the victim of avian predation (see Predation above).

#### DISCUSSION

The California Red-Legged Frog recovery plan emphasizes protection and recovery of breeding habitat (U.S. Fish and Wildlife Service, 2002), and most protection efforts have focused on breeding sites. One challenge in managing *R. draytonii* has been the paucity of data on habitat use beyond the breeding site, thus making it difficult to evaluate requirements for nonbreeding habitat and connecting migration corridors. Our study provides insights into *R. draytonii* movement and habitat use in a coastal environment and establishes a basis for making decisions about habitat protection.

Migration of *R. draytonii* from the breeding sites we studied was highly variable. Some frogs remained at breeding ponds all year, whereas others spent only a few days. Twothirds of female frogs and 25% of male frogs moved from breeding areas. Bulger et al. (2003) found that 80-90% of R. draytonii remained at one breeding site all year. In our study, frogs at sites that held water only seasonally often lingered until the site was on the verge of drying completely. Because all our study sites were in an area where summer fog is the norm (E. J. Null, NOAA Technical Memorandum, NWS WR-126, 1995; Lundquist and Bourcy, 2000), frogs could move throughout much of the summer with little risk of desiccation. Once along the riparian corridor, frogs used a range of microhabitats that provided both cover and moisture, especially blackberry thickets, logjams, and root tangles at the base of standing or fallen trees. Regular summer dispersal across open grassland is in contrast to what Rothermel and Semlitsch (2002) reported for juvenile Ambystoma and Bufo in Missouri where desiccation appeared to be a significant factor affecting amphibian dispersal across fields adjacent to their artificial pools.

There was a wide range of migration distances (30–1400 m, straight-line). Our main study pond was 110 m from a riparian zone that provided suitable nonbreeding habitat (CP, Fig. 1). For frogs that moved at least 30 m from the pond, the median movement was 150 m. Relatively short movements from breeding sites was also suggested by the nocturnal surveys of riparian vegetation along Olema Creek (Fig. 4) where we found more frogs in areas adjacent to breeding sites. At Big Lagoon, where nonbreeding habitat was immediately adjacent to breeding sites in the marsh, the median distance moved was 68 m, and none of the frogs went more than 390 m. These short movements were similar to Columbia Spotted Frogs (Rana luteiventris); Pilliod et al. (2002) found no significant difference between males ( $\bar{x} = 367 \text{ m moved}$ ) and females ( $\bar{x} = 354$  m). Bartelt et al. (2004) reported that male Western Toads (Bufo boreas) traveled shorter distances from breeding ponds than females (581 m  $\pm$  98 and 1105 m  $\pm$  272, respectively). Because there is relatively little data on these species, it is not possible to determine whether the differences are speciesspecific or dependent on the local landscape.

When frogs moved beyond the minimum distance to reach a suitable nonbreeding area, some followed riparian corridors, whereas others moved directly toward sites where they stayed through the nonbreeding season. Because most frogs moved from a breeding pond, across a grazed pasture, to a riparian area, they did not have the option of following a waterway during their initial movement. This is similar to Bulger et al. (2003), where frogs mostly moved in a straight line without apparent regard to intervening vegetation or topography. However, there were a few individuals in each study that moved primarily along a creek.

During our nocturnal surveys of Olema Creek, some frogs were well hidden by cover, whereas others sat fully exposed on top of logs or even on the sandy edge of the creek, places where California Red-Legged Frogs were rarely seen during the day. It is unclear why some individuals spent hours exposed to predation when good cover was only 1–2 m away. A frog in the open would have a wider field of view to detect and capture prey, perhaps partially mitigating the risk of predation. We documented predation by a Great Blue Heron, had evidence of predation by a raptor, and suspect that two other frogs succumbed to mammal predators. Additionally, we occasionally observed predators along Olema Creek including raccoons, Black-Crowned Night Herons, river otters, and nonnative rats (Rattus spp.). At a marsh that was not part of this study, we regularly observed night herons, and R. drayto*nii* were so skittish that we have never been able to capture a single individual.

Based on their findings that 60% of the radiotagged frogs stayed within 30 m of their

breeding sites, Bulger et al. (2003) recommend a 100-m buffer with an array of suitable habitat elements around breeding sites. Although that might work well at their study area, we do not believe that a simple, symmetrical buffer is typically adequate. At our main study site, a 100m buffer would not include any suitable nonbreeding habitat. Because the pond completely dries every 4–5 years, such a buffer would result in the elimination of the local population. By contrast, the Big Lagoon site has suitable nonbreeding habitat immediately adjacent to the marsh. At that site, maintaining the marsh habitat and the natural water levels would likely be adequate for long-term survival.

Three important conclusions from our study are that (1) most frogs move away from breeding sites, but only a few move farther than the nearest suitable nonbreeding habitat; (2) the distance moved is highly site-dependent, as influenced by the local landscape; and (3) land managers should not use average dispersal or migration distances (from our study, or any other) to make decisions about habitat requirements. A herpetologist familiar with *R. draytonii* ecology needs to assess the local habitat requirements.

*Recommendations.*—Maintaining populations of pond-breeding amphibians, such as *R. draytonii*, requires that all essential habitat components be protected. These include (1) breeding habitat, (2) nonbreeding habitat, and (3) migration corridors. In addition, a buffer is needed around all three areas to ensure that outside activities do not degrade any of the three habitat components.

For *R. draytonii*, nonbreeding habitats must have several characteristics: (1) sufficient moisture to allow amphibians to survive throughout the nonbreeding season (up to 11 months), (2) sufficient cover to moderate temperatures during the warmest and coldest times of the year, and (3) protection (e.g., deep pools in a stream or complex cover such as root masses or thick vegetation) from predators such as raptors (hawks and owls), herons, and small carnivores.

Breeding habitat has been well described (U.S. Fish and Wildlife Service, 2002; Stebbins 2003) and receives most of the management attention (US Fish and Wildlife Service, 2002). However, nonbreeding areas are equally important because some *R. draytonii* spend only a week or two at breeding sites, yet nonbreeding habitat is frequently ignored and is generally not well understood. Aside from our study, Bulger et al. (2003) are the only ones to publish details on the use of nonbreeding habitat by *R. draytonii*. Additional research on nonbreeding habitat is needed, especially in

other parts of range where *R. draytonii* occupy a diversity of ecotypes.

Migration corridors are frequently not considered in management planning for California Red-Legged Frogs. Our work and that of Bulger et al. (2003) indicate that R. draytonii migration corridors can be less "pristine" (e.g., closely grazed fields, plowed agricultural land) than the other two habitat components. Bulger et al. (2003) observed that R. draytonii did not avoid or prefer any landscape feature or vegetation type. They tracked frogs that crossed agricultural land, including recently tilled fields and areas with maturing crops. Our study site did not encompass such a diversity of habitats, but frogs readily traversed pastureland that surrounded the breeding sites. While conducting other research, we observed five frogs crossing a recently burned field as they moved toward a breeding pond during the first rain of the season (25 October 2004). Both our study and that of Bulger et al. were conducted at study sites near the Pacific Ocean where summer fog and high relatively humidity reduce the risk of desiccation for dispersing amphibians (E. J. Null, NOAA Technical Memorandum, NSW, WR-126, 1995; Lundquist and Bourcy, 2000). Though desiccation was probably not a problem for frogs in our study, amphibians are often faced with a variety of hazards including roads (Gibbs, 1998; Vos and Chardon, 1998), degradation of habitat (Vos and Stumpel, 1995; Findlay and Houlahan, 1997; Gibbs, 1998), and predation (Gibbs, 1998), as well as desiccation (Rothermel and Semlitsch, 2002; Mazerolle and Desrochers, 2005).

Buffers are often described as the area that frogs use near breeding sites. Such usage combines migration corridors and nonbreeding habitat, as well as the adjacent area necessary to protect these areas. We believe that it is important to identify each habitat component separately and then include a buffer that is sufficiently large to maintain the integrity of each habitat type. Such a buffer cannot be defined as a standard distance but rather as an area sufficient to maintain the essential features of the amphibian habitat. Hence, a riparian area adjacent to a forest undergoing clear-cut logging would need a relatively large buffer to protect it from increased sedimentation and the increased temperature fluctuations that occur after logging. Less severe habitat modifications adjacent to amphibian habitat could be accommodated with a narrower buffer (deMaynadier and Hunter, 1995, 1999; Gibbs, 1998).

Buffers are typically described as a fixedwidth boundary around breeding sites (Semlitsch and Bodie, 2003). However, the distribution of habitat components is rarely symmetrical

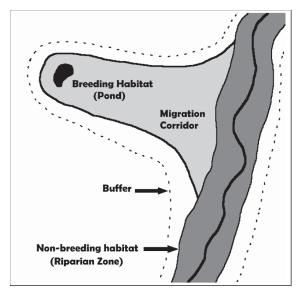


FIG. 6. Stylized diagram of typical *Rana draytonii* habitat showing the critical habitat components and the required asymmetrical buffer.

(e.g., a pond with frogs dispersing in all directions to surrounding nonbreeding area). At all of our study sites, frogs moved primarily in one direction, often toward the nearest riparian area, similar to what Rothermel and Semlitsch (2002) reported. As suggested by Regosin et al. (2005), protecting frog habitat in these situations requires an asymmetrical conservation area (Fig. 6). Because it is often not obvious from casual inspection what areas frogs are relying upon, delineating each habitat component and determining the size of a suitable buffer requires either an expert opinion from a field biologist with extensive experience with the species of interest or a field study to monitor radiotagged frogs.

The design of protected areas is often developed with the unstated assumption that only the most sedentary frogs can or need to be protected. The resulting systematic loss of individuals that move the farthest can have unexpected and unwanted effects (Gill, 1978; Berven and Grundzien, 1990). Long-distance dispersers are the individuals most likely to reach distant breeding sites and, hence, provide the genetic diversity that is important for survival of small populations. Additionally, those same dispersers are the individuals that would colonize sites where frogs have been lost because of random events that periodically extirpate local populations. By consistently selecting against frogs that disperse the greatest distances, the effective size of a metapopulation is reduced and the size of the effective breeding population is smaller; smaller breeding populations have a greater likelihood of extirpation (Gill, 1978; Sjogren, 1991).

Acknowledgments.--We thank S. Berendt, C. Corben, K. Freel, G. Guscio, and L. Wood for assistance with fieldwork. W. Perry prepared the maps. J. Fellers, G. Rathbun, and N. Scott offered useful comments on the manuscript. Fieldwork was funded by the U.S. Geological Survey, U.S. Fish and Wildlife Service, and the National Park Service. Collecting permits were provided by the National Park Service and the U.S. Fish and Wildlife Service. The Vedanta Society allowed us to radiotrack frogs on their property. This research was conducted under California Department of Fish and Game and U.S. Fish and Wildlife Service research collecting permits. The authors have complied with all applicable institutional Animal Care guidelines.

#### LITERATURE CITED

- BARTELT, P. E., C. R. PETERSON, AND R. W. KLAVER. 2004. Sexual differences in the post-breeding movements and habitats selected by Western Toads (*Bufo boreas*) in southeastern Idaho. Herpetologica 60:455–467.
- BERVEN, K. A., AND T. A. GRUDZIEN. 1990. Dispersal in the Wood Frog (*Rana sylvatica*): implications for genetic population structure. Evolution 44:2047– 2056.
- BODIE, J. R. 2001. Stream and riparian management for freshwater turtles. Journal of Environmental Management 62:443–455.
- BULGER, J. B., N. J. SCOTT JR., AND R. B. SEYMOUR. 2003. Terrestrial activity and conservation of adult California Red-legged Frogs *Rana aurora draytonii* in coastal forests and grasslands. Biological Conservation 110:85–95.
- BURKE, V. J., AND J. W. GIBBONS. 1995. Terrestrial buffer zones and wetland conservation: a case study of freshwater turtles in Carolina Bay. Conservation Biology 9:1365–1369.
- CORBEN, C., AND G. M. FELLERS. 2001. A technique for detecting eyeshine of amphibians and reptiles. Herpetological Review 32:89–91.
- DeMAYNADIER, P. G., AND M. L. HUNTER JR. 1995. The relationship between forest management and amphibian ecology: a review of the North American literature. Environmental Reviews 3:230– 261.
  - . 1999. Forest canopy closure and juvenile emigration by pool-breeding amphibians in Maine. Journal of Wildlife Management 63:441–450.
- FELLERS, G. M. 2005. *Rana draytonii* Baird and Girard 1852, California Red-Legged Frog. *In M. Lannoo* (ed.), Amphibian Declines: The Conservation Status of United States Species. Volume 2, pp. 552–554. University of California Press, Berkeley.
- FELLERS, G. M., AND P. M. KLEEMAN. 2003. A technique for locating and recovering radiotransmitters at close range. Herpetological Review 34:123.

- FELLERS, G. M., AND L. WOOD. 2004. Rana aurora draytonii (California Red-Legged Frog) predation. Herpetological Review 35:163.
- FINDLAY, C. S., AND J. HOULAHAN. 1997. Anthropogenic correlates of species richness in Southeastern Ontario wetlands. Conservation Biology 11:1000– 1009.
- GIBBONS, J. W., J. W. COKER, AND T. M. MURPHY. 1977. Selected aspects of the life history of the Rainbow Snake (*Farancia erytrogamma*). Herpetologica 33:276–281.
- GIBBS, J. P. 1998. Amphibian movements in response to forest edges, roads, and streambeds in southern New England. Journal of Wildlife Management 62:584–589.
- GILL, D. E. 1978. The metapopulation ecology of the Red-Spotted Newt, *Notophthalmus viridescens*. Ecological Monographs. 48:145–166.
- JENNINGS, M. R., AND M. P. HAYES. 1994. Amphibian and Reptile Species of Special Concern in California., California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova.
- JOLY, P., C. MIAUD, A. LEHMANN, AND O. GROLET. 2001. Habitat matrix effects on pond occupancy in newts. Conservation Biology 15:239–248.
- KEAST, A., AND E. S. MORTON (eds.). 1980, Migrant Birds in the Neotropics: Ecology, Behavior, Distribution, and Conservation. Smithsonian Institution Press, Washington, DC.
- LAMOUREUX, V. S., AND D. M. MADISON. 1999. Overwintering habitats of radio-implanted Green Frogs, *Rana clamitans*. Journal of Herpetology 33:430–435.
- LUNDQUIST, J. D., AND T. B. BOURCY. 2000. California and Oregon Humidity and Coastal Fog. Proceedings, 14th Conference on Boundary Layers and Turbulence. Aspen, CO.
- MADISON, D. M. 1997. The emigration of radioimplanted Spotted Salamanders, *Ambystoma maculatum*. Journal of Herpetology 31:542–552.
- MAZEROLLE, M. J., AND A. DESROCHERS. 2005. Landscape resistance to frog movements. Canadian Journal of Zoology 83:455–464.
- PILLIOD, D. S., C. R. PETERSON, AND P. I. RITSON. 2002. Seasonal migration of Columbia Spotted Frogs (*Rana luteiventris*) among complementary resources in a high mountain basin. Canadian Journal of Zoology 80:1849–1862.

- POPE, S. E., L. FAHRIG, AND H. G. MERRIAM. 2000. Landscape complementation and metapopulation effects on Leopard Frog populations. Ecology 81:2498–2508.
- RATHBUN, G. B., AND T. G. MURPHEY. 1996. Evaluation of a radio-belt for ranid frogs. Herpetological Review 27:187–189.
- REGOSIN, J. V., B. S. WINDMILLER, R. N. HOMAN, AND J. M. REED. 2005. Variation in terrestrial habitat use by four pool-breeding amphibian species. Journal of Wildlife Management 69:1481–1493.
- RICHTER, S., J. E. YOUNG, R. A. SEIGEL, AND G. N. JOHNSON. 2001. Post-breeding movements of the Dark Gopher Frog, *Rana sevosa* Goin and Netting: implications for conservation and management. Journal of Herpetology 35:316–321.
- ROTHERMEL, R. B., AND R. D. SEMLITSCH. 2002. An experimental investigation of landscape resistance of forest versus old-field habitats to emigrating juvenile amphibians. Conservation Biology 16: 1324–1332.
- SEMLITSCH, R. D., AND J. R. BODIE. 2003. Biological criteria for buffer zones around wetlands and riparian habitats for amphibians and reptiles. Conservation Biology 17:1219–1228.
- SJOGREN, P. 1991. Extinction and isolation gradients in metapopulations: the case of the Pool Frog (*Rana lessonae*). Biological Journal of the Linnean Society 42:135–147.
- STEBBINS, R. C. 2003. A Field Guide to Western Reptiles and Amphibians., Houghton Mifflin, New York.
- U.S. FISH AND WILDLIFE SERVICE. 2002. Recovery plan for the California Red-Legged Frog (*Rana aurora draytonii*). U.S. Fish and Wildlife Service, Portland, OR.
- Vos, C. C., AND J. P. CHARDON. 1998. Effects of habitat fragmentation and road density on the distribution pattern of the Moor Frog, *Rana arvalis*. Journal of Applied Ecology 35:44–56.
- Vos, C. C., AND A. H. P. STUMPEL 1995. Comparison of habitat-isolation parameters in relation to fragmented distribution patterns in the Tree Frog (*Hyla arborea*). Landscape Ecology 11:203–214.

Accepted: 20 January 2007.

# Attachment 4

### MOVEMENT PATTERNS AND MIGRATION DISTANCES IN AN UPLAND POPULATION OF CALIFORNIA TIGER SALAMANDER (AMBYSTOMA CALIFORNIENSE)

#### SUSAN G. ORLOFF

Ibis Environmental Inc., 340 Coleman Dr. San Rafael, California 94901, USA, email: Sue@ibisenvironmental.com

Abstract.—During five winter breeding seasons (October-April, 2000–2005), I investigated the migratory movements of an upland population of California Tiger Salamander (*Ambystoma californiense*) in Contra Costa County, California. I used a drift fence and pitfall trap array to partially enclose a proposed 27 ha housing project and capture migrating adult and juvenile salamanders. The study objective was to assess movement patterns and migration distances for upland life stages during an effort to translocate all captured salamanders and reduce their mortality from future development at the study site. I recorded substantial numbers of adult and juvenile *A. californiense* (90–417 annually) farther from breeding ponds than previously reported. The majority of salamanders were captured at least 800 m from the nearest breeding pond while a smaller number of salamanders were captured as far as 2.2 km from the nearest breeding pond. The study indicates that recent recommendations to protect 630 m of upland habitat adjacent to breeding ponds may leave large portions of upland life stages at risk. Adults appeared to exhibit fidelity to upland habitat, returning close to the initial point of capture. In situations where translocation is used to remove salamanders from upland habitats subject to development, results suggest it may take several years to successfully relocate a high proportion of individuals in the population.

Key Words.—Ambystoma californiense; buffer zones; California Tiger Salamander; conservation; pitfall trap; migration distance; terrestrial movements; upland ecology.

#### INTRODUCTION

Conserving terrestrial habitat surrounding wetlands is essential for maintaining populations of many pondbreeding amphibians (Semlitsch and Jensen 2001; Semlitsch 2002; Semlitsch and Bodie 2003). Upland habitat is critical for feeding, refuge, and migratory movements of juvenile and adult life stages (Semlitsch 1998; Semlitsch and Jensen 2001). Recent studies emphasize that amphibian population viability can be extremely sensitive to survivorship of upland life stages (Biek et al. 2002; Trenham and Shaffer 2005). Further, the importance of specific areas of upland habitat and preferences for a particular migratory route have been reported for several species of ambystomatid salamanders (Shoop 1968; Stenhouse 1985; Trenham and Cook 2008).

Despite research documenting the biological importance of terrestrial habitat for amphibians, the extent and location of appropriate areas required to sustain viable populations are poorly understood. Several recent studies estimated the area of terrestrial habitat needed to adequately protect amphibian populations, based on migration distances from multiple studies and species. Semlitsch (1998) estimated that a 164 m "buffer zone" would encompass 95% of most ambystomatid salamander populations (based on six species). Semlitsch and Bodie (2003) estimated that "core terrestrial habitat" for 13 species of salamanders

ranged from 117 to 218 m from the wetland. Rittenhouse and Semlitsch (2007) found that 95% of the adult breeding population for six species of salamanders occurs within 245 m of the wetland boundaries. However, because these studies were primarily of eastern species that typically inhabit forest or woodlands, the resulting recommendations may not be well suited to western *Ambystoma* species associated with grasslands. Although much remains to be learned regarding the appropriate size of buffer zones, it is clear that identifying and protecting upland habitat should be a management priority, especially for rare and endangered species (Marsh and Trenham 2001; Semlitsch 2007; Harper et al. 2008).

The California Tiger Salamander, Ambystoma californiense, is listed as a threatened species by the U.S. Fish and Wildlife Service (2004) and the state of California (California Fish and Game Commission 2010). The range of this species is restricted to grasslands and foothills of central California (Storer 1925). Adults spend the majority of their life cycle in small-mammal burrows in upland habitat (Loredo et al. 1996). With the onset of winter rains, adults emerge from underground terrestrial retreats and migrate to ponds for reproduction (Loredo and Van Vuren 1996). The importance of maintaining upland habitat adjacent to breeding ponds for A. californiense has only recently been emphasized (Trenham 2001; Trenham and Shaffer 2005). A more detailed under-

Copyright © 2011. Susan Orloff. All Rights Reserved.

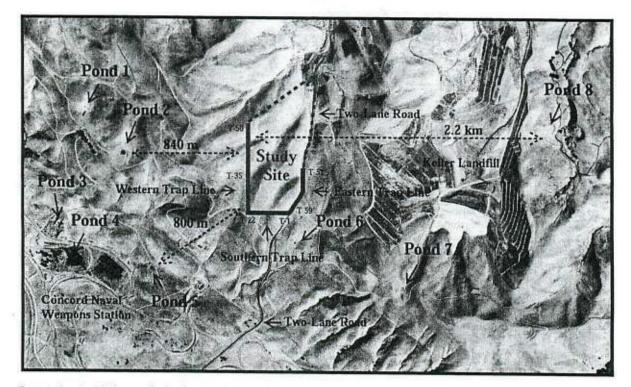


FIGURE 1. Aerial photograph showing the closest breeding ponds to the study site in Contra Costa County, California, USA (from <a href="http://www.ternaserver.com">http://www.ternaserver.com</a>; [Accessed 1 August 2002]). Bold red solid lines indicate trap line segments (western, southern, and eastern) along boundaries of the study site, T represents trap number, and dashed lines with arrows at both ends indicate distances from the western trap line to nearest breeding ponds. Ponds 1–5 are located on Concord Naval Weapons Station (CNWS) and Ponds 6–8 are located on a landfill adjacent to the study site

standing of migratory movements and activity patterns in upland habitats is fundamental to managing this species (Trenham and Shaffer 2005).

This paper presents findings of a five-year study investigating the migratory movements of upland life stages of a population of A. californiense at a proposed housing development. The primary objectives of the study were (1) to characterize movement patterns and timing of movements during the breeding season, (2) to measure distances from capture locations to closest known breeding ponds, and (3) to test for relationships between the timing of migratory movements and environmental parameters. An additional objective of the study was to reduce direct mortality from future development at the study site by translocating all captured salamanders outside the study site and restricting reentry. Conservation strategies involving translocations are a common wildlife management tool (Griffith et al. 1989; Fischer and Lindenmayer 2000; Dodd 2005). Although the effectiveness of translocation strategies has been subject to controversy (e.g., Dodd and Seigel 1991; Seigel and Dodd 2002; Trenham and Marsh 2002), a recent review has shown improved success rates for some species of amphibians when a critical minimum number of individuals are translocated (Germano and

Bishop 2008). Relatively few translocation studies have been conducted on amphibians (Germano and Bishop 2008) or addressed human and wildlife conflicts (e.g., Cooke and Oldham 1995; Rathbun and Schneider 2001), and none have assessed the efficacy of translocating adult amphibians within upland habitat.

#### MATERIALS AND METHODS

Study site.—The proposed housing development is located on the northern edge of the San Joaquin Valley in northeastern Contra Costa County, California. The 27-ha area consists of grazed annual grasslands on rolling to steep hills (elevation range = 213–274 m; Fig. 1). Two primary drainages traverse the site but amphibian breeding ponds are not present. Lands surrounding the site are primarily grazed grasslands. The Concord Naval Weapons Station (CNWS) is located to the west and south of the site and a privately owned, active landfill is located to the east and southeast.

Eight breeding ponds are known to occur near the study site (Fig. 1). To the west and southwest, the closest ponds are on CNWS (Ponds 1-5) and are the primary breeding ponds on CNWS lands (Stitt and Downard 2000; Shawn Smallwood, pers. comm.). To

### Orloff.-Movement patterns and migration distances of California Tiger Salamander.

the east and southeast, the closest ponds are located on the adjacent landfill (Ponds 6-8). To the north, no known breeding ponds occur within 2.5 km. I examined aerial photographs from several years (1999, 2000, 2004, and 2005) and USGS topographic maps, and found no other potential breeding ponds closer to the study site. Before the trapping study began, I conducted four night surveys during winter rain events to determine if A. californiense was present at the study site. During these initial surveys, I observed four adults at burrow entrances of California Ground Squirrels (Spermophilus beechevi) and thus commenced an intensive translocation effort.

Trapping techniques .- My field team and I (hereafter we) installed a drift fence and pitfall trap array along a partial perimeter (1.3 km) of the study site. The drift fence bordered the boundaries most likely to be used as movement corridors, and included the western, southern, and a portion of the eastern border of the study site (Fig. 1). We installed 118 pitfall traps (59 pairs of 7.5 L plastic buckets) located every 15 to 30 m along the inside and outside of the drift fence. We used a 0.9 m tall commercial quality silt fence buried 0.3 m underground, stretched taut, and secured by both wooden and steel fence posts. We placed elevated covers over the traps to provide shading and minimize predation, and placed a damp non-cellulose sponge in each trap to maintain moisture for captured salamanders. We replaced the drift fence and pitfall traps (i.e., trap line) each year of the study and repaired the fence line as needed to maintain its integrity as a barrier to movement.

Our surveys encompassed five winter breeding seasons, from October 2000 to April 2005 (hereafter, years 2000 to 2004). In 2001 and 2002, we increased the length of the trap line by installing nine pairs of pitfall traps along the eastern border of the study site. While the trap line encompassed over half the total perimeter of the proposed development, the entire area was not completely enclosed due to the large area of the site. We opened all traps at dusk on nights when the chance of rain was predicted to be 40% or greater and checked at dawn the following morning. Because amphibians are often active on the night after a heavy rain (Gibbons and Bennett 1974), we left the traps open on nights after a rain event that exceeded 0.6 cm, even when no rain was predicted for that night. At all other times the traps were closed. We immediately translocated individuals captured inside the trap line to small mammal burrows 15 to 100 m outside the development. We kept individuals captured outside the trap line outside and translocated them in the same manner.

For each capture, we recorded date, trap number, trap line side (inside or outside), sex (adults only), reproductive condition (reproductive or nonreproductive), snout-vent length (SVL), total length, and age class (adult or juvenile). We identified individuals

as adults if they had at least one of the following characteristics: keeled tail, swollen vent (reproductive males), gravid condition (reproductive females), or large body length (≥ 75 mm SVL; Trenham et al. 2000). We identified juveniles based on small body length (usually < 75 mm SVL; Loredo and Van Vuren 1996) and the absence of adult characteristics. Males were distinguished from females by the presence of a keeled tail, swollen vent, or proportionally longer tail (Petranka 1998; Searcy and Shaffer 2008). We recorded adultsized salamanders without other distinguishing characteristics as adults; these salamanders may have been subadults (≥ 1 year of age but not sexually mature) or salamanders returning from the ponds post breeding (i.e., non-reproductive). Because juvenile body lengths vary considerably (46-114 mm; Loredo and Van Vuren 1996) and can overlap adult sizes, we may have mistakenly classified some larger juveniles as adults in non-reproductive condition. In addition, we acquired two photographs of the dorsal surfaces of each captured salamander for individual identification.

*Environmental variables.*—In 2000 and 2001, 1 measured precipitation using a manual rain gauge located on site; the gauge was read and emptied when traps were opened at dusk and checked again at dawn the next morning. For the remainder of the study years, I used an automatic rain gauge (Hobo event logger, Onset Inc., Pocasset, MA., USA) to record hourly rain events (2.5 mm intervals). Air temperature was manually recorded on each morning traps were checked. I used additional data on hourly and yearly rainfall near the study site from California Department of Water Resources, California Data Exchange Center (available from <u>http://www.cdec.water.ca.gov</u> [last accessed 21 September 2006]).

Analyses.—I pooled daily capture data by week, year, sex, age class, and location (inside/outside trap line and trap line segment) as measures of salamander activity. I used the location of captures to infer likely movement patterns (i.e., attempting to leave or enter the study site, and directionality). To evaluate movement patterns within a breeding season, I divided capture data into early season (presumably migrating to breed) and late season (presumably returning from breeding) based on the temporal distribution of captures for all five study years combined.

To standardize for the variability in trapping effort (i.e., different number of traps per line segment and nights of trapping each year), I calculated capture rates (number of captures per 100 trap nights) for analyses. Distance calculations were measured as presumed straight line travel. Within each study year, I compared dorsal patterns in photographs to determine the number of intra-annual recaptures. Individual identification using photography has been employed successfully with amphibians that have unique patterns of coloration; unlike invasive marking techniques, this causes no harm to the animal (e.g., Donnelly et al. 1994; Doody 1995; Bailey 2004).

I used parametric statistics when data were normally distributed and non-parametric tests when data were not. To determine if recaptured individuals returned to a similar point from which they were initially trapped, the observed mean number of traps between initial and returning trap locations was compared with the expected mean number of traps under a uniformly random scenario (Shoop and Doty 1972). For this analysis, I pooled data from all five study years to obtain an adequate sample size and used only those individuals that were initially trapped early in the breeding season on the inside of the western trap line and then recaptured later in the season outside that same trap line segment (i.e., presumably returning to the study site after breeding). I used the western trap line data because it had the majority of returns and traps along this segment were evenly spaced providing the most accurate distance measurements between initial and returning trap locations.

I tested for annual and seasonal variation in capture numbers among all five study years. I used chi-square tests to determine if annual sex ratios differed significantly from an expected 1:1 ratio. I evaluated the association between seasonal rainfall (both early and late season) and the proportion of males and females captured both inside and outside the trap line using Pearson's correlation coefficient. I used the sign test to compare annual adult capture rates early in the season on the inside of the western trap line and capture rates later in the season outside that same trap line segment, and to compare annual rainfall between early and late seasons. I used Pearson's correlation coefficient to assess whether there was a negative association between translocation efforts and annual capture rates over time based on the proportions of inside versus outside captures, and to test for a relationship between annual on-site rainfall and annual capture rates.

I also analyzed within-year associations between environmental parameters and the number of *A. californiense* captured. To assess the influence of precipitation and temperature prior to capture, I used Spearman's rank correlation. This analysis used rainfall amounts 12 h prior to opening traps (i.e., day prior to capture), 12 h prior to checking traps (i.e., night of capture), and within 24 h prior to checking traps (total of day and night). In addition, I used Wilcoxon two-sample rank sum test to assess if rain at dusk on the night of capture or the night prior to opening the traps was associated with the number of captures. Precise measurements of rain using the automatic rain recorder (which allowed for analysis of rain amounts in intervals less than a 24-h period) were available only in 2002, 2003 and 2004. Of these three

TABLE 1. Adult and juvenile Ambystoma californiense captured inside and outside the trap line during five winter breeding seasons at the study site in Contra Costa County, California. Totals include recaptured individuals. Unique captures exclude recaptured individuals and are shown in parentheses.

Year	Adult Total No. (Unique No.)		Juvenile Total No. (Unique No.)		Adult & Juvenile Total No. (Unique No.)	
2000 - 2001						
Inside trap line	59	(58)	3	(3)	62	(61)
Outside trap line	76	(37)	62	(47)	138	
Totals 2001-2002	135	(95)	65	(50)	200	(145)
Inside trap line	184	(182)	4	(3)	188	(185)
Outside trap line	215	(158)	14	(13)		(171)
Totals 2002-2003	399	(340)	18	(16)	417	(356)
Inside trap line	63	(61)	3	(3)	66	(64)
Outside trap line	120	(96)	34	(33)		(129)
Totals 2003-2004	183	(157)	37	(36)		(193)
Inside trap line	37	(36)	0	(0)	37	(36)
Outside trap line	52	(37)	1	(1)	53	(38)
Totals 2004-2005	89	(73)	1	(1)	90	(74)
Inside trap line	23	(22)	0	(0)	23	(22)
Outside trap line	72	(61)	86	(81)	1000	(142)
Totals	95	(83)	86	(81)		(164)

years, I chose 2002 for analysis because it was least affected by translocation efforts and barrier fencing.

l excluded recaptures from the analysis of some data sets (i.e., capture distribution, movement patterns, sex ratios, and annual reductions). However, except for sex ratios, these analyses did include those individuals first captured during the early season inside the trap line and then later recaptured outside the same trap line during the late season. For annual comparisons of capture numbers, I deleted data on additional traps installed in 2001 and 2002 from the analyses. For all statistical tests, results were considered significant at  $\alpha = 0.05$ .

#### RESULTS

Capture numbers and movement patterns.—The annual number of A. californiense captured varied from 90 to 417 salamanders over the five year study period (Table 1). Recaptured individuals represented between 9-28% of annual totals, with 96% of these individuals captured on the outside of the trap line. Eight recaptured individuals were captured on or translocated to the outside of the trap line and then later captured on the inside, but these eight represented less than 1% of the total captures. Adult recaptures returning to the study site (presumably after breeding) were found Orloff.-Movement patterns and migration distances of California Tiger Salamander.

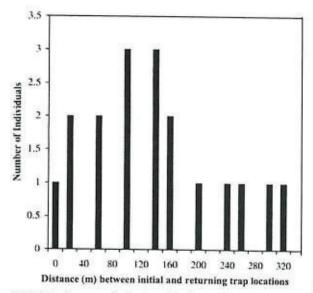


FIGURE 2. Frequency distribution of the distance between initial and returning trap locations for individual *Ambystoma californiense* for all five study years combined (2000–2005). Results include only those salamanders first trapped early during the breeding season inside the trap line and then recaptured outside the same trap line later in the season. Early season = late October to December 31; Late season = January 1 to end of March. Zero on the x-axis represents individuals that returned to the same trap location where they were initially captured.

significantly closer to where they were initially captured inside the trap line than would be expected by random (Z = -2.92, P = 0.003). Forty-four percent of adult recapture locations were within five traps ( $\leq 100$  m) of the initial inside trap location (Fig. 2). Several individuals were recaptured more than once outside the western trap line, presumably attempting to reenter the site. One male returned to the site five times.

Capture rates from all five study years combined indicate that males and females migrated to the breeding ponds from late October to the end of December (early season) and returned to their upland habitat from the beginning of January to the end of March (late season) (Fig. 3). Annual sex ratios differed significantly from 1:1 in 2002, with females outnumbering males by 2:1 ( $\chi^2$ = 20.46, df = 1, P < 0.001). By contrast males outnumbered females by 1.5:1 in 2000 ( $\chi^2 = 3.80$ , df = 1, P = 0.051). Sex ratios were near 1:1 in the other three study years (2001:  $\chi^2 = 0.02$ ; 2003:  $\chi^2 = 0.00$ ; and 2004:  $\chi^2 = 0.11$ ; all df = 1, all P > 0.70). Among all study years, the proportion of each sex in the population captured early in the season on the inside of the trap line (Table 2) was associated with early season rainfall (negatively associated for males: r = -0.808; positively associated for females: r = 0.808; P = 0.049 for both). However, there was no significant association between the proportion of each sex captured early in the season outside the trap line and early rainfall (males: r = -0.340;

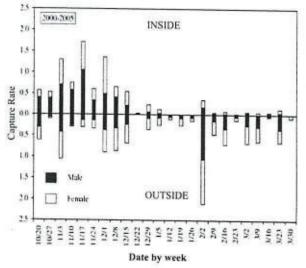


FIGURE 3. Weekly capture rates (no. per 100 trap nights) of male and female *Ambystoma californiense* inside and outside the trap line for all five study years combined (2000–2005). Early season = late October to December 31; Late season = January 1 to end of March. Dates on xaxis represent the beginning of each week. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then recaptured outside the same trap line later in the season.

females: r = 0.340; P = 0.288 for both) or captured late in the season outside the trap line and late rainfall (males: r = -0.494; females: r = 0.494; P = 0.198 for both).

Within each survey year, the capture rates of adults and juveniles were generally highest along the western trap line (Fig. 4). Analysis of early season capture data, when most salamanders presumably migrated to the ponds, indicated highest adult capture rates on the inside of the western trap line (Table 3). By contrast, analysis of late season data, presumably when most salamanders returned from the ponds, indicated highest adult capture rates outside the western trap line (Table 3). Capture rates for juveniles were highest outside the western trap line primarily in the early season (Table 4). Among all study years, more adults were captured early in the season inside the western trap line than were captured later in the season outside that same trap line segment (sign test, P = 0.031). Early and late rainfall was not significantly different among years (sign test, P = 0.50).

Migration distances.—The shortest distances from inside the western trap line, where the majority of adults were captured in the early season, to the closest breeding ponds to the west were 800 to 840 m (Ponds 5 and 2 on CNWS, respectively; Fig. 1). A smaller number of adults captured early in the season on the outside of the western trap line may be migrating east (Table 3). The closest breeding pond from the western trap line to the east is Pond 8 at 2.2 km. A few adults captured early in TABLE 2. Proportions of male and female *Ambystoma californiense* captured during the early and late winter breeding seasons on the inside and outside of the trap line. Parentheses indicate the number of each sex captured and N = the total number of adults captured. Early season = late October to December 31; Late season = January 1 to end of March. Results exclude all recaptured individuals.

Season/ Trap Line Sid	2000- c 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005
Early/Inside					
Male	0.76 (41)	0.50 (86)	0.39 (23)	0.68 (23)	0.52 (11)
Female	0.24 (13)	0.50 (87)	0.61 (36)	0.32 (11)	0.48 (10)
N =	54	173	59	34	21
Early/Outsid	e				
Male	0.42 (8)	0.55 (46)	0.28 (23)	0.43 (13)	0.41 (15)
Female	0.58 (11)	0.45 (38)	0.72 (58)	0.57 (17)	0.59 (22)
N =	19	84	81	30	37
Late/Outside					
Male	0.33 (6)	0.45 (52)	0.33 (11)	0.36 (5)	0.43 (12)
Female	0.66 (12)	0.55 (64)	0.66 (22)	0.64 (9)	0.57 (16)
N=	18	116	33	14	28

TABLE 3. Capture rates of adult Ambystoma californiense (no. per 100 trap nights) along the western, southern, and eastern trap lines during the early and late winter breeding seasons of the five study years. Early season = late October to December 31; Late season = January 1 to end of March. Data represent captures inside/outside each trap line. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then later recaptured outside the same trap line during the late season. Total number of adults captured is indicated by N.

Season/Trap Line	2000- 2001	2001- 2002	2002- 2003	2003 2004	2004- 2005
Early Season, N =	71	251	136	65	59
Western	8.6/2.5	28.4/6.7	9.8/12.3	4.4/2.1	3.5/4.5
Southern	1.0/1.0	4.8/5.9	1.9/3.4	1.0/3.1	0.5/2.7
Eastern		4.2/22.7	1.4/6.3	2.9/3.5	1.3/2.6
Late Season, N =	34	146	46	21	29
Western	0.8/4.8	1.9/19.7	0.5/4.6	1.5/3.3	0.4/3.2
Southern	0.0/1.9	0.7/2.6	0.7/2.2	0.4/1.7	0.0/0.6
Eastern	-	5.3/1.5	0.0/2.9	0.0/0.0	0.0/0.0

the season along the inside of the eastern trap line may have been traveling east as well. The closest known breeding pond is only 225 m from the southeast corner the study site (Pond 6). I captured relatively few adults along the inside of either the southern or eastern segments of the trap line in the early season.

Migratory movements and environmental parameters .- Based on trapping data adults began moving with the first night of substantial rain of the season (≥ 1 cm). Smaller amounts of nightly rain (≤ 0.5 cm) at the beginning of the breeding season did not appear to initiate movement. In all survey years, the earliest dates adults were captured ranged from 20 October (2004) to 11 November (2001). Most adult captures occurred between early November and mid-December with fewer more temporally dispersed captures later in the season. Juveniles began arriving at the boundaries of the study site each year within six nights of measurable rain. The earliest dates juveniles were captured ranged from 29 October (2000) to 22 November (2001).

Both the amount of rain within 12 h (night of capture) and 24 h prior to checking traps were positively correlated with number of *A. californiense* captured (r =0.626 for night rain; r = 0.603 for 24 h; P < 0.001 for both). Rain 12 h prior to opening traps was also correlated with captures (r = 0.375, P = 0.012). In addition, rain at dusk (Wilcoxon Z = 2.66, P < 0.005) and temperature (r = 0.363, P < 0.015) were positively associated with number of captures. Rain the night prior to opening traps was not associated with number of captures (Wilcoxon Z = 0.31, P = 0.378).

Annual reduction in captures.—Over the five study years, the proportion of adults captured inside the trap line decreased (r = -0.845, P = 0.036) and adult capture rates were not associated with on-site rainfall for those five years (Fig. 5, r = -0.753, P = 0.071). In 2000 and 2001, the capture rate of adults was higher inside than outside the trap line (Fig. 5). However, during 2002–2004 the capture rate was higher outside than inside. By 2004 the ratio of adult captures inside the trap line (versus outside) was much lower (0.35) than in previous years (0.62–1.2).

#### DISCUSSION

Successful conservation for Ambystoma californiense requires protection of both breeding sites and adequate surrounding uplands (Petranka 1998; Semlitsch 1998). Knowledge of terrestrial movement patterns and migration distances is essential to establishing appropriate upland protection zones adjacent to breeding ponds. My study expands the current understanding of upland habitat use for A. californiense and should better inform management for this species. The most important findings of my study are that A. californiense appeared to exhibit fidelity to upland habitat locations and occurred in relatively large numbers farther from breeding ponds than previously reported.

Study limitations.—The present study has certain limitations that should be taken into account when interpreting my findings. The partial drift fence may have affected my results in the following ways: 1) capture rates may have over- or under-estimated the actual number of salamanders entering or leaving the study site, 2) distribution of captures was limited to Orloff.-Movement patterns and migration distances of California Tiger Salamander.

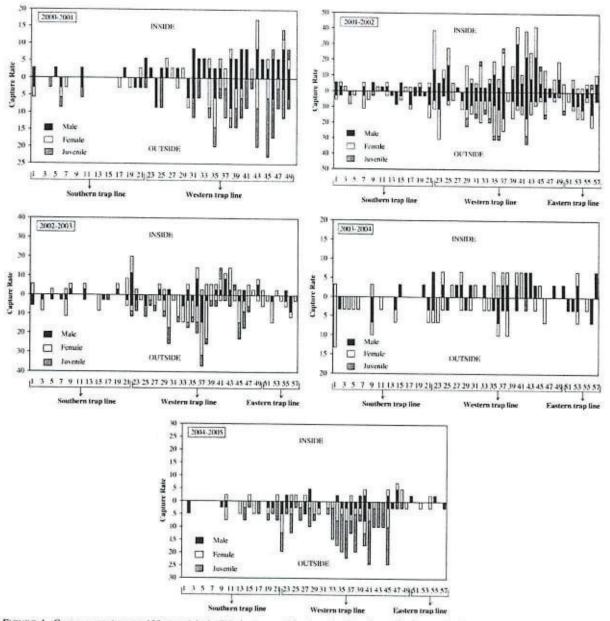


FIGURE 4. Capture rates (no. per 100 trap nights) of Ambystoma californiense inside and outside the trap line by sex, age class, and trap line for each of the five study years. Trap number for each trap line segment is indicated on the x-axis. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then recaptured outside the same trap line later in the season.

certain sections of the study site, and 3) trespass rates for the study site could not be determined (i.e., when a salamander exits or enters a site without being captured). These limitations may have influenced my analysis of patterns of movement, sex ratios/proportions, and annual reductions in number of individuals captured.

In addition, translocating salamanders and restricting their entry into the study site may have altered the age class distribution for those remaining within the site. Studies of *A. californiense* and other *Ambystoma* species have shown that age classes may differ in their use of habitat (Rothermel 2004; Trenham and Shaffer 2005) and vary in activity in response to environmental cues (Semlitsch 1983). This may have influenced my analysis of patterns of movement, and migratory movements with applicable data sets. Lastly, my findings are also limited by having only one study location. Although my results are directly applicable to this site, it may not be representative of other grassland areas that support *A. californiense*.

TABLE 4. Capture rates of juvenile A. californiense (no. per 100 trap nights) along the western, southern, and eastern trap lines during the early and late winter breeding seasons of the five study years. Early season = late October to December 31; Late season = January 1 to end of March. Data represent captures inside/outside the trap lines. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then later recaptured outside the same trap line during the late season. Total number of adults captured is indicated by N.

Season/Trap Line	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005
Early Season, N =	36	14	29	1	45
Western	0.5/5.3	0.2/2.4	0.6/5.2	0.2/0.0	0.0/8.0
Southern	0.0/0.7	0.0/0.0	0.0/0.3	0.0/0.0	0.0/1.1
Eastern	-	0.8/0.0	0.0/0.0	0.0/0.0	0.0/0.0
Late Season, N =	14	2	7	0	36
Western	0.0/2.7	0.2/0.0	0.0/1.1	0.0/0.0	0.0/3.8
Southern	0.0/0.3	0.0/0.2	0.0/0.2	0.0/0.0	0.0/1.7
Eastern	-	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0

Capture numbers and movement patterns.—Adults tended to return to a location close to where they were initially captured, which suggests fidelity to specific areas of upland habitat. Although several other studies have indicated Ambystoma species tend to follow the same nonrandom pathways as they move toward and away from breeding ponds (Stenhouse 1985; Phillips and Sexton 1989; Trenham and Cook 2008), these results were typically inferred from the distribution of captures around ponds, not from distant upland habitat capture data.

In all study years more adults were captured early in the season (presumably going to breed) than were captured later in the season along the same trap line segment (presumably returning from breeding). Rainfall amounts during the early and late seasons did not appear to account for this decrease in captures. The lower number of returning animals may be partly due to mortality, or salamanders straying off path when returning from their natal ponds or dispersing to different ponds (Trenham et al. 2001; Trenham and Cook 2008).

A higher proportion of migrating males than females has been correlated with low rainfall years in other studies of *A. californiense* (Loredo and Van Vuren 1996; Cook et al. 2006). My findings are consistent with this pattern. Apparently more females forego breeding in dry years than males (Loredo and Van Vuren 1996; Trenham et al. 2000). My results contrast with previous studies of *A. californiense* and other *Ambystoma* species that suggest a female bias at greater distances from breeding ponds (Regosin et al. 2003; Trenham and Cook 2008). The distances from the nearest breeding ponds in my study were considerably greater than these previous studies, yet my annual sex ratios were only female biased in one of the five study years.

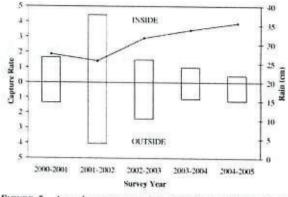


FIGURE 5. Annual capture rates (no. per 100 trap nights) of adult Ambystoma californiense inside and outside the trap line (bars) and onsite rainfall amounts (October-April; solid line) for the five study years. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then recaptured outside the same trap line later in the season.

Migration distances.--- I captured large numbers of A. californiense farther from breeding ponds than has been previously documented. In early studies of migration distances, maximum distance ranged from 130 m during one night of visually tracking (Loredo et al. 1996) to 248 m using radio tracking (Trenham 2001). However, these studies only examined movements during initial dispersal into the terrestrial habitat and thus may not be representative of the total distance adults may travel (Trenham and Shaffer 2005). In a more recent study using variable trap line distances from a pond, Trenham and Shaffer (2005) found that 50-95% of adults were trapped between 150 to 620 m from the pond, respectively. Continuing work at this site has documented a few individuals moving up to 1000 m from the most likely breeding pond (Peter Trenham, pers. comm.). Ambystoma californiense has also been observed up to 2.1 km from breeding ponds (U.S. Fish and Wildlife Service 2004); however, this was thought to be only a small number of individuals. Even in light of these studies showing a few individuals making longer distance movements, the large numbers of adults and juveniles I captured at least 800 m from the closest breeding ponds is noteworthy.

Current estimates that 95% of adult *A. californiense* occur within 620 m of the breeding pond (Trenham and Shaffer 2005) do not appear applicable to my study site. If this estimate were applied to my study site, which is greater than 620 m from the closest breeding ponds on CNWS, the large number of captures would represent less than 5% of the adult upland population. This would result in an exceedingly high extrapolated number of adults using the ponds on CNWS (~5,000 to 10,000 adults). However, Loredo and Van Vuren (1996) found an average of only 141 adults at their study pond on CNWS (Pond 5, Fig. 1), which is typical for other sites (Trenham et al. 2001; Cook et al. 2006). It is more likely that a greater percentage of the breeding population at

CNWS is moving farther away from the breeding ponds than previous research would have predicted.

Migratory movements and environmental parameters.—Movement patterns in my study area were influenced by the distribution of rainfall within the 24-h period prior to capture, with both rain at dusk and on the night of capture (12-h prior) strongly correlated to captures. Although several studies of *A. californiense* or other *Ambystoma* species also found adult migration to be positively associated with rainfall (Semlitsch 1983; Beneski et al. 1986; Trenham et al. 2000), these studies measured daily (24-h periods) or weekly rainfall, not rainfall within less than a 24-h period.

The majority of *A. californiense* adults were captured from early November to mid-December, which is earlier than other study sites where peak migration occurred in January in Monterey County (Trenham et al. 2000) or December and January in Sonoma and Contra Costa counties (Loredo and Van Vuren 1996; Cook et al. 2006). Unlike these other studies, which were conducted at study ponds and recorded only the date of arrival at those ponds, my data presumably represent the actual initiation of migration from upland emergence. Therefore, the discrepancy in peak migration periods may be because my study site was at least 800 m away from the closest probable breeding ponds, and it may have taken several rainy nights to reach the ponds.

Reduction in numbers .- My findings suggest that it takes multiple years of trapping and translocating animals to substantially reduce the number of adults within a project site. This is consistent with other research that has shown A. californiense typically spend up to four to five years in their upland burrows before they reach sexual maturity and migrate to breeding ponds for the first time (Trenham et al. 2000). The reduction in annual captures found over my five study years could have been affected by variables other than removal trapping. For example, rainfall has been shown to affect both the number of migrating adults and reproductive success among ambystomatids (e.g., Semlitsch 1983). However, my annual capture numbers were not correlated with on-site rainfall. In addition, I examined local annual rainfall data for the five years prior to my study and found no patterns that might have affected past reproductive success and subsequently influenced capture numbers during my study. It is important to note that because the drift fence was not a closed system, it was not possible to determine whether individuals captured inside or outside the trap line were resident to those sides of the study site.

The costs and benefits of amphibian translocation strategies have been debated and establishing criteria for success is difficult (Seigel and Dodd 2002; Trenham and Marsh 2002). Because my study only involved moving animals to adjacent grassland habitat a short distance from the capture point ( $\leq 100$  m), some of the more critical problems typically associated with translocation projects were not applicable, including the availability of suitable habitats, disease transmission, and genetic considerations (Dodd and Seigel 1991). However, because a portion of my translocated animals were recaptured presumably trying to return to the study site, they could have been subject to additional stress which reduced their survival (Matthews 2003; Germano and Bishop 2008). In addition, I do not know if the resources of the adjacent area were adequate to sustain an increase in population size (Petranka 1989).

Other options for managers to reduce the number of salamanders in a proposed construction area include passive relocation using wooden ramps with barrier fencing or excavating salamanders from their burrows. Although I have observed *A. californiense* using ramps to exit a project site, there are no published reports on the success of this passive relocation technique. Excavation is time consuming (Pittman 2005), difficult due to the complexity of burrow systems, and potentially hazardous to the salamanders.

Management implications.--My findings have several implications for future conservation and management of this species. First, the current suggested buffer zone of 630 m around breeding ponds for longterm preservation of individual A. californiense populations (Trenham and Shaffer 2005) may not protect a substantial portion of some upland populations. Second, the method proposed by Searcy and Shaffer (2008) for calculating mitigation value for A. californiense, which is based on the exponential decrease in salamander density with increased distance from breeding ponds, may not be applicable in all cases. Other factors could be influencing the density distribution around ponds, such as uneven distribution of resources and presence of other species (Rittenhouse and Semlitsch 2007; Searcy and Shaffer 2008). The results of my study underscore the need to consider other relevant biological factors in establishing buffer zones or mitigation credits. Third, trapping may be the most reliable means of predicting habitat value or detecting occurrence in uplands. I found that the number of salamanders observed during winter night surveys was not a reliable indication of population size. The limited number of salamanders I observed was probably due to few being above ground at the burrow entrances during the night surveys. Fourth, efforts to remove A. californiense, via trapping or passive relocation, from a proposed project site for only one year (to reduce impacts from development) may miss a large portion of the population. My findings suggest that multiple years are required to substantially reduce the abundance of adult life stages in upland habitat.

Herpetological Conservation and Biology

Acknowledgments.—I am grateful for the biologists who assisted in the field work for this study, including Kathy Willet, Derek Jansen, and Jill Bennett. I appreciate Mark Allaback of Biosearch (Santa Cruz, CA) for helping to develop and design this study. I thank Dr. Pete Trenham and Mark Allaback who reviewed and improved the original manuscript. I also thank the U.S. Fish and Wildlife Service and California Department of Fish and Game for authorizing this study through issuance of a 10(a)(1)(A) permit (TE-075898–1) and Scientific Collectors Permit (801083–05).

#### LITERATURE CITED

- Bailey, L.L. 2004. Evaluating elastomer marking and photo identification methods for terrestrial salamanders: marking effects and observer bias. Herpetological Review 35:38–41.
- Beneski J.T., Jr., E.J. Zalisko, and J.H. Larsen Jr. 1986. Demography and migratory patterns of the Eastern Long-toed Salamander, *Ambystoma marcrodactylum* columbianum. Copeia 1986:398–408.
- Biek, R., W.C. Funk, B.A. Maxell, and L.S. Mills. 2002. What is missing in amphibian decline research: insights from ecological sensitivity analysis. Conservation Biology 16:728–734.
- California Fish and Game Commission. 2010. List California Tiger Salamander as a threatened species. California Regulatory Notice Register. Title 14, Vol. No. 12–Z:425–427.
- Cook, D.G., P.C. Trenham, and P.T. Northen. 2006. Demography and breeding phenology of the California Tiger Salamander (*Ambystoma californiense*) in an urban landscape. Northwestern Naturalist 87:215–224.
- Cooke, A.S., and R.S. Oldham. 1995. Establishment of populations of the Common Frog, *Rana temporaria*, and the Common Toad, *Bufo bufo*, in a newly created reserve following translocation. Herpetological Review 5:173–180.
- Dodd, C.K., Jr. 2005. Population manipulations. Pp. 265– 270 In Amphibian Declines: The Conservation Status of United States Species. Lannoo, M. (Ed.). University of California Press, Berkeley, California, USA.
- Dodd, C.K., Jr., and R.A. Seigel. 1991. Relocation, repatriation, and translocation of amphibians and reptiles: are they conservation strategies that work? Herpetologica 47:336–350.
- Donnelly, M.A., C. Guyer, J.E. Juterbock, and R.A. Alford. 1994. Techniques for marking amphibians. Pp. 277–284 In Measuring and Monitoring Biological Diversity: Standard Methods for Amphibians. Heyer, W. R., M.A. Connelly, R.W. McDiarmid, L.C. Hayek, M.S. Foster (Eds.). Smithsonian Institution Press, Washington D.C., USA.
- Doody, J.S. 1995. A photographic mark-recapture method for patterned amphibians. Herpetological Review 26:19-21.

- Fischer, J., and D.B. Lindenmayer. 2000. An assessment of the published results of animal relocations. Biological Conservation 96:1–11.
- Germano, J.M., and P.J. Bishop. 2008. Suitability of amphibians and reptiles for translocation. Conservation Biology 23:7–15.
- Gibbons, J.W., and D.H. Bennett. 1974. Determination of anuran terrestrial activity patterns by a drift fence method. Copeia 1974:236–243.
- Griffith, B., J.M. Scott, J.W. Carpenter, and C. Reed. 1989. Translocation as a species conservation tool: status and strategy. Science 245:477–480.
- Harper, E.B., T.A.G. Rittenhouse, and R.D. Semlitsch. 2008. Demographic consequences of terrestrial habitat loss for pool-breeding amphibians: predicting extinction risks associated with inadequate size of buffer zones. Conservation Biology 22:1205–1215.
- Loredo, I., and D. Van Vuren. 1996. Reproductive ecology of a population of the California Tiger Salamander. Copeia 1996:895–901.
- Loredo, I., D. Van Vuren, and M.L. Morrison. 1996. Habitat use and migration behavior of the California Tiger Salamander. Journal of Herpetology 30:282–282.
- Marsh, D.M., and P.T. Trenham. 2001. Metapopulation dynamics and amphibian conservation. Conservation Biology 15:40–49.
- Matthews, K.R. 2003. Response of Mountain Yellowlegged Frogs, *Rana muscosa*, to short distance translocation. Journal of Herpetology 37:621-626.
- Petranka, J.W. 1989. Density-dependent growth and survival of larval *Ambystoma*: evidence from wholepond manipulations. Ecology 70:1752–1767.
- Petranka, J.W. 1998. Salamanders of the United States and Canada. Smithsonian Institution Press, Washington, D.C., USA.
- Phillips, C.A., and O.J. Sexton. 1989. Orientation and sexual differences during breeding migrations of the Spotted Salamander, *Ambystoma maculatum*. Copeia 1989:17–22.
- Pittman, B.T. 2005. Observations of upland habitat use by California Tiger Salamanders based on burrow excavations. Transactions of the Western Section of the Wildlife Society 41:26–30.
- Rathbun, G.B., and J. Schneider. 2001. Translocation of California Red-legged Frogs (*Rana aurora draytonii*). Wildlife Society Bulletin 29:1300–1303.
- Regosin, J.V., B.S. Windmiller, and J.M. Reed. 2003. Influence of abundance of small-mammal burrows and conspecifics on the density and distribution of Spotted Salamanders (*Ambystoma maculatum*) in terrestrial habitats. Canadian Journal of Zoology 81:596–605.
- Rittenhouse, T.A.G., and R.D. Semlitsch. 2007. Distribution of amphibians in terrestrial habitat surrounding wetlands. Wetlands 27:153–161.
- Rothermel, B.B. 2004. Migratory success of juveniles: a potential constraint on connectivity for pond-breeding amphibians. Ecological Applications 14:1535–1546.

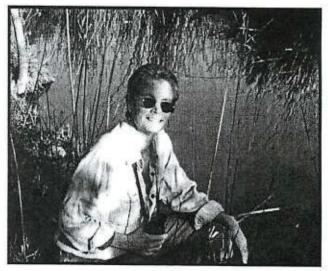
Orloff.-Movement patterns and migration distances of California Tiger Salamander.

- Searcy, C.A., and H.B. Shaffer. 2008. Calculating biologically accurate mitigation credits: insights from the California Tiger Salamander. Conservation Biology 22:997–1005.
- Seigel, R.A., and C.K. Dodd, Jr. 2002. Translocations of amphibians: proven management method or experimental technique? Conservation Biology 16:552–554.
- Semlitsch, R.D. 1983. Structure and dynamics of two breeding populations of the Eastern Tiger Salamander, *Ambystoma tigrinum*. Copeia 1983:608–616.
- Semlitsch, R.D. 1998. Biological delineation of terrestrial buffer zones for pond-breeding salamanders. Conservation Biology 12:1113–1119.
- Semlitsch, R.D. 2002. Critical elements for biologically based recovery plans of aquatic-breeding amphibians. Conservation Biology 16:619–629.
- Semlitsch, R.D. 2007. Differentiating migration and dispersal processes for pond-breeding amphibians. Journal of Wildlife Management 72:260–267.
- Semlitsch, R.D., and J.R. Bodie. 2003. Biological criteria for buffer zones around wetlands and riparian habitats for amphibians and reptiles. Conservation Biology 17:1219–1228.
- Semlitsch, R.D., and J.B. Jensen. 2001. Core habitat, not buffer zone. National Wetlands Newsletter 23:5-7.
- Shoop, C.R. 1968. Migratory orientation of *Ambystoma* maculatum: movements near breeding ponds and displacements of migrating individuals. Biological Bulletin 135:230-238.
- Shoop, C.R., and T.L. Doty. 1972. Migratory orientation by Marbled Salamanders (*Ambystoma opacum*) near a breeding area. Behavioral Biology 7:131–136.
- Stenhouse S.L. 1985. Migratory orientation and homing in Ambystoma maculatum and Ambystoma opacum. Copeia 1985:631–637.
- Stitt, E.W., and G.T. Downard. 2000. Status of the California Red-legged Frog and California Tiger

Salamander at Concord Naval Weapons Station, California. Transactions of the Western Section of the Wildlife Society 36:32–39.

- Storer, T.I. 1925. A synopsis of the amphibia of California. University of California Publications in Zoology 27:1–342.
- Trenham, P.C. 2001. Terrestrial habitat use by adult California Tiger Salamanders. Journal of Herpetology 35:343–346.
- Trenham, P.C., and D.G. Cook. 2008. Distribution of migrating adults related to the location of remnant grassland around an urban California Tiger Salamander (*Ambystoma californiense*) breeding pool. Pp. 9–16 *In* Urban Herpetology, Herpetological Conservation. Mitchell, J.C., and R.E. Jung Brown (Eds.). Society for the Study of Amphibians and Reptiles, Salt Lake City, Utah, USA.
- Trenham, P.C., and D.M. Marsh. 2002. Amphibian translocation programs: reply to Seigel and Dodd. Conservation Biology 16:555–556.
- Trenham, P.C., and H.B. Shaffer. 2005. Amphibian upland habitat use and its consequences for population viability. Ecological Applications 15:1158–1168.
- Trenham, P.C., W.D. Koenig, and H.B. Shaffer. 2001. Spatially autocorrelated demography and interpond dispersal in the salamander, *Ambystoma californiense*. Ecology 82:3519–3530.
- Trenham, P.C., H.B. Shaffer, W.D. Koenig, and M.R. Stromberg. 2000. Life history and demographic variation in the California Tiger Salamander (*Ambystoma californiense*). Copeia 2000:365–377.
- U. S. Fish and Wildlife Service. 2004. Determination of threatened status for the California Tiger Salamander; and special rule exemption for existing routine ranching activities; final rule. Federal Register 69:47212–47248

SUSAN ORLOFF is a Wildlife Biologist and principal of a consulting firm in the San Francisco Bay Area. She has degrees from San Francisco State University (B.A.) and Sonoma State University (M.A.). During the last 25 years, she has worked on a diversity of projects involving the status and conservation of sensitive wildlife species. Her early career focused on species of the Central Valley in California and she has authored several papers on the endangered San Joaquin Kit Fox (Vulpes macrotis mutica). Sue also has extensive experience assessing the impacts of windfarm development on raptor populations, which resulted in several publications. Her more recent research emphasizes sensitive amphibians and reptiles of California. This research includes a long-term population monitoring program for California Red-legged Frogs (Rana draytonii) and San Francisco Garter Snakes (Thamnophis sirtalis tetrataenia), a study on the impacts of variations in creek flow releases on California Redlegged Frogs, and a multiyear study on the effects of hydroelectric operations on the Foothill Yellow-legged Frog (Rana boylii). (Photographed by C.K. Cole)







396 HAYES STREET, SAN FRANCISCO, CA 94102 T: (415) 552-7272 F: (415) 552-5816 www.smwlaw.com WINTER KING Attorney

January 10, 2014

#### Via Email and U.S. Mail

Kristin Pollot Associate Planner City of Pittsburg, Planning Department 65 Civic Avenue Pittsburg, CA 94565 E-Mail: kpollot@ci.pittsburg.ca.us

#### Re: <u>Montreux Residential Subdivision and Draft Environmental Impact</u> <u>Report</u>

Dear Ms. Pollot:

This firm represents Save Mount Diablo ("SMD") with regard to the Montreux Residential Subdivision Project ("Project"). SMD is a non-profit organization dedicated to preserving Mount Diablo's peaks, surrounding foothills and watersheds through land acquisition and preservation strategies designed to protect the mountain's natural beauty, biological diversity and historic and agricultural heritage. To advance this goal, SMD regularly participates in land use planning processes for projects that could impact Mount Diablo and its surrounding foothills, such as the Montreux Project. We submit these comments on the Project and associated draft Environmental Impact Report ("DEIR") on SMD's behalf.

As described below, SMD has serious concerns about the impacts of the Project, which proposes to transform 77 acres of largely untouched open space lands in the Woodlands subarea, immediately adjacent to the open spaces of the South Hills subarea, into a residential subdivision with 356 estate homes, onsite access roadways, drainage basins, and a water storage tank. DEIR at 3.0-8 and 9. The urban-scale Project is currently outside the City limits, outside the service areas for the Delta Diablo Sanitation District and the Contra Costa Water District Service Area boundary, and therefore lacks a certain water supply. The Project is patently inconsistent with the City's general plan and requires rezoning to permit development at the proposed density. In short, the Project has all the hallmarks and adverse environmental impacts of leapfrog development. It is

therefore perhaps unsurprising that it directly conflicts with numerous general plan policies that discourage such development.

In addition, the DEIR for the Project fails to provide the public and decision makers with crucial information about the Project, its impacts, and feasible mitigation measures, in direct violation of the California Environmental Policy Act ("CEQA").<sup>1</sup> For example, the Project description lacks sufficient detail for the public to determine what the impacts of the Project will be. Although the City is apparently contemplating a development agreement as part of the Project, the agreement itself is not included as an attachment to the DEIR or otherwise made available to the public, and the description of the agreement's terms is cursory at best. Similarly, consultant reports on various impact areas are referred to in the DEIR but not provided for public review. At the very least, the DEIR must be revised and recirculated to include these documents and information.

The DEIR's analysis of specific environmental impacts is similarly lacking. As discussed in this letter and the attached report from consulting hydrologist Bruce Abelli-Amen of Baseline Environmental Consulting ("Baseline Report"), developing the Project on the area's the steep terrain will require extensive cut and fill, which, in turn, will drastically affect the hydrology of the area and could even damage downstream properties. Baseline Report attached as Exhibit 1. Yet the DEIR contains *no discussion whatsoever* of these potential impacts, relying solely on the Initial Study's cursory discussion of the issue. Similar flaws are found in other impact analysis, including aesthetics, biological resources, public services, and public safety. More is required of an adequate EIR.

In sum, after reviewing the DEIR and other Project documents, it is our opinion that the Project conflicts with the City of Pittsburg's General Plan and Municipal Code in violation of State Planning and Zoning Law, Gov't Code § 65000 et seq. For this and other reasons, the City cannot make the findings necessary to approve the Project's requested rezoning and tentative map. *See* Gov't Code §§ 66473.5 & 66474. In addition, the DEIR for the Project violates the minimum standards of adequacy under CEQA. As a result, the City cannot approve the Project as currently proposed and must, at a minimum, recirculate a revised DEIR that addresses the inadequacies identified in this letter.

<sup>&</sup>lt;sup>1</sup> Public Resources Code § 21000 et seq. (hereinafter "CEQA"); Cal. Code of Regulations, tit. 14, § 15000 et seq. (hereinafter "Guidelines").



### I. Approval of the Project Would Violate California Planning and Zoning Law and the Subdivision Map Act.

The State Planning and Zoning Law (Gov't Code § 65000 et seq.) requires that development decisions be consistent with the jurisdiction's general plan. *See* Gov't Code §§ 65860 (requiring consistency of zoning to general plan), 66473.5 & 66474 (requiring consistency of subdivision maps to general plan), and 65359 and 65454 (requiring consistency of specific plan and other development plan and amendments thereto to general plan). Thus, "[u]nder state law, the propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements." *Resource Defense Fund v. County of Santa Cruz* (1982) 133 Cal.App.3d 800, 806. Accordingly, "[t]he consistency doctrine [is] the linchpin of California's land use and development laws; it is the principle which infuses the concept of planned growth with the force of law." *Families Unafraid to Uphold Rural El Dorado County v. Board of Supervisors* (1998) 62 Cal.App.4th 1332, 1336.

It is an abuse of discretion to approve a project that "frustrate[s] the General Plan's goals and policies." *Napa Citizens for Honest Gov't v. Napa County* (2001) 91 Cal.App.4th 342, 379. The project need not present an "outright conflict" with a general plan provision to be considered inconsistent; the determining question is instead whether the project "is compatible with and will not frustrate the General Plan's goals and policies." *Napa Citizens*, 91 Cal.App.4th at 379.

Here, the proposed Project does more than just frustrate the General Plan's goals. It is directly inconsistent with numerous provisions in the General Plan. Consequently, the Project cannot be approved in its current form.

### A. The Project Is Inconsistent with Numerous General Plan and Municipal Code Provisions.

The City's General Plan and Municipal Code contains several provisions intended to ensure that development occur in an environmentally sensitive manner. As discussed below, the Project is inconsistent with many important Plan and Code provisions.

///

///

///



### 1. General Plan and Code Provisions Relating to the Preservation of Hillsides

The Project site is designated and pre-zoned for Hillside Plan Development. DEIR at 3.0-8. The General Plan requires that development in the hills be sensitive to the natural terrain, minimize cut-and-fill, and incorporate natural features (*e.g.*, topography and creeks) into the design of residential neighborhoods. General Plan Land Use Element Policies 2-P-21, 2-P-23, 2-P-24, 2-P-25, 4-P-9. General Plan Land Use Element Policy 2-P-21. The General Plan also indicates that the City must "ensure that all General Plan policies apply to hillside land irrespective of zoning –whether Planned Development or any other base district." General Plan Land Use Element Policy 2-P-22.

General Plan provisions specific to the Woodlands sub-area where the Project is located are even more protective. For example, the General Plan specifies a goal to support new residential development in locations that do not significantly impact the natural setting." General Plan Goal: Woodlands 2-G-27 and 2-G-28. As discussed below and throughout this letter, the Project proposes mass grading that fills a natural drainage and denudes the site of natural vegetation. Other Woodlands-area specific provisions require that the "natural topography be retained to the *maximum extent feasible*, and large-scale grading discouraged" and that development be minimally visible from Kirker Pass Road. General Plan Policy: Woodlands 2-P-73.

The Municipal Code accordingly establishes regulations for development in hillside areas that establish several goals to protect hillsides. For example, the Code establishes the goal "to protect natural topographic features, aesthetic view, vistas, and prominent ridges." It also calls for the City to "protect adjacent properties from potential adverse impacts of grading and drainage associated with hillside development," and "encourage the use of development techniques and alternatives that will be compatible to the terrain of the hillside areas." Municipal Code § 18.56.02.

The Municipal Code contains provisions requiring topographic maps indicating the steepness of the site's slopes. Municipal Code § 18.56.070.K. The Code also requires landscape plans indicating the location of existing and proposed trees and other plant materials, and before and after grading details. *Id.* But neither the DEIR nor technical appendix actually include these details.

Despite the lack of information in the DEIR, it is clear that the Project would be inconsistent with these provisions. The DEIR concludes that the Project is consistent with the General Plan because the Project proposes to preserve the southernmost portion of the site. DEIR at 4.0-2. However, the development plan



proposed for the remainder of the site would be anything but sensitive to the natural terrain. Rather than follow the natural topography and minimize grading, the Project site's steep slopes would be cut away to create unnaturally "flat" areas for building pads where steep slopes and drainage areas, including wetlands, previously existed. The Project requires a staggering 1.4 million cubic yards of excavation and fill material. DEIR at 3.0-12. Grading involving an estimated this level of excavation would result in the removal of trees and other natural vegetation throughout the development area and would also change much of the site's natural landform. Moreover, as made clear in the DEIR, the development would be very visible from Kirker Pass Road and would stand in stark contrast to the surrounding hillsides. DEIR at Figures 5.1-5 and 5.1-6.

# 2. General Plan Provisions Relating to the Protection of Natural Resources.

The General Plan encourages development that is compatible with the environment and sensitive habitats, "particularly habitats that support special status species" and calls for development that preserves significant ecological resources. Resources Conservation Element Goals 9-G-1 and 9-G-2 and Policies 4-P-14, 4-P-15, 9-P-13. The DEIR again concludes that the Project is consistent with the General Plan because the Project proposes to preserve the southernmost portion of the site and because the site's resources were "considered and documented." DEIR at 4.0-6. However, as discussed below, the DEIR's documentation of natural resources is seriously flawed. See section II.B.3 below. The Project is inconsistent with these provisions because, as discussed below, it will result in significant adverse impacts to sensitive habitats and species on and adjacent to the Project site. The DEIR has failed to provide a complete analysis of these impacts. *Id.* As a result, the Project will result in significant impacts related to direct and indirect impacts to special status species in contravention of the General Plan. *Id.* 

### **3.** General Plan Provisions Relating to the Protection of Drainages

The General Plan includes provisions that protect drainages and prevent erosion. Resources Conservation Element Policies 9-G-4 and 9-G-5. The General Plan also includes provisions to require evaluation and implementation of Best Management Practices to protect against creek bank destabilization and require assessments of downstream drainage impacts. Policies 9-P-15, 9-P-17, and 9-P-21. The DEIR fails to mention these General Plan provisions let alone analyze consistency with them. As discussed further below, and in the attached Baseline Report, the DEIR fails to evaluate these impacts. As a result, the Project is inconsistent with these General Plan provisions.



### 4. General Plan Provisions Relating to the Provision of Public Services.

The DEIR discloses that the Project would add school children to area schools that are already over capacity. DEIR at 5.6-8. The Project is inconsistent with General Plan provisions that specify the City is to "ensure that school facilities maintain adequate capacity to provide for current and projected enrollment." General Plan Policy 8-G-10. The Project is inconsistent with the General Plan in that it would approximately 277 new students to a school system already over-capacity.

The General Plan specifies that the City is to provide 1.8 *sworn officers* per each 1,000 residents. The DEIR discloses that the Project would add to the City's population so that additional police officers would be needed to serve the community. DEIR at 5.6-8. As the DEIR makes clear, there is "no guarantee that the General Fund revenues provided by the new development would fully fund the new positions." DEIR at 5.6-8. Thus, the Project conflicts with the General Plan requirements for police protection.

For all of these reasons, the Project is inconsistent with the General Plan and the Municipal Code. Because of the Project's inconsistencies with these planning documents, approval of this Project would violate State Planning and Zoning Law and the County's Development Code.

### **B.** Approval of this Project Would Violate the Subdivision Map Act.

The proposed Project requires approval of a tentative subdivision map. *See* DEIR at 3.0-13. As a result, the City must comply with the Subdivision Map Act. This statute requires that a tentative map approval be consistent with the local general plan. *See* Gov't Code §§ 66473.5; 66474; *see also Friends of "B" Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 998 (Subdivision Map Act expressly requires consistency with general plan). Approval of a project that is inconsistent with the general plan violates the Subdivision Map Act and may be enjoined on that basis. *See Friends of "B" Street*, 106 Cal.App.3d at 998 ("City approval of a proposed subdivision … may be enjoined for lack of consistency of the subdivision map with the general plan."); *see also* City of Pittsburg Municipal Code § 17.20.060 (to approve a tentative map, the following findings must be made, among others: 1) the proposed map is consistent with the general plan and any applicable specific plan, or other applicable provisions of [the municipal] code; 2) the site is physically suitable for the proposed density of development; and 3) the design of the subdivision or the proposed improvements will not cause substantial



environmental damage or substantially and avoidably injure fish or wildlife or their habitat).

As detailed throughout this letter, the Project is inconsistent with various goals and policies set forth in the City's General Plan. *See e.g.*, Section I(A), *supra*. Because approval of the Project would violate the general plan consistency requirements of the Subdivision Map Act and the City's own municipal code, the Project application must be denied.

### II. The DEIR Is Inadequate Under CEQA.

The environmental impact report is "the heart of CEQA." *Laurel Heights Improvement Ass'n v. Regents of University of California* (1988) 47 Cal.3d 376, 392 (citations omitted) ("*Laurel Heights I*"). It "is an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return. The EIR is also intended 'to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.' Because the EIR must be certified or rejected by public officials, it is a document of accountability." Id. (citations omitted). Where, as here, an EIR fails to fully and accurately inform decision makers, and the public, of the environmental consequences of proposed actions, it does not satisfy the basic goals of the statute. *See* CEQA § 21061("The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect that a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.").

As discussed in detail below and in the attached technical report, the DEIR is replete with serious flaws. *See* Baseline Report. It lacks a legally defensible description of the Project and contains so little information about the Project's potential environmental impacts that, in many instances, it is difficult to evaluate the accuracy of the environmental analysis. Nor does the DEIR provide the necessary evidence or analysis to support its conclusions that environmental impacts would be less than significant. Many of the so-called mitigation measures proposed in the DEIR are nothing more than general assertions that something will be done in the future about the Project's significant environmental impacts. Such deferral is prohibited by CEQA. Consequently, the City must prepare and recirculate a revised EIR if it chooses to proceed with the proposed Project.



#### A. The DEIR Fails to Adequately Describe the Project.

#### 1. The DEIR's Project Description Omits Critical Information.

Under CEQA, the inclusion in the EIR of a clear and comprehensive description of the proposed project is critical to meaningful public review. *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193. The court in *Inyo* explained why a thorough project description is necessary:

"A curtailed or distorted project description may stultify objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance." d. at 192-93. Thus, "[a]n accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR." *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818, 830.

Here, the description of the Project is inadequate. The DEIR fails to identify key components of the Project that have the potential to result in significant environmental impacts. For example, the DEIR entirely omits critical information about the improvements that would be needed to resolve the area's hydraulic and flood risks. *See* Baseline Report at 1 and 2. Additionally, the DEIR fails to adequately describe the Project's stormwater system and fails to include a Stormwater Control Plan. The proposed Project will result in a substantial increase in impermeable surfaces, which will, in turn, increase runoff from the site, yet the document does not include any detail about where drainage features (inlets, piping, culverts, etc.) would be located and how these systems, including the detention basins, would be operated. The DEIR does not appear to include, nor does it reference, any hydrologic or hydraulic engineering that supports the drainage plan. The reader of the DEIR has no idea how the detention basins were sized or how they would be operated. Without detailed information regarding the location and design of the drainage facilities, it is impossible for decision makers and the public to evaluate the accuracy of the DEIR's conclusions.



The DEIR also fails to include the following crucial information about the Project:

- Number and type of trees to be removed;
- Location of the Project staging areas;
- Location of spoils sites and haul routes;
- Construction-related activities (including timeline, location, number of construction employees, types of equipment, etc.);
- Other Project features such as fences, bridges, gates or other proposed improvements.

All of this information must be included in a revised EIR so that the impacts associated with these features and activities can be analyzed.

# 2. The Project Description Avoids Any Meaningful Discussion of the Proposed Development Agreement.

The DEIR notes that the Project will include a development agreement, and states that the agreement's primary purpose is to vest the applicant's entitlements. DEIR at 3.0-12. The DEIR also states that the development agreement will include provisions regarding integration of the project entrance with the future Donlon Boulevard extension, requirements for payment of fees related to open space and compliance with the City's inclusionary housing ordinance. *Id.* However, no information is provided about the conditions, terms, restrictions and requirements for subsequent actions. The text of this development agreement is not included anywhere in the DEIR. And the development agreement was not included among the publicly available environmental documents for the project. Without any more detailed information about the terms of the agreement, key elements of the project description are omitted and cannot be analyzed in the EIR, in direct violation of CEQA. *See, e.g., Laurel Heights Improvement Ass'n v. Regents of the University of California* (1993) 6 Cal.4th 1112, 1123 ("*Laurel Heights II*") (the purpose of CEQA "is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made").

This omission is particularly disturbing as development agreements typically seek to "lock in" development rights – including existing regulations and the density and intensity of development – over an extended period of time. As such, development agreements have the potential to greatly exacerbate the potential impacts of



a project by limiting the lead agency's permitting authority and ability to impose additional mitigation measures or reduce the intensity of development at later discretionary phases of the project. This problem is only compounded where, as here, the development of critical mitigation measures is deferred to the indefinite future.

The DEIR's failure to provide any specifics regarding the development agreement constitutes a fatal shortcoming in the Project Description and the subsequent analysis of Project impacts. To comply with CEQA, the DEIR must be recirculated with a more detailed description of the development agreement or with the draft agreement attached.

# **3.** The DEIR Minimizes the Extent of the Project By Failing to Describe and Analyze Full Build-Out Conditions.

Courts have held that, when analyzing the environmental impacts of a general plan or other planning document, the lead agency must analyze "the future development *permitted* by the [plan]... Only then can the ultimate effect of the [plan] upon the physical environment be addressed." *Christward Ministry v. Superior Court of San Diego County* (1986) 184 Cal.App.3d 180, 194 (emphasis added); *see also City of Redlands v. County of San Bernardino* (2002) 96 Cal.App.4th 398, 409 (quoting same).

Here, the Project proposes rezoning not only for the 77-acre portion of the site designated for residential development but for entire site. DEIR at 3.0-8. Nowhere does the DEIR analyze the impacts of a potential increase in density on the entire site. The DEIR proposes that the 71-acre area proposed for open space will be subject to "recordation of a deed restriction or some other appropriate mechanism, prior to the acceptance of the last Final Map for the site (should it be broken into phases)." DEIR at 2.0-21. This approach is not adequately protective of the open space. First, recording the deed restriction prior to the last Final Map (rather than prior to the *first* Final Map) leaves the open space area vulnerable to damaging uses during construction. Second, deferring recordation of the deed restriction to such a late date leaves the open space vulnerable to future proposals for alteration of the open space area to other uses.

Alternatively, the DEIR could have specified use of a conservation easement on the open space area, conveyed to a land trust capable of managing and enforcing it, to preserve and protect the area in perpetuity. Such an easement should be recorded prior to acceptance of the first Final Map. As proposed, the open space area is vulnerable to future proposals for alteration of the open space area to other uses, and therefore, the DEIR must analyze the potential impacts at full build-out should the City approve the change in zoning.



## **B.** The DEIR Fails to Analyze and Mitigate the Project's Significant Environmental Impacts.

CEQA requires that an EIR be detailed, complete, and reflect a good faith effort at full disclosure. Guidelines § 15151. The document should provide a sufficient degree of analysis to inform the public about the proposed project's adverse environmental impacts and to allow decision-makers to make intelligent judgments. *Id.* Consistent with this requirement, information regarding the project's impacts must be "painstakingly ferreted out." *Environmental Planning & Info. Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 357 (finding an EIR for a general plan amendment inadequate where the document did not make clear the effect on the physical environment).

Meaningful analysis of impacts effectuates one of CEQA's fundamental purposes: to "inform the public and responsible officials of the environmental consequences of their decisions before they are made." *Laurel Heights II*, 6 Cal.4th at 1123. To accomplish this purpose, an EIR must contain facts and analysis, not just an agency's bare conclusions. *Citizens of Goleta Valley*, 52 Cal.3d at 568. Nor may an agency defer its assessment of important environmental impacts until after the project is approved. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 306-07. An EIR's conclusions must be supported by substantial evidence. *Laurel Heights I*, 47 Cal.3d at 409.

As documented below, the DEIR fails to identify, analyze, or support with substantial evidence its conclusions regarding the Project's significant environmental impacts. These deficiencies render the DEIR inadequate under CEQA.

# 1. The DEIR Fails to Analyze and Disclose Significant Aesthetic Impacts of the Project.

The proposed Project will alter and adversely impact the visual landscape of the site and the surrounding area by completely transforming this scenic, hilly area into a dense, residential one. As discussed above, the Project will cut and fill large swaths of hillside and excavate an enormous amount of soil: 1.4 million cubic yards. DEIR at 3.0-12. (Assuming a dump truck holds 10 cubic yards, the proposed excavation equates to 140,000 truckloads of soil.) The DEIR acknowledges that the Project would result in significant and unavoidable impacts relating to a the degradation of the existing visual character of the area. DEIR 2.0-6. Despite this assessment, the DEIR concludes that the Project's other aesthetic impacts will be less than significant because of certain landscaping and design features. However, landscaping and design features cannot reduce



the significant topographic impacts of the Project to a level of insignificance. Furthermore, the DEIR's conclusion that aesthetic impacts will be insignificant flies in the face of established CEQA precedent.

Under CEQA, it is the state's policy to "[t]ake all action necessary to provide the people of this state with . . . enjoyment of *aesthetic*, natural, scenic, and historic environmental qualities." CEQA § 21001(b) (emphasis added). "A substantial negative effect of a project on view and other features of beauty could constitute a significant environmental impact under CEQA." *Ocean View Estates Homeowners Assn., Inc. v. Montecito Water District* (2004) 116 Cal.App.4th 396, 401. No special expertise is required to demonstrate that the Project will result in significant aesthetic impacts. *Ocean View Estates*, 116 Cal.App.4th at 402 ("Opinions that the [project] will not be aesthetically pleasing is not the special purview of experts."); *The Pocket Protectors v. City of Sacramento* (2005) 124 Cal.App.4th 903, 937 ("[N]o special expertise is required on this topic.").

As explained by the court in *Quail Botanical Gardens Foundation, Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1606, it is "self-evident" that replacing open space with a subdivision will have an adverse effect upon "views and the beauty of the setting." Instead of addressing and analyzing the Project's visual effects, the DEIR employs contorted logic to mask its clear impacts. For example, the DEIR acknowledges that the General Plan identifies views of the "rolling, grassy hills to the south," which characterize the site, as important visual resources for the City and that the development will be visible from area parks. DEIR at 5.1-8. The DEIR also acknowledges that the Project site "could be considered an element of broad scenic vistas of hills and open space visible from Kirker Pass Road, a designated scenic route in the General Plan. *Id.* The DEIR even states that the Project could have a substantial adverse effect on a scenic vista. *Id.* Surprisingly, the DEIR then concludes that impacts to scenic vistas would be less than significant because design guidelines included in Mitigation Measure AES-1 would mitigate these significant impacts. DEIR at 5.1-9.

Such a conclusion is misguided and unsupported by evidence. The guidelines and standards that the DEIR relies on address the colors and materials to be used in the development but in reality they do nothing to reduce the height, mass, or location of structures or to ensure that the development is less visible from public viewpoints. The DEIR fails to provide any specific information or analysis, as to how the proposed measure would mitigate significant impacts to existing views from parks and other public viewpoints. A neutral color palette will not camouflage this large subdivision.

Moreover, the DEIR fails to provide evidence to support its conclusion that the Project's impacts to area scenic vistas would be less than significant. Specifically, the EIR fails to evaluate the Project's impacts to views from East Bay Regional Park District ("EBRPD") trails and from open space areas in Stoneman Park to the north. *See* DEIR Figure 5.1-3 indicating visual simulations performed only for views from Kirker Pass Road. The DEIR also fails to evaluate impacts to planned parklands to the south and southwest of the project site. As pointed out by during the scoping process, the EBRPD has acquired the "Thomas North" parcel to the south of the Project site and the "Land Waste Management" and "Affinito" parcels to the southwest. A revised EIR must be prepared to evaluate the Project's impacts to views from these parcels.

The Project will transform an undeveloped, rural area framed by rolling hills into a large residential subdivision. This change substantially degrades not only the existing visual character and quality of the site and its surroundings but the quality of scenic vistas enjoyed from area roadways, parks, and trails. These impacts are considered significant impact under CEQA. Guidelines, Appendix G(I)(c). Thus, the DEIR's conclusion that the Project's impact on scenic vistas would be less than significant cannot be sustained.

### 2. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Hydrology and Water Quantity.

The DEIR includes absolutely no discussion of the potential impacts to hydrology and water quality, having concluded in the Initial Study ("IS") that the Project's impacts in these areas would be less than significant. As explained in the attached Baseline Report, this conclusion is not supported by substantial evidence and, in fact, the Project would substantially alter site drainage and the stream channel that runs through the property. While the IS provides a general discussion of these potential impacts, it contains no supporting studies or data and relies entirely on future preparation of a Storm Water Pollution Prevention Plan ("SWPPP") and compliance with existing regulations to reduce the Projects impacts to a level of insignificance. As discussed in detail below, this approach does not comport with CEQA. In very steep terrain like this, it is virtually impossible for projects to comply with National Pollutant Discharge Elimination System ("NPDES") requirements, which is evidenced by the Project's proposed detention basins. Thus, relying on compliance with existing requirements is particularly unacceptable in this situation. In addition, steep terrain such as this makes remediation of unstable soils very challenging.



### (a) The DEIR Fails to Adequately Describe the Existing Hydrological Setting.

The DEIR/IS provides no information on the hydrology and water quality setting. Without describing the hydrology of the on-site drainage and that of Kirker Creek downstream, the reader of the DEIR/IS has no context within which to evaluate potential project impacts. Perhaps most important, the DEIR/IS does not provide any discussion of the hydrology of Kirker Creek and its susceptibility to flooding. The DEIR must be revised to include a Hydrology and Water Quality section that adequately describes the hydrologic setting.

#### (b) The Project Does Not Comply with Applicable Requirements Under the NPDES

The IS states that the project would treat stormwater runoff "as required by provision C.3 of the Contra Costa County municipal stormwater NPDES permit by directing all site runoff into three detention basins." IS at 59. However, this statement appears to refer to an old (and superseded) NPDES permit. The current NPDES permit that the project would be required to comply with is the Municipal Regional Stormwater NPDES Permit, Order No. R2-2009-0074, NPDES Permit No. CAS612008, adopted October 14, 2009 and revised November 28, 2011 ("MRP"). Not only does the Initial Study refer to the wrong NPDES permit, it wrongly interprets what C.3 provisions would be required. Baseline Report at 3. The C.3 portion of the MRP, which refers to post-construction stormwater management for new development and redevelopment projects, requires Low Impact Development ("LID"). The Project as proposed includes centralized detention basins, which are not LID features.

The goal of LID is to reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and biotreatment through rain gardens, bioretention units, bioswales, and planter/tree boxes. LID also limits disturbance of natural water bodies and drainage systems; minimizes compaction of highly permeable soils; protects slopes and channels; and minimizes impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies. Baseline Report at 3 and 4.

Here, the Project would result in massive grading, moving approximately 1.4 million cubic yards of soil. DEIR at 3.0-12. No LID designs or feathers appear to be

incorporated or required. Instead, several large detention basins are proposed to collect the site's stormwater before discharging it into Kirker Creek. Incorporation of LID designs and features into the project would require extensive modifications to the grading plan and overall site plan. These design changes to the project should be made by the applicant and the revised project evaluated in a recirculated DEIR.

### (c) The Project Would Result in Flooding and Erosion Impacts Downstream

Based on a review of available mapping and aerial photographs, the Baseline Report concludes that Kirker Creek appears to have reaches that are highly incised with oversteepened creek banks. Baseline Report at 4. This indicates that portions of the creek may be unstable. *Id.* There are areas in the City of Pittsburg (e.g., Brush Creek Drive, Canyon Way), where homes are located within 20 to 30 feet of the top of the creek bank. Any change to the hydrology of flows in Kirker Creek could result in hydromodification and cause increased erosion and creek bank failure, which may jeopardize existing structures. *Id.* 

The DEIR/IS fails to provide any explanation as to how the detention basins would be operated to prevent "erosion of existing stream banks and flooding downstream along Kirker Creek," and it is not clear that they can be so operated. IS at 60. Simply delaying flows in detention basins is not an effective approach to preventing downstream hydromodification of Kirker Creek. Baseline Report at 4. The Project would result in a substantial amount of new impervious surfaces conveying increased flows to centralized basins. This would in turn increase total discharge volume to Kirker Creek. *Id.* Even moderate flows to the creek, if sustained for longer periods of time than would occur without the project, could cause significant downstream erosion. *Id.* This is a potentially significant impact that must be fully analyzed under CEQA.

In sum, the DEIR lacks sufficient evidentiary support for its conclusion that the Project's impacts on hydrology and water quality would be less than significant. A revised DEIR that comprehensively evaluates and mitigates the proposed Project's hydrology and water quality impacts must be prepared and recirculated.

# **3.** The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Biological Resources

The DEIR presents an incomplete—and hence inadequate—discussion of the Project's potential impacts to biological resources. As detailed below, the DEIR underestimates Project-related impacts to biological resources as a result of a series of



errors, including: (1) faulty methodology; (2) the failure to describe accurately the environmental setting; (3) the failure to analyze the extent and severity of impacts to sensitive species and habitats; and (4) the failure to analyze the Project's cumulative effects. The DEIR's treatment of biological impacts does not meet CEQA's well established legal standard for impacts analysis. Given that analysis and mitigation of such impacts are at the heart of CEQA, the DEIR will not comply with the Act until these serious deficiencies are remedied.

### (a) The DEIR Appears to Employ Faulty Methodology.

The DEIR employs faulty methodology and incorrect assumptions in its analysis of Project impacts to biological resources. It appears that the DEIR's analysis is not based on focused surveys tailored to determine the likelihood that particular species would be present. In fact, the DEIR never describes the methodology employed for site surveys. Aside from one sentence that indicates the surveys consisted of "driving and walking around the site" (DEIR Appendix 5.3 at pdf page 4), the DEIR provides no description of the survey methods at all. The DEIR should have included focused surveys for all special status with the potential to occur on site. These surveys should have included surveys for grassland birds, rare plant surveys, and, as discussed below, appropriately timed protocol level surveys for species likely to occur on-site.

The survey information as it stands does not provide an adequate basis for determinations about the individual and cumulative impacts of this Project on either special-status species or rare habitats. The DEIR's inadequate analysis of the species and habitats on the site results in an understatement of the Project's biological impacts.

# (b) The DEIR Fails to Adequately Describe the Project's Biological Setting.

An EIR also "must include a description of the environment in the vicinity of the project, as it exists before the commencement of the project, from both a local and a regional perspective." Guidelines § 15125; *see also Environmental Planning and Info. Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354. CEQA requires that special emphasis be placed on environmental resources that are rare or unique to that region and that would be affected by the Project. Guidelines § 15125(c). Here, the DEIR's discussion of environmental setting is sorely deficient.

The DEIR fails to provide a complete description of the Project's biological setting and, in some cases, presents conflicting information. For example, the DEIR states that the Project site does not include alkali soils; an important distinction because some



special status plants occur solely in alkali soils. DEIR at 5.3-7. However, the DEIR also indicates that saltgrass (Distichlis spicata), a plant that is dependent on alkali soils, was observed on site. DEIR at Table 5.3-1.

In other cases, the DEIR simply presents erroneous information. For instance, the DEIR dismisses the potential occurrence of big tarplant stating that "the highly disturbed on-site grasslands do not provide suitable habitat . . . ." DEIR at Table 5.3-2. However, this species is found in annual grasslands, usually on slopes like the ones that characterize the Project site. Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014.

In other instances, the DEIR omits crucial information altogether. The DEIR fails to evaluate grassland birds likely to occur on site and entirely ignores the grasshopper sparrow, a California species of special concern. *Id.* and DEIR Table 5.3-2 (excludes grasshopper sparrow).

The DEIR also fails to analyze the presence and number of other special status species that it acknowledges may be present on the site and in the Project area. For example, although the DEIR acknowledges that California tiger salamander ("CTS"), a species protected by the federal Endangered Species Act, has been documented in the Project vicinity (DEIR at 5.3-18), the DEIR is dismissive of the potential for this species to occur on site. DEIR at 5.3-3 (lists species for which suitable habitat is found on the Project site but excludes CTS). The DEIR states that because there is no suitable breeding habitat for CTS within or near the project site and that the nearest occurrence is 0.5 miles away, the species is not likely to occur on the site. DEIR Table 5.3-2 at page 5.3-13.

However, the DEIR fails to evaluate potential upland habitat on site that may be used by CTS. As explained in the attached report, "Movement Patterns and Migration Distances in An Upland Population of California Tiger Salamander" (Orloff, 2011), CTS disperse over distances far greater than 0.50 miles. Orloff Report, attached as Exhibit 2. Thus, the Project site, which is within a half mile of a known breeding site, is very likely to provide aestivation habitat for CTS. Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014; biography attached as Exhibit 3. Moreover, it appears that other ponds providing potentially suitable habitat may be present in close proximity to the Project site. *See* map attached as Exhibit 4 and Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014. Accordingly, the DEIR's description of the biological setting (and the document's impact analysis) must be revised to include consideration of this species. *Id*.

Similarly, the DEIR acknowledges that burrowing owls are known to occur in the area, but dismisses their potential to occur onsite based on the fact that no owls were observed onsite and that the nearest occurrence of nesting burrowing owls is 2.5 miles west of the site. DEIR at Table 5.3-11. The DEIR's conclusion is not based on any evidence. In fact, burrowing owl have been observed nesting on the Thomas Home Ranch property located to the southwest of the Project site (between Nortonville Road and Kirker Pass Road) within the past year. Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014. Moreover, burrowing owl do not depend exclusively on ground squirrel burrows for nesting sites, as implied in the DEIR. DEIR at 5.3-11. Burrowing owls have been known to nest in shallow indentations such as those present in the rock outcroppings on site. DEIR at 5.3-1.

Moreover, the DEIR mischaracterizes the role of the Habitat Conservation Plan ("HCP") and its role in relation to environmental documentation for the project. First, the HCP is a conservation mechanism that includes a broad, programmatic review of resources throughout eastern Contra Costa County; it is not a project-specific, impactanalysis document. DEIR at 5.3-24. Thus, the information in the HCP cannot replace properly designed and implemented surveys of the project site to determine the biological resources there. Second, the DEIR states that the HCP's primary goal is to streamline review of development projects. DEIR at 5.3-24. This is incorrect. The HCP is intended to serve as a coordinated process for permitting and mitigating the incidental take of endangered species. It does not excuse the City from requiring site-specific analysis. Finally, the HCP is administered by the East Contra Costa County Habitat Conservancy ("Conservancy"). DEIR at 5.3-25. The Conservancy is not a land use agency and therefore is not tasked with making decisions about the appropriate location for siting land development. That responsibility falls to the City, which has the responsibility of completing site-specific analysis of the Project's significant impacts to special status species and habitat as part of the CEQA process. Therefore, the DEIR must be revised to include a thorough investigation of the site's existing biological setting and the Project's impacts on those resources.

The DEIR's perfunctory description of the sensitive species and habitats present in the Project area results in an incomplete description of the sensitive environmental setting of the Project. This failure to describe the Project setting violates CEQA. *See San Joaquin Raptor*, 27 Cal.App.4th at 724-25 (environmental document violates CEQA where it fails to completely describe wetlands on site and nearby wildlife preserve). The DEIR should have included surveys for these species as part of its assessment of biological resources. Accordingly, the DEIR's description of the biological setting must be revised to include consideration of these and other overlooked species.



(c) The DEIR Fails to Adequately Analyze the Project's Direct Impacts to Sensitive Species.

The DEIR's failure to describe the existing setting severely undermines its analysis of Project impacts. Despite the DEIR's acknowledgement that the Project would adversely affect potential habitat for several special status, the DEIR fails to adequately analyze adverse impacts to these species. For example, the DEIR acknowledges that the Project site includes potential habitat for burrowing owl, a California Species of Special Concern ("CSC"); San Joaquin kit fox, a federally endangered species and a California Threatened species; and vernal pool fairy shrimp, a federally Threatened species. DEIR at 5.3-26 and 27. Yet, rather than conduct appropriate surveys to evaluate the presence/absence of these species and analyze the extent and severity of the Project's impacts, the DEIR simply applies a laundry list of measures required by the Habitat Conservation Plan for the Project area and concludes that all impacts will be mitigated to less than significant levels. See, e.g., DEIR at 5.3-31 and 32. By failing to analyze the extent and severity of impacts to biological resources, the DEIR downplays the effects of the loss of open space on special status species. The end result is a document which is so crippled by its approach that decision makers and the public are left with no real idea as to the severity and extent of environmental impacts. See, e.g., Berkeley Keep Jets Over the Bay Com. v. Bd. of Port Comrs. (2001) 91 Cal.App.4th 1344, 1370-71; Galante Vineyards v. Monterey Peninsula Water management Dist. (1997) 60 Cal.App.4th 1109, 1123; Santiago County Water Dist. v. County of Orange (1981) 118 Cal.App.3d 818, 831 (a lead agency may not simply jump to the conclusion that impacts would be significant without disclosing to the public and decision makers information about how adverse the impacts would be).

Similarly the DEIR's analysis of impacts to raptors such as Swainson's hawk simply asserts that they would be affected by a reduction in nesting resources, ignoring altogether the impacts caused by loss of habitat. DEIR at 5.3-28. Urbanization has a profound effect on raptors because they require large areas to hunt and are disturbed by human activity near their nests. Moreover, the DEIR's sole mitigation proposal for raptors focuses exclusively on avoiding active nests. It ignores perch resources and the role that loss of habitat and urbanization have on raptors. In any event, the DEIR must quantify the Project's effects on raptors, and the efficacy of the proposed mitigation, so that the public and decision makers may reach their own conclusions. *Save Our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 130.

#### (d) Indirect Impacts on Wildlife

The DEIR ignores altogether the Project's indirect impacts on wildlife. Indirect impacts from low density residential development can be as devastating to wildlife as the direct loss of habitat. (*See generally* Exhibit 5 [Hansen, et al., Land Use Change in Rural America: Effects Of Exurban Development On Biodiversity: Patterns, Mechanisms, And Research Needs]). For example, toxic compounds from the residential activities could adversely impact wildlife that rely on Kirker Creek. The use of common fertilizers and pesticides associated with routine yard maintenance and landscaping can generate concentrations of pollutants that degrade water quality and harm wildlife.

It is also well established that noise—and even low ambient noise levels from typical residential activities adversely impacts wildlife species, causing them to flee their habitats and even abandon nests. Wildlife can also be quite sensitive to glare from ambient night lighting. Also, cats, unless they are kept indoors, are skilled predators on wildlife. Cats can radically decrease the potential for bird species and small reptiles to survive in sensitive habitats adjacent to project sites. *See* "Domestic Cat Predation on Birds and Other Wildlife" attached as Exhibit 6. These indirect impacts would be significant and therefore must be analyzed in an EIR.

In short, the DEIR's analysis of impacts to biological resources dramatically understates the Project's potential to significantly affect sensitive species and sensitive habitats. To comply with CEQA, the City must prepare a revised DEIR fully analyzing the Project's potential impacts to these resources and identifying effective mitigation measures. Given the substantial revisions that are necessary, the City must recirculate the revised DEIR. Guidelines 15088.5(a)(4).

### 4. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Cultural and Historic Resources.

The Project is located on the site of a former historic ranch complex considered a significant historic resource under CEQA (*i.e.*, Thomas Ranch complex). *See* DEIR Appendix 1.0; IS at 41. According to a historic resources survey performed in 1995, the complex consisted of a house and a number of small barns in a style typical of the period from the late 1800's through the turn of the century. *Id*. The IS indicates that the historic buildings were demolished and the area leveled, but that the ranch complex was never inventoried as recommended in the 1995 study. IS at 42. It also indicates that historic and/or prehistoric archaeological deposits may be present on the site. *Id*.



Nonetheless, while the DEIR acknowledges the likelihood of significant archaeological resources on the site, it fails to identify the extent of potential cultural resources, adequately analyze potential impacts to those resources, or adequately mitigate the project's potentially significant impacts to cultural resources. Instead, the DEIR relies on the IS analysis and incorporates the mitigation measures proposed in that document. DEIR at 2.0-19. These measures provide for monitoring during construction and data collection and recording should resources be discovered. Based on implementation of these measures, the DEIR concludes that resulting impacts would be less than significant.

However, the assertion that post-approval data collection will mitigate the project's impacts to known resources on the site to a less-than-significant level is not supported by substantial evidence, constitutes an inappropriate deferral of mitigation measures under *Sundstrom v. County of Mendocino*, 202 Cal.App.3d at 296, and is erroneous as a matter of law. In fact, "where a historic resource is to be demolished, documentation of the resources usually falls short of full mitigation."). *See* Discussion following Guidelines § 15126.4. Moreover, courts have explained that the mitigation of the effects of demolition of an historic resource (as defined by CEQA) through documentation of the resource and placement of commemorative markers is not adequate to reduce impacts to a level of insignificance. *League of Protection of Oakland's Architectural and Historic Resources v. City of Oakland* (1997) 52 Cal.App.4th 595.

Moreover, under CEQA, the preferred method of reducing impacts to cultural resources is avoidance. *See Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal.App.4th 48, 86-87. The only feasible way to avoid cultural resources with a development project like this is to conduct surveys before final project design is approved; identify all known historic properties that will be affected by the project; and consider redesigning the project to avoid them.

Here, given that the site includes known significant historical resources, and especially given the fact that known historical resources were destroyed without proper evaluation or documentation, the City should require a third party consultant to perform trenching tests now, as part of the CEQA process, to assess whether the Project would impact significant resources and what Project modifications could be incorporated to avoid the resources. Until such additional investigation and analysis of potential impacts to cultural resources is prepared, the DEIR cannot be certified under CEQA and the Project must not be approved.

Finally, the cultural resources evaluations prepared by Holman and Associates (1995, 1999, and 2000) were not included as appendices to the DEIR. Although it is customary to exclude location maps and specific language related to the



location of resources to protect potential resources on site, the DEIR omitted the studies altogether. Without these studies, it is impossible for the public and decision makers to evaluate the impacts the proposed project would have on cultural resources. Accordingly, for this and the other reasons discussed above, the DEIR's analysis of impacts to cultural resources is inadequate under CEQA.

# 5. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Public Services.

As the DEIR acknowledges, several schools within the Pittsburg Unified School District are currently operating at or near capacity. DEIR at 5.6-3. The Project will generate up to 277 Kindergarten through Twelfth grade students. DEIR at 5.6-8. The DEIR discloses that the Project would generate the need for new school facilities to be constructed. The DEIR concludes that school impacts will be mitigated to a less-thansignificant level, however, by payment of fees established by the school districts. DEIR at 5.6-9 (citing Gov't Code § 65996).

While it may be true that the payment of such fees is deemed mitigation under Government Code section 65996, this provision does not excuse the City from analyzing the impacts to the environment of sending 277 new students to schools that are already at or near capacity. Indeed, the DEIR's threshold of significance states that the Project could have a significant effect on the environment if it would: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios . . . for schools. DEIR at 5.6-7. With several schools already at capacity, the Project will necessarily require the construction of "new or physically altered" school facilities. Construction of these school facilities may have land use and planning impacts and, if sited on undeveloped open space lands, potential biological, agricultural, recreational, and other impacts as well. The DEIR must be revised to analyze these potential environmental impacts.

Moreover, the DEIR failed to consider cumulative impacts of school construction. The DEIR lists five Major Projects (DEIR at 5.0-4), most of which are residential projects, in its cumulative impacts analysis. In addition, the City of Pittsburg's Project Pipeline List includes at least a dozen residential projects. Considering that the Pittsburg Unified School District is already at or near capacity, the DEIR must analyze how this project, along with the related projects, will cumulatively affect school services in the District.

# 6. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Public Safety.

The Project site has an existing high-pressure petroleum pipeline within the area proposed as a buffer. DEIR at 3.0-9. The Project proposes to site residences within 1,000 feet of the pipeline, yet the DEIR provides no analysis of related safety impacts. *Id.* Although leaks, ruptures, and explosions may not be common for underground pipelines, the impacts from pipeline failures when they do occur can be catastrophic. *See* "Pipelines Explained: How Safe are America's 2.5 Million Miles of Pipelines?" attached as Exhibit 7. As explained in that article, pipelines are prone to failure as they age and corrode. Given the Project's proposal to locate housing in close proximity to the pipeline, the DEIR should have provided an analysis of the condition of the pipeline and the likelihood of failure or accidents.

Instead, the DEIR includes a mitigation measure (carried over from the IS) that only requires the developer to disclose the location of the pipeline to prospective homebuyers. DEIR at 2.0-2.0. However, this measure does nothing to minimize risks to homeowners. Indeed, the DEIR fails to provide any evidence to support its conclusion that risks associated with potential rupture of the pipeline would be reduced to a less-than-significant level with implementation of the measure.

# 7. The DEIR's Analysis of Growth Inducing Impacts Is Incomplete and Flawed.

CEQA requires that an EIR include a "detailed statement" setting forth the growth-inducing impacts of a proposed project. CEQA § 21100(b)(5); *City of Antioch v. City Council of Pittsburg* (1986) 187 Cal. App. 3d 1325, 1337. The statement must "[d]iscuss the ways in which the proposed project could foster economic growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Guidelines §15126.2(d). It must also discuss how the project "may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively" or "remove obstacles to population growth." *Id.* 

Here, the DEIR's analysis of growth-inducing impacts is legally inadequate. As with other issues, the document relies on speculation instead of evidence to support its conclusions. The DEIR's conclusion that the Project will have no growthinducing impacts is not supported by substantial evidence.

The DEIR relies on the promise that the required facility upgrades necessary to serve the Project would only serve development on the main Project site to



conclude that there is little chance that the Project will cause adjacent, undeveloped land to be developed, and thus that the Project will not induce significant growth. DEIR at 7.0-5. With a growing population in the Bay Area, extending infrastructure to an area currently outside the City Limit will remove one barrier that currently keeps pressure for development in the area in check.

The City's General Plan specifies a goal of efficient land use patterns which reduce environmental impacts and minimize the potential for residential and commercial sprawl. Approval and development of the Montreux Project would expand development and extend utility infrastructure beyond the City's existing service area, effectively removing an obstacle to future development approvals in the area. That new development has yet to be approved does not excuse the requirement to analyze a project's environmental or growth inducing impacts. Guidelines § 15126.2(d); *City of Davis v. Coleman* (9th Circuit 1975) 521 F.2d 661,675-76.

The DEIR fails to conduct such an analysis. As the *City of Davis* court directed "the purpose of an EIS/EIR is to evaluate the possibilities in light of current and contemplated plans and to produce an informed estimate of the environmental consequences." *Id.* at 676. Accordingly, the DEIR must be revised to identify the extent and location of new development facilitated by removing the obstacle of limited existing infrastructure and to analyze the environmental impacts of the growth.

If the City has contrary data demonstrating that the Project will not induce growth – and there is no indication in the DEIR that it does – it must reference it in the document. However, it may not lawfully rely on unsupported assumptions to summarily conclude that no induced growth will occur. CEQA § 21080(e)(2) ("Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative").

# 8. The DEIR Fails to Provide an Adequate Analysis of the Project's Potentially Significant Cumulative Impacts.

CEQA requires lead agencies to disclose and analyze a project's "cumulative impacts," defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Guidelines § 15355. Cumulative impacts may result from a number of separate projects, and occur when "results from the incremental impact of the project [are] added to other closely related past, present, and reasonably foreseeable probable future projects," even if each project contributes only "individually minor" environmental effects. Guidelines §§ 15355(a)-(b). A lead agency must prepare an EIR if



a project's possible impacts, though "individually limited," prove "cumulatively considerable." CEQA § 21083(b); Guidelines § 15064(i).

Extensive case authority highlights the importance of a thorough cumulative impacts analysis. In *San Bernardino Valley Audubon Society v. Metropolitan Water Dist. of Southern Cal.* (1999) 71 Cal.App.4th 382, 386, 399, for example, the court invalidated a negative declaration and required an EIR for the adoption of a habitat conservation plan and natural community conservation plan. The court specifically held that the negative declaration's "summary discussion of cumulative impacts is inadequate," and that "it is at least potentially possible that there will be incremental impacts. . . that will have a cumulative effect." *See also Kings County Farm Bureau*, 221 Cal.App.3d at 728-729 (EIR's treatment of cumulative impacts on water resources was inadequate where the document contained "no list of the projects considered, no information regarding their expected impacts on groundwater resources and no analysis of the cumulative impacts").

In contravention of the above authorities, the DEIR provides no analysis of the Project's cumulative impacts on biological resources, but simply concludes that, because the applicant will pay permit fees under the Habitat Conservation Plan for the area, cumulative impacts are less than significant. DEIR at 5.3-37. The DEIR thus completely ignores the cumulative effects of recent development approvals and potential future approvals in the City. For example, as discussed earlier in this letter, the City's Project Pipeline List indicates that the City has approved, or is in the process of approving, at least a dozen residential development projects constructing thousands of residential units. See Exhibit 7. The DEIR lists only five projects considered in the cumulative analysis. DEIR at 5.0-4. Other projects that should have been considered in a cumulative analysis include projects that have been approved but not yet constructed (Alves Ranch (364 units); Bancroft Gardens II (28 units); the San Marco Development (1,588 units); and Vista del Mar (518 units). See generally Exhibit 8. These development projects, together with the present subdivision, would have a cumulatively significant impact on open space and natural resources in the Project area. Notwithstanding such evidence, the DEIR fails to provide any analysis of this potentially significant impact.

In another particularly glaring omission, the DEIR also neglects to analyze cumulative impacts on hydrological resources. Specifically, the DEIR contains no analysis of the Project's impacts together with the effects of other development projects proposed within the Project area that may contribute to changes in hydrology in Kirker Creek. Another major project, the James Donlon Boulevard Extension, which is currently under review by the City and would include massive grading and alteration of local drainage patterns and hydrology within the Kirker Creek watershed, is not considered in



the DEIR's hydrology analysis. The effects on water quality, flooding, and hydromofication from these two major projects, and others, on Kirker Creek must be analyzed in a revised DEIR.

# 9. The DEIR Fails to Adequately Analyze and Mitigate Alternatives to the Project.

The alternatives section, along with the mitigation section, is the core of an EIR. *Citizens of Goleta Valley*, 52 Cal.3d at 564. Every EIR must describe a range of alternatives to a proposed project, and to its location, that would feasibly attain the project's basic objectives while avoiding or substantially lessening the project's significant impacts. CEQA § 21100(b)(4); Guidelines § 15126(d). In preparing an EIR, the lead agency must ensure "that all reasonable alternatives to proposed projects are thoroughly assessed." *San Joaquin Raptor*, 27 Cal.App.4th at 717. An EIR's alternatives discussion must focus on alternatives that avoid or substantially lessen significant effects of the project. Guidelines § 15126.6(b); *Citizens of Goleta Valley*, 52 Cal.3d at 556 (EIR must consider alternatives that offer "substantial environmental advantages."). The range must be sufficient "to permit a reasonable choice of alternatives so far as environmental aspects are concerned." *San Bernardino Valley Audubon Soc'y v. County of San Bernardino* (1984) 155 Cal.App.3d 738, 750. The DEIR's discussion of alternatives fails to meet these standards.

Sound planning principles dictate that the City carefully consider alternatives in the present case because the proposed Project would require annexation of the Project site into the City limits and into service areas for water and sanitation districts and would result in admittedly significant impacts to air quality, visual resources, and public services. DEIR at 2.0-6, 2.0-8, 2.0-10, and 2.0-16. This DEIR's analysis of alternatives is insufficient under CEQA because the document fails to consider feasible alternatives that would reduce Project impacts. Guidelines § 15126.6(c); *Citizens of Goleta Valley*, 52 Cal.3d at 566.

As a preliminary matter, the DEIR's failure to disclose the extent and severity of the Project's broad-ranging impacts necessarily distorts the document's analysis of Project alternatives. As a result, the alternatives are evaluated against an inaccurate representation of the Project's impacts. Proper identification and analysis of alternatives is impossible until Project impacts are fully disclosed. Moreover, as discussed above, the document's analysis is incomplete and/or inaccurate so that it is simply not possible to conduct a comparative evaluation of the Project's and the alternatives' impacts.

The DEIR also fails to describe an alternative location for the Project, stating that because neither the developer nor the City owns or controls any other property in the vicinity of the site that is of sufficient size to accommodate the project, the ability of the developer to find and purchase an alternative site to develop the project is considered speculative. DEIR at 6.0-3. The DEIR goes on to state that "... the development of the same number of residential uses at a different location would result in similar visual character and construction air quality impacts. Thus, placing the proposed development at an alternative site would not avoid the significant impacts of the proposed project." *Id.* 

This approach fails to meet CEQA's requirements for the analysis of alternatives. It provides no information on the alternative sites that might be available or event the criteria for such a site search. Without this information and, if possible, a further identification of alternative sites, the DEIR is inadequate and cannot be certified under CEQA. Moreover, even if it is true that no alternative sites exist that could accommodate all of the Project in one location, a feasible alternative could break the Project up into two or more locations. Such an alternative could involve in-fill sites and would likely disperse some of the significant project impacts associated with the proposed Project. An alternative that examines dividing the Project among two or more locations should be included in a revised DEIR.

Contrary to CEQA, the DEIR also fails to explain why the proposed Project was selected over alternatives that are identified as environmentally superior. CEQA requires that the EIR explain why environmentally superior alternatives were rejected. Guidelines § 15126.6(d). As the California Supreme Court held in *Laurel Heights I*, 47 Cal.3d at 405, "[i]f the [lead agency] considered various alternatives and found them to be infeasible . . . those alternatives and the reasons they were rejected . . . must be discussed in the EIR with sufficient detail to enable meaningful participation and criticism by the public." The DEIR fails to include this analysis.

## **III. CONCLUSION**

To cure the many defects identified in this letter, the DEIR must be revised and recirculated. These steps are necessary to provide the public and decision makers with an opportunity to gauge the true impacts of this significant, proposed development. Moreover, the Project itself must be revised to comply with the City's general plan. Only then could the City make the findings necessary to approve this subdivision.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Winter King

tic 1. Bong  $\bigcirc$ 

Carmen J. Borg, AICP Urban Planner

## **List of Exhibits**

Exhibit 1:	Bruce Abelli-Amen, Comments on Draft Environmental Impact Report and Initial Study, Baseline Environmental Consulting, Jan. 8, 2014.
Exhibit 2:	Susan Orloff, Movement Patters and Migration Distances in an Upland Population of California Tiger Salamander ( <i>Ambystoma Californiense</i> ), Ibis Environmental Inc., Apr. 1, 2011.
Exhibit 3:	Malcolm Sproul Biography, Retrieved Jan. 8, 2014.
Exhibit 4:	Potential Pond Site Image and Location, Retrieved on Jan. 8, 2014 from <u>http://earth.google.com</u>
Exhibit 5:	Andrew J. Hansen, et al, Effects of Exurban Development on Biodiversity: Patterns, Mechanisms, and Research Needs, Ecological Society of America, Dec. 1, 2005.
Exhibit 6:	Domestic Cat Predation on Birds and Other Wildlife, Cats Indoors and American Bird Conservancy.
Exhibit 7:	Lena Groeger, Pipelines Explained: How Safe are America's 2.5 Million Miles of Pipelines?, ProPublica, Nov. 15, 2012.

City of Pittsburg, Project Pipeline List- Updated September 2013, Retrieved Jan. Exhibit 8: 8, 2014. 555789.3



# EXHIBIT 1



8 January 2014 13316-00

Ms. Carmen Borg Shute, Mihaly, and Weinberger 396 Hayes Street San Francisco, CA 94102

## Subject: Montreux Residential Subdivision Draft Environmental Impact Report

Dear Ms. Borg:

At your request, BASELINE Environmental Consulting ("BASELINE") has reviewed the CEQA analysis of the hydrology and water quality issues included in the November 2013 Montreux Residential Subdivision Draft Environmental Impact Report ("DEIR") and appended March 2013 Montreux Residential Subdivision Project Initial Study ("Initial Study"). Specifically, we reviewed the Hydrology and Water Quality section of the Initial Study only, because the DEIR does not include any analysis of hydrology or water quality (this topic was scoped out of the DEIR). In order to provide a meaningful context, we also reviewed the Project Descriptions included in the Initial Study and DEIR. Our comments are presented below.

## COMMENTS ON DEIR AND INITIAL STUDY

## **Project Description**

The Project Description does not include adequate details of the design and function of the stormwater drainage system to allow the reader of the DEIR to understand this important project element. The description of the stormwater drainage features is limited to the location of the detention basins and a mention that the stormwater system would use inlets and piping. As stated in the Project Description (DEIR page 3.0-9), the project would include grading to construct stormwater detention basins:

Three stormwater detention basins are included in the preliminary grading plan, with two large basins located on the east side of the main project site (Parcels C and D) along Kirker Pass Road, and a third small basin with a 12 foot access road located on the offsite parcel to the northwest of the main project site. Construction of these basins would require grading to re-contour the eastern end of the southern ridgeline on the main project site, and the north-facing slope above the proposed off-site basin located on the off-site parcel. While the entire off-site parcel totals approximately 72 acres, only 16.8 acres would be graded in order to accommodate the new off-site basin (which has an actual footprint of 0.83 acre).

Based on information included on Figure 3.0-6 (DEIR page 3.0-10) the parcels containing the large detention basins would be 5.91 and 3.75 acres. The off-site detention basin would have a



bottom area of 0.83 acres and approximately 16.8 acres of grading would be required to construct the off-site basin. In total, more than 26 acres of land would be graded to construct these three basins.

The project would convey runoff to the detention basins using drainage inlets and piping (DEIR page 3.0-9):

New storm drainage infrastructure, including drainage inlets and piping, would be installed in the proposed roadways on the main project site to connect developed areas to the stormwater detention basins.

The Project Description fails completely to describe where drainage features (inlets, piping, culverts, etc.) would be located and how these systems, including the detention basins, would be operated. The DEIR does not appear to include, nor does it reference, any hydrologic or hydraulic engineering that supports the drainage plan. The reader of the DEIR has no idea how the detention basins were sized or how they would be operated. The DEIR Project Description should be revised to include this information and appropriate hydrologic/hydraulic studies should be appended to the DEIR.

## Hydrology and Water Quality Analysis

**Hydrologic Setting.** The DEIR/Initial Study provides no information on the hydrology and water quality setting. Without describing the hydrology of the on-site drainage and that of Kirker Creek downstream, the reader of the DEIR has no context within which to evaluate potential project impacts. The DEIR should be revised to include a Hydrology and Water Quality section that includes a detailed hydrologic setting.

*Stormwater Quality and NPDES Compliance.* The Hydrology and Water Quality section of the Initial Study indicates that (Initial Study page 59):

Postconstruction, the project would treat stormwater runoff from the new impervious surfaces created onsite, as required by provision C.3 of the Contra Costa County municipal stormwater NPDES permit by directing all site runoff into three detention basins where the runoff would be detained and released at a rate that does not exceed the current rate at which site runoff is discharged into receiving waters. The detention and slow release would allow pollutants, especially sediment to settle in the detention basins and not be discharged into the receiving waters. Therefore the site runoff would not exceed any water quality standards. This impact is considered less than significant.

The paragraph above represents the sum total of the Initial Study/DEIR analysis and discussion of post-construction stormwater management issues. This paragraph not only fails to convey the scope of post-construction stormwater management issues and potential impacts related to the proposed project, it misrepresents NPDES requirements.



The Initial Study states that the project would treat stormwater runoff "as required by provision C.3 of the Contra Costa County municipal stormwater NPDES permit by directing all site runoff into three detention basins." The actual NPDES permit that the project would be required to comply with is the Municipal Regional Stormwater NPDES Permit, Order No. R2-2009-0074, NPDES Permit No. CAS612008, adopted October 14, 2009 and revised November 28, 2011 ("MRP"). Not only does the Initial Study refer to the wrong NPDES permit, it wrongly interprets what C.3 provisions would be required. The C.3 portion of the MRP, which refers to post-construction stormwater management for new development and redevelopment projects, <u>requires</u> Low Impact Development ("LID").<sup>1</sup>

The goal of LID is to reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and biotreatment through rain gardens, bioretention units, bioswales, and planter/tree boxes. LID also limits disturbance of natural water bodies and drainage systems; minimizes compaction of highly permeable soils; protects slopes and channels; and minimizes impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies. The project would include the following (Initial Study page 60):

The project includes alteration of site drainage and the alteration of the unnamed intermittent and ephemeral stream channel that runs through the project site.

Under the project, the existing "unnamed intermittent and ephemeral stream channel" would be eliminated and placed in an underground pipe (contrary to LID principles and MRP requirements).

The basic design of the project, which includes mass grading, destruction of natural drainages, extensive new impervious surfaces, no small-scale distributed stormwater treatment features, conventional gutter and pipe collections systems, and centralized detentions basins is completely contrary to LID principles and therefore would be in violation of the MRP. The Initial Study/DEIR fails completely to identify and mitigate the flaws in project design related to post-construction stormwater management.

Incorporation of LID designs and features into the project would require extensive modifications to the grading plan and overall site plan. These design changes to the project

<sup>&</sup>lt;sup>1</sup> A stormwater management strategy aimed at maintaining or restoring the natural hydrologic functions of a site. LID design detains, treats, and infiltrates runoff by minimizing impervious area, using pervious pavements and green roofs, dispersing runoff to landscaped areas, and routing runoff to rain gardens, cisterns, swales, and other small-scale facilities distributed throughout a site (source: Contra Costa County C.3 Guidebook).



should be made by the applicant and the revised project should be subject to CEQA review (which should include an EIR-level analysis of Hydrology and Water Quality).

Centralized detention basins are not LID features and should be eliminated from the stormwater quality management plan for the project. However, it is possible that some sort of detention may be required to mitigate the potential for downstream flooding of Kirker Creek.

**Downstream Flooding and Erosion.** The following paragraph is the only Initial Study/DEIR discussion provided related to potential downstream flooding (Initial Study page 60):

A majority of stormwater runoff on the site would be channeled to two detentions basins located along Kirker Pass Road, which would delay the flow of water downstream in the event of a storm, thus preventing erosion of existing stream banks and flooding downstream along Kirker Creek.

The Initial Study/DEIR does not provide any discussion of the hydrology of Kirker Creek and its susceptibility to flooding, and therefore it is impossible for the reader to know if downstream flooding is an important issue. Based on review of available mapping and aerial photographs, Kirker Creek appears to have reaches that are highly incised with oversteepened creek banks. This indicates that portions of the creek may be unstable. There are areas in the City of Pittsburg (e.g., Brush Creek Drive, Canyon Way), where homes are located within 20 to 30 feet of the top of the creek bank. Any change to the hydrology of flows in Kirker Creek could cause increased erosion and creek bank failure, which may jeopardize existing structures. This is a potentially significant impact which must be fully analyzed under CEQA.

The Initial Study fails to provide any explanation as to how the detention basins would be operated so that "erosion of existing stream banks and flooding downstream along Kirker Creek" would be prevented. The concept of "hydromodification"<sup>2</sup> is not even mentioned in the Initial Study/DEIR. Simply delaying flows in detention basins is not an effective approach to preventing downstream hydromodification of Kirker Creek. By introducing widespread new impervious surfaces and conveying the increased flows to centralized basins (which tend to become sealed and do not infiltrate much water), the project would increase total discharge volume to Kirker Creek (i.e., with an increased volume of runoff, the detention basins may be able to limit increases in peak discharges, but the duration of flows would almost certainly increase). Even moderate flows to the creek, if sustained for longer periods of time than would occur without the project, could cause significant downstream erosion. The Initial Study/DEIR fails completely to analyze and mitigate this potential impact.

In summary, the project proposes mass grading, elimination of existing natural drainage channels, and drastic changes to site hydrology and flow discharge characteristics. The Initial

<sup>&</sup>lt;sup>2</sup> Hydromodification is generally defined as changes in channel form associated with alterations in flow and sediment due to past or proposed future land use alteration.



Study/DEIR includes no description of the hydrologic setting, provides no substantive analysis of the hydrology or water quality effects of the project, and provides no substantial evidence for the findings of less than significant for all hydrology and water quality impacts. For a project of this magnitude, located just upstream from a potentially unstable creek system, a full EIR-level analysis of hydrology and water quality issues must be completed.

*Cumulative Impacts.* The Initial Study/DEIR completely fails to evaluate (or even mention) cumulative impacts related to hydrology and water quality. For example, another major project, the James Donlon Boulevard Extension, which would include massive grading and alteration of local drainage patterns and hydrology within the Kirker Creek watershed is not mentioned in the DEIR analysis. The effects and water quality, flooding, and hydromofication of these two major projects on Kirker Creek should be analyzed in the DEIR.

Should you have any questions or comments, please contact us at your convenience.

Sincerely,

ulle

Bruce Abelli-Amen Senior Hydrogeologist Cert. Hydrogeologist No. 96

BAA:km

556803.1

# EXHIBIT 2

# MOVEMENT PATTERNS AND MIGRATION DISTANCES IN AN UPLAND POPULATION OF CALIFORNIA TIGER SALAMANDER (AMBYSTOMA CALIFORNIENSE)

### SUSAN G. ORLOFF

Ibis Environmental Inc., 340 Coleman Dr. San Rafael, California 94901, USA, email: Sue@ibisenvironmental.com

Abstract.—During five winter breeding seasons (October-April, 2000–2005), I investigated the migratory movements of an upland population of California Tiger Salamander (*Ambystoma californiense*) in Contra Costa County, California. I used a drift fence and pitfall trap array to partially enclose a proposed 27 ha housing project and capture migrating adult and juvenile salamanders. The study objective was to assess movement patterns and migration distances for upland life stages during an effort to translocate all captured salamanders and reduce their mortality from future development at the study site. I recorded substantial numbers of adult and juvenile *A. californiense* (90–417 annually) farther from breeding ponds than previously reported. The majority of salamanders were captured at least 800 m from the nearest breeding pond while a smaller number of salamanders were captured as far as 2.2 km from the nearest breeding pond. The study indicates that recent recommendations to protect 630 m of upland habitat adjacent to breeding ponds may leave large portions of upland life stages at risk. Adults appeared to exhibit fidelity to upland habitat, returning close to the initial point of capture. In situations where translocation is used to remove salamanders from upland habitats subject to development, results suggest it may take several years to successfully relocate a high proportion of individuals in the population.

Key Words.—Ambystoma californiense; buffer zones; California Tiger Salamander; conservation; pitfall trap; migration distance; terrestrial movements; upland ecology.

#### INTRODUCTION

Conserving terrestrial habitat surrounding wetlands is essential for maintaining populations of many pondbreeding amphibians (Semlitsch and Jensen 2001; Semlitsch 2002; Semlitsch and Bodie 2003). Upland habitat is critical for feeding, refuge, and migratory movements of juvenile and adult life stages (Semlitsch 1998; Semlitsch and Jensen 2001). Recent studies emphasize that amphibian population viability can be extremely sensitive to survivorship of upland life stages (Biek et al. 2002; Trenham and Shaffer 2005). Further, the importance of specific areas of upland habitat and preferences for a particular migratory route have been reported for several species of ambystomatid salamanders (Shoop 1968; Stenhouse 1985; Trenham and Cook 2008).

Despite research documenting the biological importance of terrestrial habitat for amphibians, the extent and location of appropriate areas required to sustain viable populations are poorly understood. Several recent studies estimated the area of terrestrial habitat needed to adequately protect amphibian populations, based on migration distances from multiple studies and species. Semlitsch (1998) estimated that a 164 m "buffer zone" would encompass 95% of most ambystomatid salamander populations (based on six species). Semlitsch and Bodie (2003) estimated that "core terrestrial habitat" for 13 species of salamanders

ranged from 117 to 218 m from the wetland. Rittenhouse and Semlitsch (2007) found that 95% of the adult breeding population for six species of salamanders occurs within 245 m of the wetland boundaries. However, because these studies were primarily of eastern species that typically inhabit forest or woodlands, the resulting recommendations may not be well suited to western *Ambystoma* species associated with grasslands. Although much remains to be learned regarding the appropriate size of buffer zones, it is clear that identifying and protecting upland habitat should be a management priority, especially for rare and endangered species (Marsh and Trenham 2001; Semlitsch 2007; Harper et al. 2008).

The California Tiger Salamander, Ambystoma californiense, is listed as a threatened species by the U.S. Fish and Wildlife Service (2004) and the state of California (California Fish and Game Commission 2010). The range of this species is restricted to grasslands and foothills of central California (Storer 1925). Adults spend the majority of their life cycle in small-mammal burrows in upland habitat (Loredo et al. 1996). With the onset of winter rains, adults emerge from underground terrestrial retreats and migrate to ponds for reproduction (Loredo and Van Vuren 1996). The importance of maintaining upland habitat adjacent to breeding ponds for A. californiense has only recently been emphasized (Trenham 2001; Trenham and Shaffer 2005). A more detailed under-

Copyright © 2011. Susan Orloff. All Rights Reserved.

Herpetological Conservation and Biology

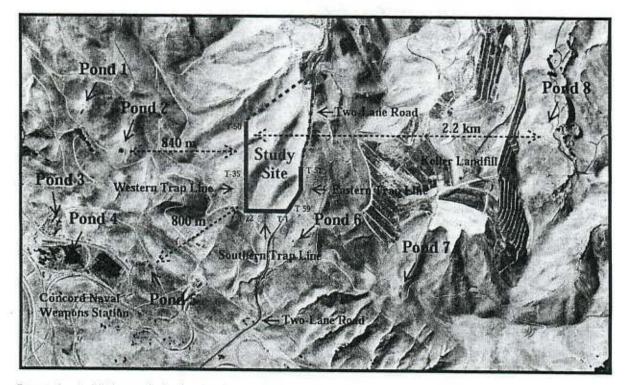


FIGURE 1. Aerial photograph showing the closest breeding ponds to the study site in Contra Costa County, California, USA (from <a href="http://www.ternaserver.com">http://www.ternaserver.com</a>; [Accessed 1 August 2002]). Bold red solid lines indicate trap line segments (western, southern, and eastern) along boundaries of the study site, T represents trap number, and dashed lines with arrows at both ends indicate distances from the western trap line to nearest breeding ponds. Ponds 1–5 are located on Concord Naval Weapons Station (CNWS) and Ponds 6–8 are located on a landfill adjacent to the study site

standing of migratory movements and activity patterns in upland habitats is fundamental to managing this species (Trenham and Shaffer 2005).

This paper presents findings of a five-year study investigating the migratory movements of upland life stages of a population of A. californiense at a proposed housing development. The primary objectives of the study were (1) to characterize movement patterns and timing of movements during the breeding season, (2) to measure distances from capture locations to closest known breeding ponds, and (3) to test for relationships between the timing of migratory movements and environmental parameters. An additional objective of the study was to reduce direct mortality from future development at the study site by translocating all captured salamanders outside the study site and restricting reentry. Conservation strategies involving translocations are a common wildlife management tool (Griffith et al. 1989; Fischer and Lindenmayer 2000; Dodd 2005). Although the effectiveness of translocation strategies has been subject to controversy (e.g., Dodd and Seigel 1991; Seigel and Dodd 2002; Trenham and Marsh 2002), a recent review has shown improved success rates for some species of amphibians when a critical minimum number of individuals are translocated (Germano and

Bishop 2008). Relatively few translocation studies have been conducted on amphibians (Germano and Bishop 2008) or addressed human and wildlife conflicts (e.g., Cooke and Oldham 1995; Rathbun and Schneider 2001), and none have assessed the efficacy of translocating adult amphibians within upland habitat.

### MATERIALS AND METHODS

Study site.—The proposed housing development is located on the northern edge of the San Joaquin Valley in northeastern Contra Costa County, California. The 27-ha area consists of grazed annual grasslands on rolling to steep hills (elevation range = 213–274 m; Fig. 1). Two primary drainages traverse the site but amphibian breeding ponds are not present. Lands surrounding the site are primarily grazed grasslands. The Concord Naval Weapons Station (CNWS) is located to the west and south of the site and a privately owned, active landfill is located to the east and southeast.

Eight breeding ponds are known to occur near the study site (Fig. 1). To the west and southwest, the closest ponds are on CNWS (Ponds 1-5) and are the primary breeding ponds on CNWS lands (Stitt and Downard 2000; Shawn Smallwood, pers. comm.). To

# Orloff.-Movement patterns and migration distances of California Tiger Salamander.

the east and southeast, the closest ponds are located on the adjacent landfill (Ponds 6-8). To the north, no known breeding ponds occur within 2.5 km. I examined aerial photographs from several years (1999, 2000, 2004, and 2005) and USGS topographic maps, and found no other potential breeding ponds closer to the study site. Before the trapping study began, I conducted four night surveys during winter rain events to determine if A. californiense was present at the study site. During these initial surveys, I observed four adults at burrow entrances of California Ground Squirrels (Spermophilus beecheyi) and thus commenced an intensive translocation effort.

Trapping techniques .- My field team and I (hereafter we) installed a drift fence and pitfall trap array along a partial perimeter (1.3 km) of the study site. The drift fence bordered the boundaries most likely to be used as movement corridors, and included the western, southern, and a portion of the eastern border of the study site (Fig. 1). We installed 118 pitfall traps (59 pairs of 7.5 L plastic buckets) located every 15 to 30 m along the inside and outside of the drift fence. We used a 0.9 m tall commercial quality silt fence buried 0.3 m underground, stretched taut, and secured by both wooden and steel fence posts. We placed elevated covers over the traps to provide shading and minimize predation, and placed a damp non-cellulose sponge in each trap to maintain moisture for captured salamanders. We replaced the drift fence and pitfall traps (i.e., trap line) each year of the study and repaired the fence line as needed to maintain its integrity as a barrier to movement.

Our surveys encompassed five winter breeding seasons, from October 2000 to April 2005 (hereafter, years 2000 to 2004). In 2001 and 2002, we increased the length of the trap line by installing nine pairs of pitfall traps along the eastern border of the study site. While the trap line encompassed over half the total perimeter of the proposed development, the entire area was not completely enclosed due to the large area of the site. We opened all traps at dusk on nights when the chance of rain was predicted to be 40% or greater and checked at dawn the following morning. Because amphibians are often active on the night after a heavy rain (Gibbons and Bennett 1974), we left the traps open on nights after a rain event that exceeded 0.6 cm, even when no rain was predicted for that night. At all other times the traps were closed. We immediately translocated individuals captured inside the trap line to small mammal burrows 15 to 100 m outside the development. We kept individuals captured outside the trap line outside and translocated them in the same manner.

For each capture, we recorded date, trap number, trap line side (inside or outside), sex (adults only), reproductive condition (reproductive or nonreproductive), snout-vent length (SVL), total length, and age class (adult or juvenile). We identified individuals

as adults if they had at least one of the following characteristics: keeled tail, swollen vent (reproductive males), gravid condition (reproductive females), or large body length (≥ 75 mm SVL; Trenham et al. 2000). We identified juveniles based on small body length (usually < 75 mm SVL; Loredo and Van Vuren 1996) and the absence of adult characteristics. Males were distinguished from females by the presence of a keeled tail, swollen vent, or proportionally longer tail (Petranka 1998; Searcy and Shaffer 2008). We recorded adultwithout other sized salamanders distinguishing characteristics as adults; these salamanders may have been subadults (≥ 1 year of age but not sexually mature) or salamanders returning from the ponds post breeding (i.e., non-reproductive). Because juvenile body lengths vary considerably (46-114 mm; Loredo and Van Vuren 1996) and can overlap adult sizes, we may have mistakenly classified some larger juveniles as adults in non-reproductive condition. In addition, we acquired two photographs of the dorsal surfaces of each captured salamander for individual identification.

*Environmental variables.*—In 2000 and 2001, 1 measured precipitation using a manual rain gauge located on site; the gauge was read and emptied when traps were opened at dusk and checked again at dawn the next morning. For the remainder of the study years, I used an automatic rain gauge (Hobo event logger, Onset Inc., Pocasset, MA., USA) to record hourly rain events (2.5 mm intervals). Air temperature was manually recorded on each morning traps were checked. I used additional data on hourly and yearly rainfall near the study site from California Department of Water Resources, California Data Exchange Center (available from <u>http://www.cdec.water.ca.gov</u> [last accessed 21 September 2006]).

Analyses.—I pooled daily capture data by week, year, sex, age class, and location (inside/outside trap line and trap line segment) as measures of salamander activity. I used the location of captures to infer likely movement patterns (i.e., attempting to leave or enter the study site, and directionality). To evaluate movement patterns within a breeding season, I divided capture data into early season (presumably migrating to breed) and late season (presumably returning from breeding) based on the temporal distribution of captures for all five study years combined.

To standardize for the variability in trapping effort (i.e., different number of traps per line segment and nights of trapping each year), I calculated capture rates (number of captures per 100 trap nights) for analyses. Distance calculations were measured as presumed straight line travel. Within each study year, I compared dorsal patterns in photographs to determine the number of intra-annual recaptures. Individual identification using photography has been employed successfully with amphibians that have unique patterns of coloration; unlike invasive marking techniques, this causes no harm to the animal (e.g., Donnelly et al. 1994; Doody 1995; Bailey 2004).

I used parametric statistics when data were normally distributed and non-parametric tests when data were not. To determine if recaptured individuals returned to a similar point from which they were initially trapped, the observed mean number of traps between initial and returning trap locations was compared with the expected mean number of traps under a uniformly random scenario (Shoop and Doty 1972). For this analysis, I pooled data from all five study years to obtain an adequate sample size and used only those individuals that were initially trapped early in the breeding season on the inside of the western trap line and then recaptured later in the season outside that same trap line segment (i.e., presumably returning to the study site after breeding). I used the western trap line data because it had the majority of returns and traps along this segment were evenly spaced providing the most accurate distance measurements between initial and returning trap locations.

I tested for annual and seasonal variation in capture numbers among all five study years. I used chi-square tests to determine if annual sex ratios differed significantly from an expected 1:1 ratio. I evaluated the association between seasonal rainfall (both early and late season) and the proportion of males and females captured both inside and outside the trap line using Pearson's correlation coefficient. I used the sign test to compare annual adult capture rates early in the season on the inside of the western trap line and capture rates later in the season outside that same trap line segment, and to compare annual rainfall between early and late seasons. I used Pearson's correlation coefficient to assess whether there was a negative association between translocation efforts and annual capture rates over time based on the proportions of inside versus outside captures, and to test for a relationship between annual on-site rainfall and annual capture rates.

I also analyzed within-year associations between environmental parameters and the number of *A. californiense* captured. To assess the influence of precipitation and temperature prior to capture, I used Spearman's rank correlation. This analysis used rainfall amounts 12 h prior to opening traps (i.e., day prior to capture), 12 h prior to checking traps (i.e., night of capture), and within 24 h prior to checking traps (total of day and night). In addition, I used Wilcoxon two-sample rank sum test to assess if rain at dusk on the night of capture or the night prior to opening the traps was associated with the number of captures. Precise measurements of rain using the automatic rain recorder (which allowed for analysis of rain amounts in intervals less than a 24-h period) were available only in 2002, 2003 and 2004. Of these three

TABLE 1. Adult and juvenile Ambystoma californiense captured inside and outside the trap line during five winter breeding seasons at the study site in Contra Costa County, California. Totals include recaptured individuals. Unique captures exclude recaptured individuals and are shown in parentheses.

Year	Adult Total No. (Unique No.)		Juvenile Total No. (Unique No.)		Adult & Juvenile Total No. (Unique No.)	
2000 - 2001						
Inside trap line	59	(58)	3	(3)	62	(61)
Outside trap line	76	(37)	62	(47)	138	(84)
Totals 2001-2002	135	(95)	65	(50)	200	(145)
Inside trap line	184	(182)	4	(3)	188	(185)
Outside trap line	215	(158)	14	(13)		(171)
Totals 2002-2003	399	(340)	18	(16)		(356)
Inside trap line	63	(61)	3	(3)	66	(64)
Outside trap line	120	(96)	34	(33)		(129)
Totals 2003-2004	183	(157)	37	(36)		(193)
Inside trap line	37	(36)	0	(0)	37	(36)
Outside trap line	52	(37)	1	(1)	53	(38)
Totals 2004-2005	89	(73)	1	(1)	90	(74)
Inside trap line	23	(22)	0	(0)	23	(22)
Outside trap line	72	(61)	86	(81)		(142)
Totals	95	(83)	86	(81)		(164)

years, I chose 2002 for analysis because it was least affected by translocation efforts and barrier fencing.

l excluded recaptures from the analysis of some data sets (i.e., capture distribution, movement patterns, sex ratios, and annual reductions). However, except for sex ratios, these analyses did include those individuals first captured during the early season inside the trap line and then later recaptured outside the same trap line during the late season. For annual comparisons of capture numbers, I deleted data on additional traps installed in 2001 and 2002 from the analyses. For all statistical tests, results were considered significant at  $\alpha = 0.05$ .

#### RESULTS

Capture numbers and movement patterns.—The annual number of A. californiense captured varied from 90 to 417 salamanders over the five year study period (Table 1). Recaptured individuals represented between 9-28% of annual totals, with 96% of these individuals captured on the outside of the trap line. Eight recaptured individuals were captured on or translocated to the outside of the trap line and then later captured on the inside, but these eight represented less than 1% of the total captures. Adult recaptures returning to the study site (presumably after breeding) were found Orloff.-Movement patterns and migration distances of California Tiger Salamander.

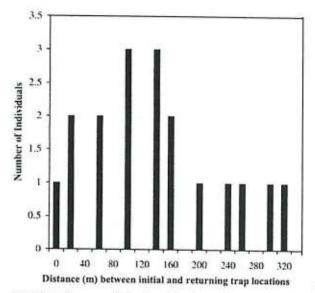


FIGURE 2. Frequency distribution of the distance between initial and returning trap locations for individual *Ambystoma californiense* for all five study years combined (2000–2005). Results include only those salamanders first trapped early during the breeding season inside the trap line and then recaptured outside the same trap line later in the season. Early season = late October to December 31; Late season = January 1 to end of March. Zero on the x-axis represents individuals that returned to the same trap location where they were initially captured.

significantly closer to where they were initially captured inside the trap line than would be expected by random (Z = -2.92, P = 0.003). Forty-four percent of adult recapture locations were within five traps ( $\leq 100$  m) of the initial inside trap location (Fig. 2). Several individuals were recaptured more than once outside the western trap line, presumably attempting to reenter the site. One male returned to the site five times.

Capture rates from all five study years combined indicate that males and females migrated to the breeding ponds from late October to the end of December (early season) and returned to their upland habitat from the beginning of January to the end of March (late season) (Fig. 3). Annual sex ratios differed significantly from 1:1 in 2002, with females outnumbering males by 2:1 ( $\chi^2$ = 20.46, df = 1, P < 0.001). By contrast males outnumbered females by 1.5:1 in 2000 ( $\chi^2 = 3.80$ , df = 1, P = 0.051). Sex ratios were near 1:1 in the other three study years (2001:  $\chi^2 = 0.02$ ; 2003:  $\chi^2 = 0.00$ ; and 2004:  $\chi^2 = 0.11$ ; all df = 1, all P > 0.70). Among all study years, the proportion of each sex in the population captured early in the season on the inside of the trap line (Table 2) was associated with early season rainfall (negatively associated for males: r = -0.808; positively associated for females: r = 0.808; P = 0.049 for both). However, there was no significant association between the proportion of each sex captured early in the season outside the trap line and early rainfall (males: r = -0.340;

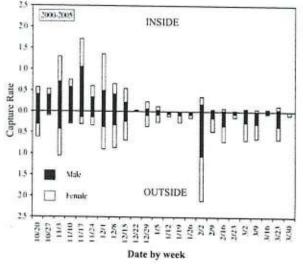


FIGURE 3. Weekly capture rates (no. per 100 trap nights) of male and female *Ambystoma californiense* inside and outside the trap line for all five study years combined (2000–2005). Early season = late October to December 31; Late season = January 1 to end of March. Dates on x-axis represent the beginning of each week. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then recaptured outside the same trap line later in the season.

females: r = 0.340; P = 0.288 for both) or captured late in the season outside the trap line and late rainfall (males: r = -0.494; females: r = 0.494; P = 0.198 for both).

Within each survey year, the capture rates of adults and juveniles were generally highest along the western trap line (Fig. 4). Analysis of early season capture data, when most salamanders presumably migrated to the ponds, indicated highest adult capture rates on the inside of the western trap line (Table 3). By contrast, analysis of late season data, presumably when most salamanders returned from the ponds, indicated highest adult capture rates outside the western trap line (Table 3). Capture rates for juveniles were highest outside the western trap line primarily in the early season (Table 4). Among all study years, more adults were captured early in the season inside the western trap line than were captured later in the season outside that same trap line segment (sign test, P = 0.031). Early and late rainfall was not significantly different among years (sign test, P = 0.50).

Migration distances.—The shortest distances from inside the western trap line, where the majority of adults were captured in the early season, to the closest breeding ponds to the west were 800 to 840 m (Ponds 5 and 2 on CNWS, respectively; Fig. 1). A smaller number of adults captured early in the season on the outside of the western trap line may be migrating east (Table 3). The closest breeding pond from the western trap line to the east is Pond 8 at 2.2 km. A few adults captured early in TABLE 2. Proportions of male and female Ambystoma californiense captured during the early and late winter breeding seasons on the inside and outside of the trap line. Parentheses indicate the number of each sex captured and N = the total number of adults captured. Early season = late October to December 31; Late season = January 1 to end of March. Results exclude all recaptured individuals.

Season/ Trap Line Sid	2000- le 2001	2001- 2002	2002 2003	2003- 2004	2004- 2005
Early/Inside					
Male	0.76 (41)	0.50 (86)	0.39 (23)	0.68 (23)	0.52 (11)
Female	0.24 (13)	0.50 (87)	0.61 (36)	0.32 (11)	0.48 (10)
N =	54	173	59	34	21
Early/Outsid	e				
Male	0.42 (8)	0.55 (46)	0.28 (23)	0.43 (13)	0.41 (15)
Female	0.58 (11)	0.45 (38)	0.72 (58)	0.57 (17)	0.59 (22)
N =	19	84	81	30	37
Late/Outside	8				
Male	0.33 (6)	0.45 (52)	0.33 (11)	0.36 (5)	0.43 (12)
Female	0.66 (12)	0.55 (64)	0.66 (22)	0.64 (9)	0.57 (16)
N=	18	116	33	14	28

TABLE 3. Capture rates of adult Ambystoma californiense (no. per 100 trap nights) along the western, southern, and eastern trap lines during the early and late winter breeding seasons of the five study years. Early season = late October to December 31; Late season = January 1 to end of March. Data represent captures inside/outside each trap line. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then later recaptured outside the same trap line during the late season. Total number of adults captured is indicated by N.

Season/Trap Line	2000– 2001	2001- 2002	2002- 2003	2003 2004	2004- 2005
Early Season, N =	71	251	136	65	59
Western	8.6/2.5	28.4/6.7	9.8/12.3	4.4/2.1	3.5/4.5
Southern	1.0/1.0	4.8/5.9	1.9/3.4	1.0/3.1	0.5/2.7
Eastern		4.2/22.7	1.4/6.3	2.9/3.5	1.3/2.6
Late Season, N =	34	146	46	21	29
Western	0.8/4.8	1.9/19.7	0.5/4.6	1.5/3.3	0.4/3.2
Southern	0.0/1.9	0.7/2.6	0.7/2.2	0.4/1.7	0.0/0.6
Eastern		5.3/1.5	0.0/2.9	0.0/0.0	0.0/0.0

the season along the inside of the eastern trap line may have been traveling east as well. The closest known breeding pond is only 225 m from the southeast corner the study site (Pond 6). I captured relatively few adults along the inside of either the southern or eastern segments of the trap line in the early season.

Migratory movements and environmental parameters .- Based on trapping data adults began moving with the first night of substantial rain of the season (≥ 1 cm). Smaller amounts of nightly rain (≤ 0.5 cm) at the beginning of the breeding season did not appear to initiate movement. In all survey years, the earliest dates adults were captured ranged from 20 October (2004) to 11 November (2001). Most adult captures occurred between early November and mid-December with fewer more temporally dispersed captures later in the season. Juveniles began arriving at the boundaries of the study site each year within six nights of measurable rain. The earliest dates juveniles were captured ranged from 29 October (2000) to 22 November (2001).

Both the amount of rain within 12 h (night of capture) and 24 h prior to checking traps were positively correlated with number of *A. californiense* captured (r =0.626 for night rain; r = 0.603 for 24 h; P < 0.001 for both). Rain 12 h prior to opening traps was also correlated with captures (r = 0.375, P = 0.012). In addition, rain at dusk (Wilcoxon Z = 2.66, P < 0.005) and temperature (r = 0.363, P < 0.015) were positively associated with number of captures. Rain the night prior to opening traps was not associated with number of captures (Wilcoxon Z = 0.31, P = 0.378).

Annual reduction in captures.—Over the five study years, the proportion of adults captured inside the trap line decreased (r = -0.845, P = 0.036) and adult capture rates were not associated with on-site rainfall for those five years (Fig. 5, r = -0.753, P = 0.071). In 2000 and 2001, the capture rate of adults was higher inside than outside the trap line (Fig. 5). However, during 2002–2004 the capture rate was higher outside than inside. By 2004 the ratio of adult captures inside the trap line (versus outside) was much lower (0.35) than in previous years (0.62–1.2).

#### DISCUSSION

Successful conservation for Ambystoma californiense requires protection of both breeding sites and adequate surrounding uplands (Petranka 1998; Semlitsch 1998). Knowledge of terrestrial movement patterns and migration distances is essential to establishing appropriate upland protection zones adjacent to breeding ponds. My study expands the current understanding of upland habitat use for A. californiense and should better inform management for this species. The most important findings of my study are that A. californiense appeared to exhibit fidelity to upland habitat locations and occurred in relatively large numbers farther from breeding ponds than previously reported.

Study limitations.—The present study has certain limitations that should be taken into account when interpreting my findings. The partial drift fence may have affected my results in the following ways: 1) capture rates may have over- or under-estimated the actual number of salamanders entering or leaving the study site, 2) distribution of captures was limited to Orloff.-Movement patterns and migration distances of California Tiger Salamander.

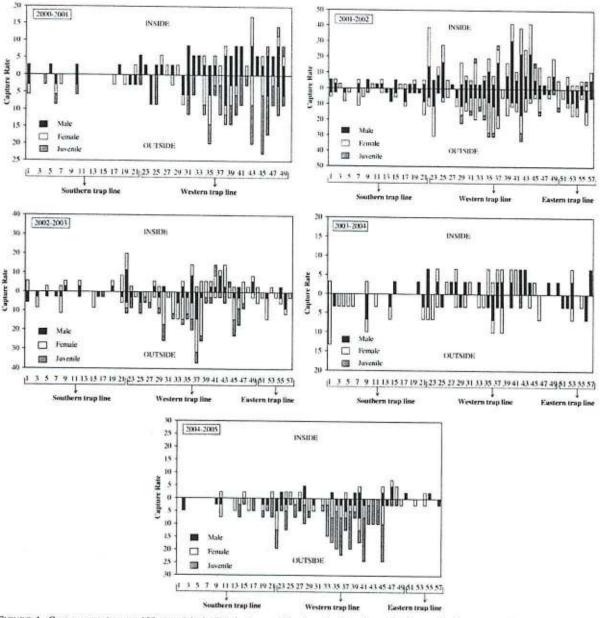


FIGURE 4. Capture rates (no. per 100 trap nights) of Ambystoma californiense inside and outside the trap line by sex, age class, and trap line for each of the five study years. Trap number for each trap line segment is indicated on the x-axis. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then recaptured outside the same trap line later in the season.

certain sections of the study site, and 3) trespass rates for the study site could not be determined (i.e., when a salamander exits or enters a site without being captured). These limitations may have influenced my analysis of patterns of movement, sex ratios/proportions, and annual reductions in number of individuals captured.

In addition, translocating salamanders and restricting their entry into the study site may have altered the age class distribution for those remaining within the site. Studies of *A. californiense* and other *Ambystoma* species

have shown that age classes may differ in their use of habitat (Rothermel 2004; Trenham and Shaffer 2005) and vary in activity in response to environmental cues (Semlitsch 1983). This may have influenced my analysis of patterns of movement, and migratory movements with applicable data sets. Lastly, my findings are also limited by having only one study location. Although my results are directly applicable to this site, it may not be representative of other grassland areas that support *A. californiense*.

TABLE 4. Capture rates of juvenile A. californiense (no. per 100 trap nights) along the western, southern, and eastern trap lines during the early and late winter breeding seasons of the five study years. Early season = late October to December 31; Late season = January 1 to end of March. Data represent captures inside/outside the trap lines. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then later recaptured outside the same trap line during the late season. Total number of adults captured is indicated by N.

Season/Trap Line	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005
Early Season, N =	36	14	29	1	45
Western	0.5/5.3	0.2/2.4	0.6/5.2	0.2/0.0	0.0/8.0
Southern	0.0/0.7	0.0/0.0	0.0/0.3	0.0/0.0	0.0/1.1
Eastern	-	0.8/0.0	0.0/0.0	0.0/0.0	0.0/0.0
Late Season, N =	14	2	7	0	36
Western	0.0/2.7	0.2/0.0	0.0/1.1	0.0/0.0	0.0/3.8
Southern	0.0/0.3	0.0/0.2	0.0/0.2	0.0/0.0	0.0/1.7
Eastern	-	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0

Capture numbers and movement patterns.—Adults tended to return to a location close to where they were initially captured, which suggests fidelity to specific areas of upland habitat. Although several other studies have indicated Ambystoma species tend to follow the same nonrandom pathways as they move toward and away from breeding ponds (Stenhouse 1985; Phillips and Sexton 1989; Trenham and Cook 2008), these results were typically inferred from the distribution of captures around ponds, not from distant upland habitat capture data.

In all study years more adults were captured early in the season (presumably going to breed) than were captured later in the season along the same trap line segment (presumably returning from breeding). Rainfall amounts during the early and late seasons did not appear to account for this decrease in captures. The lower number of returning animals may be partly due to mortality, or salamanders straying off path when returning from their natal ponds or dispersing to different ponds (Trenham et al. 2001; Trenham and Cook 2008).

A higher proportion of migrating males than females has been correlated with low rainfall years in other studies of *A. californiense* (Loredo and Van Vuren 1996; Cook et al. 2006). My findings are consistent with this pattern. Apparently more females forego breeding in dry years than males (Loredo and Van Vuren 1996; Trenham et al. 2000). My results contrast with previous studies of *A. californiense* and other *Ambystoma* species that suggest a female bias at greater distances from breeding ponds (Regosin et al. 2003; Trenham and Cook 2008). The distances from the nearest breeding ponds in my study were considerably greater than these previous studies, yet my annual sex ratios were only female biased in one of the five study years.

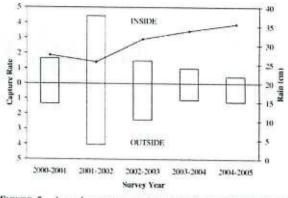


FIGURE 5. Annual capture rates (no. per 100 trap nights) of adult Ambystoma californiense inside and outside the trap line (bars) and onsite rainfall amounts (October-April; solid line) for the five study years. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then recaptured outside the same trap line later in the season.

Migration distances.--- I captured large numbers of A. californiense farther from breeding ponds than has been previously documented. In early studies of migration distances, maximum distance ranged from 130 m during one night of visually tracking (Loredo et al. 1996) to 248 m using radio tracking (Trenham 2001). However, these studies only examined movements during initial dispersal into the terrestrial habitat and thus may not be representative of the total distance adults may travel (Trenham and Shaffer 2005). In a more recent study using variable trap line distances from a pond, Trenham and Shaffer (2005) found that 50-95% of adults were trapped between 150 to 620 m from the pond, respectively. Continuing work at this site has documented a few individuals moving up to 1000 m from the most likely breeding pond (Peter Trenham, pers. comm.). Ambystoma californiense has also been observed up to 2.1 km from breeding ponds (U.S. Fish and Wildlife Service 2004); however, this was thought to be only a small number of individuals. Even in light of these studies showing a few individuals making longer distance movements, the large numbers of adults and juveniles I captured at least 800 m from the closest breeding ponds is noteworthy.

Current estimates that 95% of adult *A. californiense* occur within 620 m of the breeding pond (Trenham and Shaffer 2005) do not appear applicable to my study site. If this estimate were applied to my study site, which is greater than 620 m from the closest breeding ponds on CNWS, the large number of captures would represent less than 5% of the adult upland population. This would result in an exceedingly high extrapolated number of adults using the ponds on CNWS (~5,000 to 10,000 adults). However, Loredo and Van Vuren (1996) found an average of only 141 adults at their study pond on CNWS (Pond 5, Fig. 1), which is typical for other sites (Trenham et al. 2001; Cook et al. 2006). It is more likely that a greater percentage of the breeding population at

CNWS is moving farther away from the breeding ponds than previous research would have predicted.

Migratory movements and environmental parameters.—Movement patterns in my study area were influenced by the distribution of rainfall within the 24-h period prior to capture, with both rain at dusk and on the night of capture (12-h prior) strongly correlated to captures. Although several studies of *A. californiense* or other *Ambystoma* species also found adult migration to be positively associated with rainfall (Semlitsch 1983; Beneski et al. 1986; Trenham et al. 2000), these studies measured daily (24-h periods) or weekly rainfall, not rainfall within less than a 24-h period.

The majority of *A. californiense* adults were captured from early November to mid-December, which is earlier than other study sites where peak migration occurred in January in Monterey County (Trenham et al. 2000) or December and January in Sonoma and Contra Costa counties (Loredo and Van Vuren 1996; Cook et al. 2006). Unlike these other studies, which were conducted at study ponds and recorded only the date of arrival at those ponds, my data presumably represent the actual initiation of migration from upland emergence. Therefore, the discrepancy in peak migration periods may be because my study site was at least 800 m away from the closest probable breeding ponds, and it may have taken several rainy nights to reach the ponds.

Reduction in numbers .- My findings suggest that it takes multiple years of trapping and translocating animals to substantially reduce the number of adults within a project site. This is consistent with other research that has shown A. californiense typically spend up to four to five years in their upland burrows before they reach sexual maturity and migrate to breeding ponds for the first time (Trenham et al. 2000). The reduction in annual captures found over my five study years could have been affected by variables other than removal trapping. For example, rainfall has been shown to affect both the number of migrating adults and reproductive success among ambystomatids (e.g., Semlitsch 1983). However, my annual capture numbers were not correlated with on-site rainfall. In addition, I examined local annual rainfall data for the five years prior to my study and found no patterns that might have affected past reproductive success and subsequently influenced capture numbers during my study. It is important to note that because the drift fence was not a closed system, it was not possible to determine whether individuals captured inside or outside the trap line were resident to those sides of the study site.

The costs and benefits of amphibian translocation strategies have been debated and establishing criteria for success is difficult (Seigel and Dodd 2002; Trenham and Marsh 2002). Because my study only involved moving animals to adjacent grassland habitat a short distance from the capture point ( $\leq 100$  m), some of the more critical problems typically associated with translocation projects were not applicable, including the availability of suitable habitats, disease transmission, and genetic considerations (Dodd and Seigel 1991). However, because a portion of my translocated animals were recaptured presumably trying to return to the study site, they could have been subject to additional stress which reduced their survival (Matthews 2003; Germano and Bishop 2008). In addition, I do not know if the resources of the adjacent area were adequate to sustain an increase in population size (Petranka 1989).

Other options for managers to reduce the number of salamanders in a proposed construction area include passive relocation using wooden ramps with barrier fencing or excavating salamanders from their burrows. Although I have observed *A. californiense* using ramps to exit a project site, there are no published reports on the success of this passive relocation technique. Excavation is time consuming (Pittman 2005), difficult due to the complexity of burrow systems, and potentially hazardous to the salamanders.

Management implications .- My findings have several implications for future conservation and management of this species. First, the current suggested buffer zone of 630 m around breeding ponds for longterm preservation of individual A. californiense populations (Trenham and Shaffer 2005) may not protect a substantial portion of some upland populations. Second, the method proposed by Searcy and Shaffer (2008) for calculating mitigation value for A. californiense, which is based on the exponential decrease in salamander density with increased distance from breeding ponds, may not be applicable in all cases. Other factors could be influencing the density distribution around ponds, such as uneven distribution of resources and presence of other species (Rittenhouse and Semlitsch 2007; Searcy and Shaffer 2008). The results of my study underscore the need to consider other relevant biological factors in establishing buffer zones or mitigation credits. Third, trapping may be the most reliable means of predicting habitat value or detecting occurrence in uplands. I found that the number of salamanders observed during winter night surveys was not a reliable indication of population size. The limited number of salamanders I observed was probably due to few being above ground at the burrow entrances during the night surveys. Fourth, efforts to remove A. californiense, via trapping or passive relocation, from a proposed project site for only one year (to reduce impacts from development) may miss a large portion of the population. My findings suggest that multiple years are required to substantially reduce the abundance of adult life stages in upland habitat.

Herpetological Conservation and Biology

Acknowledgments.—1 am grateful for the biologists who assisted in the field work for this study, including Kathy Willet, Derek Jansen, and Jill Bennett. I appreciate Mark Allaback of Biosearch (Santa Cruz, CA) for helping to develop and design this study. I thank Dr. Pete Trenham and Mark Allaback who reviewed and improved the original manuscript. I also thank the U.S. Fish and Wildlife Service and California Department of Fish and Game for authorizing this study through issuance of a 10(a)(1)(A) permit (TE-075898–1) and Scientific Collectors Permit (801083–05).

#### LITERATURE CITED

- Bailey, L.L. 2004. Evaluating elastomer marking and photo identification methods for terrestrial salamanders: marking effects and observer bias. Herpetological Review 35:38–41.
- Beneski J.T., Jr., E.J. Zalisko, and J.H. Larsen Jr. 1986. Demography and migratory patterns of the Eastern Long-toed Salamander, *Ambystoma marcrodactylum* columbianum. Copeia 1986:398–408.
- Biek, R., W.C. Funk, B.A. Maxell, and L.S. Mills. 2002. What is missing in amphibian decline research: insights from ecological sensitivity analysis. Conservation Biology 16:728–734.
- California Fish and Game Commission. 2010. List California Tiger Salamander as a threatened species. California Regulatory Notice Register. Title 14, Vol. No. 12–Z:425–427.
- Cook, D.G., P.C. Trenham, and P.T. Northen. 2006. Demography and breeding phenology of the California Tiger Salamander (*Ambystoma californiense*) in an urban landscape. Northwestern Naturalist 87:215–224.
- Cooke, A.S., and R.S. Oldham. 1995. Establishment of populations of the Common Frog, *Rana temporaria*, and the Common Toad, *Bufo bufo*, in a newly created reserve following translocation. Herpetological Review 5:173–180.
- Dodd, C.K., Jr. 2005. Population manipulations. Pp. 265– 270 In Amphibian Declines: The Conservation Status of United States Species. Lannoo, M. (Ed.). University of California Press, Berkeley, California, USA.
- Dodd, C.K., Jr., and R.A. Seigel. 1991. Relocation, repatriation, and translocation of amphibians and reptiles: are they conservation strategies that work? Herpetologica 47:336–350.
- Donnelly, M.A., C. Guyer, J.E. Juterbock, and R.A. Alford. 1994. Techniques for marking amphibians. Pp. 277–284 In Measuring and Monitoring Biological Diversity: Standard Methods for Amphibians. Heyer, W. R., M.A. Connelly, R.W. McDiarmid, L.C. Hayek, M.S. Foster (Eds.). Smithsonian Institution Press, Washington D.C., USA.
- Doody, J.S. 1995. A photographic mark-recapture method for patterned amphibians. Herpetological Review 26:19-21.

- Fischer, J., and D.B. Lindenmayer. 2000. An assessment of the published results of animal relocations. Biological Conservation 96:1–11.
- Germano, J.M., and P.J. Bishop. 2008. Suitability of amphibians and reptiles for translocation. Conservation Biology 23:7–15.
- Gibbons, J.W., and D.H. Bennett. 1974. Determination of anuran terrestrial activity patterns by a drift fence method. Copeia 1974:236–243.
- Griffith, B., J.M. Scott, J.W. Carpenter, and C. Reed. 1989. Translocation as a species conservation tool: status and strategy. Science 245:477–480.
- Harper, E.B., T.A.G. Rittenhouse, and R.D. Semlitsch. 2008. Demographic consequences of terrestrial habitat loss for pool-breeding amphibians: predicting extinction risks associated with inadequate size of buffer zones. Conservation Biology 22:1205–1215.
- Loredo, I., and D. Van Vuren. 1996. Reproductive ecology of a population of the California Tiger Salamander. Copeia 1996:895-901.
- Loredo, I., D. Van Vuren, and M.L. Morrison. 1996. Habitat use and migration behavior of the California Tiger Salamander. Journal of Herpetology 30:282–282.
- Marsh, D.M., and P.T. Trenham. 2001. Metapopulation dynamics and amphibian conservation. Conservation Biology 15:40–49.
- Matthews, K.R. 2003. Response of Mountain Yellowlegged Frogs, Rana muscosa, to short distance translocation. Journal of Herpetology 37:621-626.
- Petranka, J.W. 1989. Density-dependent growth and survival of larval *Ambystoma*: evidence from wholepond manipulations. Ecology 70:1752–1767.
- Petranka, J.W. 1998. Salamanders of the United States and Canada. Smithsonian Institution Press, Washington, D.C., USA.
- Phillips, C.A., and O.J. Sexton. 1989. Orientation and sexual differences during breeding migrations of the Spotted Salamander, *Ambystoma maculatum*. Copeia 1989:17–22.
- Pittman, B.T. 2005. Observations of upland habitat use by California Tiger Salamanders based on burrow excavations. Transactions of the Western Section of the Wildlife Society 41:26–30.
- Rathbun, G.B., and J. Schneider. 2001. Translocation of California Red-legged Frogs (*Rana aurora draytonii*). Wildlife Society Bulletin 29:1300–1303.
- Regosin, J.V., B.S. Windmiller, and J.M. Reed. 2003. Influence of abundance of small-mammal burrows and conspecifics on the density and distribution of Spotted Salamanders (*Ambystoma maculatum*) in terrestrial habitats. Canadian Journal of Zoology 81:596–605.
- Rittenhouse, T.A.G., and R.D. Semlitsch. 2007. Distribution of amphibians in terrestrial habitat surrounding wetlands. Wetlands 27:153–161.
- Rothermel, B.B. 2004. Migratory success of juveniles: a potential constraint on connectivity for pond-breeding amphibians. Ecological Applications 14:1535–1546.

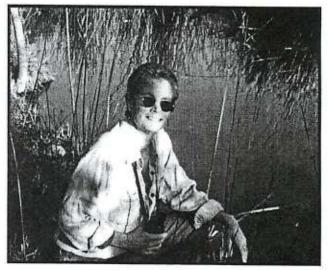
Orloff.-Movement patterns and migration distances of California Tiger Salamander.

- Searcy, C.A., and H.B. Shaffer. 2008. Calculating biologically accurate mitigation credits: insights from the California Tiger Salamander. Conservation Biology 22:997–1005.
- Seigel, R.A., and C.K. Dodd, Jr. 2002. Translocations of amphibians: proven management method or experimental technique? Conservation Biology 16:552–554.
- Semlitsch, R.D. 1983. Structure and dynamics of two breeding populations of the Eastern Tiger Salamander, *Ambystoma tigrinum*. Copeia 1983:608–616.
- Semlitsch, R.D. 1998. Biological delineation of terrestrial buffer zones for pond-breeding salamanders. Conservation Biology 12:1113–1119.
- Semlitsch, R.D. 2002. Critical elements for biologically based recovery plans of aquatic-breeding amphibians. Conservation Biology 16:619–629.
- Semlitsch, R.D. 2007. Differentiating migration and dispersal processes for pond-breeding amphibians. Journal of Wildlife Management 72:260–267.
- Semlitsch, R.D., and J.R. Bodie. 2003. Biological criteria for buffer zones around wetlands and riparian habitats for amphibians and reptiles. Conservation Biology 17:1219–1228.
- Semlitsch, R.D., and J.B. Jensen. 2001. Core habitat, not buffer zone. National Wetlands Newsletter 23:5-7.
- Shoop, C.R. 1968. Migratory orientation of *Ambystoma maculatum*: movements near breeding ponds and displacements of migrating individuals. Biological Bulletin 135:230-238.
- Shoop, C.R., and T.L. Doty. 1972. Migratory orientation by Marbled Salamanders (*Ambystoma opacum*) near a breeding area. Behavioral Biology 7:131–136.
- Stenhouse S.L. 1985. Migratory orientation and homing in Ambystoma maculatum and Ambystoma opacum. Copeia 1985:631–637.
- Stitt, E.W., and G.T. Downard. 2000. Status of the California Red-legged Frog and California Tiger

Salamander at Concord Naval Weapons Station, California. Transactions of the Western Section of the Wildlife Society 36:32–39.

- Storer, T.I. 1925. A synopsis of the amphibia of California. University of California Publications in Zoology 27:1–342.
- Trenham, P.C. 2001. Terrestrial habitat use by adult California Tiger Salamanders. Journal of Herpetology 35:343–346.
- Trenham, P.C., and D.G. Cook. 2008. Distribution of migrating adults related to the location of remnant grassland around an urban California Tiger Salamander (*Ambystoma californiense*) breeding pool. Pp. 9–16 In Urban Herpetology, Herpetological Conservation. Mitchell, J.C., and R.E. Jung Brown (Eds.). Society for the Study of Amphibians and Reptiles, Salt Lake City, Utah, USA.
- Trenham, P.C., and D.M. Marsh. 2002. Amphibian translocation programs: reply to Seigel and Dodd. Conservation Biology 16:555–556.
- Trenham, P.C., and H.B. Shaffer. 2005. Amphibian upland habitat use and its consequences for population viability. Ecological Applications 15:1158–1168.
- Trenham, P.C., W.D. Koenig, and H.B. Shaffer. 2001. Spatially autocorrelated demography and interpond dispersal in the salamander, *Ambystoma californiense*. Ecology 82:3519–3530.
- Trenham, P.C., H.B. Shaffer, W.D. Koenig, and M.R. Stromberg. 2000. Life history and demographic variation in the California Tiger Salamander (*Ambystoma californiense*). Copeia 2000:365–377.
- U. S. Fish and Wildlife Service. 2004. Determination of threatened status for the California Tiger Salamander; and special rule exemption for existing routine ranching activities; final rule. Federal Register 69:47212–47248

SUSAN ORLOFF is a Wildlife Biologist and principal of a consulting firm in the San Francisco Bay Area. She has degrees from San Francisco State University (B.A.) and Sonoma State University (M.A.). During the last 25 years, she has worked on a diversity of projects involving the status and conservation of sensitive wildlife species. Her early career focused on species of the Central Valley in California and she has authored several papers on the endangered San Joaquin Kit Fox (Vulpes macrotis mutica). Sue also has extensive experience assessing the impacts of windfarm development on raptor populations, which resulted in several publications. Her more recent research emphasizes sensitive amphibians and reptiles of California. This research includes a long-term population monitoring program for California Red-legged Frogs (Rana draytonii) and San Francisco Garter Snakes (Thamnophis sirtalis tetrataenia), a study on the impacts of variations in creek flow releases on California Redlegged Frogs, and a multiyear study on the effects of hydroelectric operations on the Foothill Yellow-legged Frog (Rana boylii). (Photographed by C.K. Cole)



# EXHIBIT 3

# SAVE MOUNT DIABLO



MALCOM SPROUL, Board Member, Chair of the Land Committee, Member of the Land and Nominating Committees

Malcolm received his B.A. and M.L.S. in Environmental Planning, from UC Berkeley, and then worked for the Marin County Planning Dept. for four years. In 1979, he joined LSA Associates and is now a principal in natural resources management and environmental planning, managing their Point Richmond office. An avid outdoorsman, Malcolm feels that Mount Diablo is a wonderful visual resource, and that the open space we are protecting is not just for people, but is essential to the protection and stability of the greatest possible diversity of biological resources in the central California region.

557081.1

# EXHIBIT 4



# Potential Pond Site - Image taken from Google Earth 2014

# EXHIBIT 5

Ecological Applications, 15(6), 2005, pp. 1893–1905  $\ensuremath{\mathbb{C}}$  2005 by the Ecological Society of America

## EFFECTS OF EXURBAN DEVELOPMENT ON BIODIVERSITY: PATTERNS, MECHANISMS, AND RESEARCH NEEDS

ANDREW J. HANSEN,<sup>1,4</sup> RICHARD L. KNIGHT,<sup>2</sup> JOHN M. MARZLUFF,<sup>3</sup> SCOTT POWELL,<sup>1,5</sup> KATHRYN BROWN,<sup>1,6</sup> PATRICIA H. GUDE,<sup>1,7</sup> AND KINGSFORD JONES<sup>1</sup>

> <sup>1</sup>Ecology Department, Montana State University, Bozeman, Montana 59717 USA <sup>2</sup>Department of Forest, Rangeland, and Watershed Stewardship, Colorado State University, Fort Collins, Colorado 80523 USA <sup>3</sup>Collage of Forest Pasourage, University of Washington, Seattle, Washington, 08105 USA

<sup>3</sup>College of Forest Resources, University of Washington, Seattle, Washington 98195 USA

Abstract. Low-density rural home development is the fastest-growing form of land use in the United States since 1950. This "exurban" development (~6-25 homes/km<sup>2</sup>) includes urban fringe development (UFD) on the periphery of cities and rural residential development (RRD) in rural areas attractive in natural amenities. This paper synthesizes current knowledge on the effects of UFD and RRD. We present two case studies and examine the patterns of biodiversity response and the ecological mechanisms that may underlie these responses. We found that many native species have reduced survival and reproduction near homes, and native species richness often drops with increased exurban densities. Exotic species, some human-adapted native species, and species from early successional stages often increase with exurban development. These relationships are sometimes nonlinear, with sharp thresholds in biodiversity response. These effects may be manifest for several decades following exurban development, so that biodiversity is likely still responding to the wave of exurban expansion that has occurred since 1950. The location of exurban development is often nonrandom relative to biodiversity because both are influenced by biophysical factors. Consequently, the effects on biodiversity may be disproportionately large relative to the area of exurban development. RRD is more likely than UFD to occur near public lands; hence it may have a larger influence on nature reserves and wilderness species. The ecological mechanisms that may underlie these responses involve alteration of habitat, ecological processes, biotic interactions, and increased human disturbance. Research on the patterns and mechanisms of biodiversity remains underdeveloped, and comparative and experimental studies are needed. Knowledge resulting from such studies will increase our ability to understand, manage, and mitigate negative impacts on biodiversity.

Key words: biodiversity; biotic interactions; ecological mechanisms; fire; habitat fragmentation; landscape management; land cover; land use; rural residential development; urban fringe development; weeds.

### INTRODUCTION

Rural America is undergoing a dramatic transition. For the first time in more than a century, more people are moving to rural areas than from rural lands (Johnson 1998). Fleeing the cities, many retirees, entrepreneurs, and others are seeking the small-town lifestyles and natural amenities of rural landscapes (Rudzitis 1999).

Manuscript received 21 July 2003; revised 10 September 2004; accepted 8 November 2004; final version received 10 December 2004. Corresponding Editor: M. G. Turner. For reprints of this Invited Feature, see footnote 1, p. 1849.

<sup>4</sup> E-mail: hansen@montana.edu

<sup>5</sup> Present address: USDA Forest Service, Pacific Northwest Research Station, 3200 SW Jefferson Way, Corvallis, Oregon 97331.

<sup>6</sup> Present address: 14445 Buffalo St., Anchorage, Alaska 99516.

<sup>7</sup> Present address: P.O. Box 283, King Salmon, Alaska 99613.

This rural in-migration is driving large changes in land use. The typical trajectory of land use change across the United States prior to 1950 was from wild land and resource extraction uses to agriculture and to suburban and urban uses. An entirely new land use has become prevalent in many parts of the United States since 1950. Many people are choosing to live "out of town" on small "ranchettes" and in rural subdivisions. Termed exurban development, low-density housing (~6-25 homes/km<sup>2</sup>) within a landscape dominated by native vegetation is now the fastest growing form of land use in the United States (Brown et al. 2005). Land long used for forestry or ranching is now being converted to home sites. The effects of exurban development on native species and ecological communities have only recently been the topic of ecological studies.

Since 1950, there has been a five-fold increase in the area within the conterminous United States that is occupied at exurban densities (Brown et al. 2005). The



PLATE 1. Rural residential development in the Greater Yellowstone Ecosystem near Red Lodge, Montana, USA. The rural homes are placed near low-elevation riparian forests that are especially important for biodiversity. Photo by A. Hansen.

exurban land use type currently covers nearly 25% of the area of the lower 48 states. The most rapid gains were in the eastern deciduous forest, the southwest, the western seaboard, the Rocky Mountains, and the upper Midwest.

This exurban development is manifest in two forms. Urban fringe development is the expansion of exurban densities on the periphery of cities. This urban fringe development (UFD) is largely driven by urban dwellers seeking more rural lifestyles while still having access to urban jobs and services (Ulmann 1954, Healy and Short 1987, Raish et al. 1997). Exurban development in counties adjacent to metropolitan counties increased six fold since 1950 (Brown et al. 2005). Over time, these exurban developments often transition to suburban and urban land uses.

A second form of exurban development is occurring distant from cities. It is focused on rural areas attractive in scenery, climate, outdoor recreation and other "natural amenities" (Rasker and Hansen 2000). Rural counties not adjacent to metropolitan counties increased fivefold in exurban area since 1950 (Brown et al. 2005). This rural residential development (RRD) is common in the rural counties of the Rocky Mountain West, the Pacific Northwest, the upper Midwest, and the southeastern United States (Gersh 1996). Rather than being randomly distributed, this development is often associated with the borders of national parks and other public lands; rivers, lakes, or coastal areas; areas of moderate climate and good outdoor recreational opportunities; and towns and small cities that offer national airports, high-speed internet access, and cultural amenities (Cromartie and Wardwell 1999, McGranahan 1999, Nelson 1999; see Plate 1).

The effects of both forms of exurban development on wildlife and biodiversity are poorly known. Relative to other types of land use, exurban development is substantially understudied. Miller and Hobbs (2002) found that only 6% of the papers on human landscapes published in *Conservation Biology* dealt with exurban and urban places. The majority of these consider the general gradient from rural to urban in and around cities. While these studies typically do not cleanly separate biodiversity in exurban places relative to suburban and urban places, they do provide a context for assessing general trends in biodiversity under land use intensification. RRD has been examined in only a few recent studies, with most of them being in the Rocky Mountain West.

Understanding the effects of exurban development on biodiversity is important to public policy. With a quarter of the nation's land area in this land use type, policies on exurban development may have a substantial effect on biodiversity nationwide. The general view among conservationists and the public is that exurban development alters ecological processes and biodiversity to a greater extent than forestry and agriculture (Marzluff and Ewing 2001). Hence, many initiatives have emerged to protect "open space" from exurban development through conservation easements and other approaches. There is also the view that the effects of exurban development are proportional to home density. Thus, zoning for lower density housing is often used to protect ecological resources.

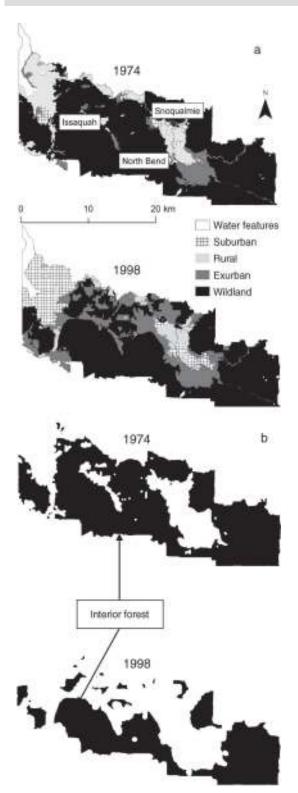


FIG. 1. (a) Change in land use in the urban fringe east of Seattle, Washington, USA. (b) Decline in interior forest resulting from changes in land use. The figure is from Robinson et al. (2005).

Several questions arise. How does exurban development change habitat and landscape patterns from those typical of lower intensity land uses? How do ecosystem, community, and population-level patterns vary as more natural habitats are converted to exurban? Are there thresholds in home density and spatial pattern where biodiversity is disproportionately affected? What ecological mechanisms underlie the response of biodiversity to exurban development? Can exurban development on private lands have consequences on adjacent or distant public lands? How do the effects of UFD and RRD compare?

In this paper, we synthesize current knowledge and attempt to answer these questions. We do so by first examining UFD and RRD and offer a case study of each. We then consider the ecological mechanisms linking both forms of exurban development to biodiversity. Where current research is insufficient to address the questions, we offer hypotheses in an effort to stimulate future research.

#### URBAN FRINGE DEVELOPMENT AND BIODIVERSITY

### Case study: Seattle, Washington

The city of Seattle, in King County, Washington, lies between the Puget Sound and the Cascades Mountains. Like many metropolitan counties on the west coast, King County has been growing rapidly. The population size increased by 44% during 1970–2000 and the number of households grew by 72%. In an attempt to control sprawl around the city, the county instituted an urban growth policy aimed at confining high density development within urban growth boundaries while maintaining low-density housing in the surrounding rural lands. Robinson et al. (2005) quantified change in land use during 1974–1998 in a 474-km<sup>2</sup> study area extending east from Seattle towards the Cascade Mountains. The study area was a matrix of forest lands with dispersed agricultural, suburban, and urban, land uses.

The authors found that the primary trajectories of change were from wildlands to exurban and from exurban and agricultural to suburban. The area of exurban increased by 193%. Exurban and suburban covered 8% of the study area in 1974 and 33% in 1998 (Fig. 1a). The reduction of wildland and agricultural lands represents the conversion of 23% of the study area to development. These changes fragmented once contiguous forest and reduced interior forest area (>200 m from forest edge) by 60% (Fig. 1b). This land use change was largely driven by single-family housing. Despite the effort to concentrate growth within the urban growth boundary, 60% of the land committed to new residential development was outside urban growth boundaries.

This land conversion on Seattle's fringe changed plant, bird, and small mammal diversity. Native forb and tree diversity declined with loss of forest (Fig. 2a). A similar, but nonsignificant trend, was found for

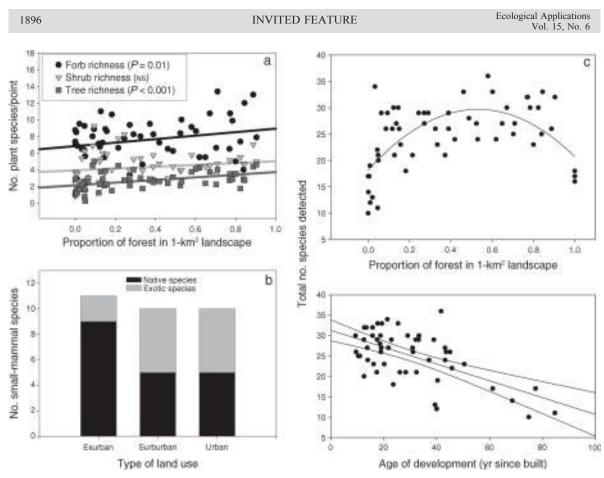


FIG. 2. Changes in biodiversity in response to urban sprawl in the Seattle metropolitan area. (a) Increases in plant species richness with increasing forest land cover. (b) Shifting composition of small mammal communities. (c) Correlation of bird species richness with amount of forest (upper panel) and age of development (lower panel). Bird data are from Donnelly (2002), Donnelly and Marzluff (2004), and Marzluff (*in press*).

shrubs. Alternatively, exotic ground cover increased significantly with development, especially with the interaction between age of development and interspersion of settled and forested remnants. The trends for plants were relatively linear. Small mammal communities changed abruptly from primarily native to mixtures of natives and exotics as landscapes were converted from exurban to suburban or urban (Fig. 2b). Bird species richness in combined samples of forest fragments and settled areas peaked at levels of settlement found in most single-family housing subdivisions (Fig. 2c). It dropped dramatically when development reached a threshold of approximately 80% developed, and when mature, second growth, coniferous forest cover occupied the entire 1-km<sup>2</sup> landscape (i.e., in relatively large forested reserves; Marzluff, in press). The peak in landscapes where forest and settlement are both abundant in the landscape occurs primarily because of colonization of early successional and deciduous forest species (Marzluff, in press). Native forest birds are predictably and linearly lost with increasing urbanization (Donnelly 2002, Donnelly and Marzluff 2004). Synanthropic birds, those ecologically associated with humans, predictably colonize landscapes as urban land cover increases. Species richness was also related to age of development, with bird species richness continuing to decrease more than 60 years after development. Average bird species richness dropped from about 35 at the time of development to below 15 by 80 years after development. This drop is accentuated by concomitant loss of forest cover with subdivision age in the sample, but additional research of similarly forested, but variously aged subdivisions confirms a general, but less extensive loss of species (Ianni 2004). Species diversity declines as subdivisions age because of losses in native mature forest birds and native birds not typically found in mature forests that colonized the openings, grasslands, ponds, and deciduous forest characteristic of new subdivisions. The loss of bird species was not explained by poor reproductive success. Nest success remained relatively high in developed study plots for all the bird guilds studied, but the numbers of active nests were greatly reduced in densely settled areas (Donnelly and Marzluff 2004). The authors concluded that the reduction in richness was primarily due to the loss of species dependent upon forest habitats,

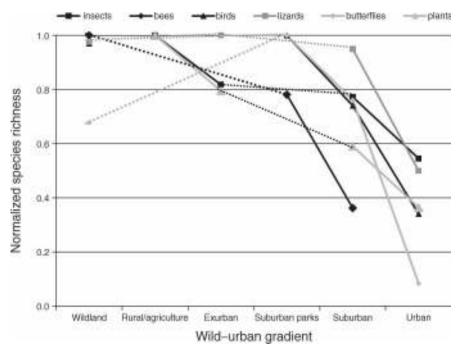


FIG. 3. Distribution of species richness across a gradient in land use for studies of various organisms. Normalized species richness is calculated as a function of the maximum number of recorded species at a point on the development gradient. Dashed lines represent unsampled portions of the gradient. Sources: insects, Denys and Schmidt (1998); bees, McIntyre and Hostetler (2001); birds, Blair (1996); lizards, Germaine et al. (1998); butterflies, Blair (1999); plants, Denys and Schmidt (1998).

rather than to increased predation levels. Reduced survival of adults and newly fledged birds is a potential factor currently being studied.

# General biodiversity responses to land use intensification on the urban fringe

The results above are consistent with the growing body of literature finding that the quantity and pattern of urban fringe development strongly influence both native and nonnative flora and fauna. The responses at the community level are a function of species response patterns, which are in turn a function of the demographic responses of individual organisms (Marzluff and Ewing 2001).

*Community patterns.*—For many plant and animal communities, species richness decreases as housing density increases along the rural–urban gradient. The literature abounds with examples for arthropods (Miyashita 1998), insects (Denys and Schmidt 1998), and amphibians (Lehtinen et al. 1999) (Fig. 3). Along a gradient from wild and undeveloped parks around the outskirts of Phoenix, Arizona, to residential sites in the city, both richness and abundance of pollinator bees (*Hymenoptera: Apoidea*) decreased markedly (McIntyre and Hostetler 2001). Similar results were documented in Tucson, Arizona, for native bird guilds, as housing density best explained the decrease in species richness along the rural–urban gradient (Germaine et

al.1998). For native rodents in protected grasslands in Boulder, Colorado, the capture rate exhibited a strong negative relationship with the percentage of surrounding suburbanization (Bock et al. 2002).

While native species often decrease in diversity and abundance along the rural–urban gradient, the opposite is often true for nonnative guilds. In the Tucson study, housing density best explained the increase in species richness for nonnative birds (Germaine et al. 1998). Within plant communities in Ohio, the percentage of nonnative species increased along the rural–urban gradient (Whitney 1985).

Because of these contrasting biodiversity response patterns along the rural-urban gradient, community richness sometimes exhibits a non-linear response in which richness peaks at intermediate levels of development (McKinney 2002). Avian and butterfly richness and diversity were both higher at moderate levels of development than in natural reserves in various sites in California and Ohio (Blair 1996, 1999). Lizard abundance, richness, and evenness all peaked at intermediate levels of development in Tucson, Arizona (Germaine and Wakeling 2001). In shoreline cottage development in central Ontario, moderate levels of development supported the highest levels of small mammal diversity (Racey and Euler 1982).

A recent meta-analysis of avian community response patterns to increasing urbanization (Marzluff 2001) confirmed the patterns emerging from the individual studies summarized above. He found that richness decreased in 61% and evenness decreased in 56% of the studies (Marzluff 2001). Over 90% of the surveyed studies documented either an increase in exotic species or a decrease in interior habitat nesters with increasing settlement.

An important conclusion from the Seattle case study is that the biodiversity response to urbanization may continue to intensify for several decades after development (Donnelly 2002, Ianni 2004). Thus in the rapidly growing cities of the United States, the full effects of recent development are likely not yet fully manifest and native biodiversity will continue to erode for decades to come.

Species patterns.-The response patterns of individual species to the rural-urban gradient are complex and account for the variety of responses at the community level. Many species decline in abundance with increased intensity of land use. Of 21 species recorded at a nature reserve in Santa Clara County, California, only 14 of these species also occurred at a nearby recreation area, and only three of these species were also found at the most urbanized site (Blair 1996). The species found only in the nature reserves were all natives including Western Wood-pewee (Contopus sordidulus), Hutton's Vireo (Vireo huttoni), and Ash-throated Flycatcher (Myiarchus cinerascens). Other examples of species that are negatively correlated with development levels come from central Ontario where the masked shrew (Sorex cinereus), deer mouse (Peromyscus maniculatus), red-backed vole (Clethrionomys gapperi), and woodland jumping mouse (Napeozapus insignis) all decreased in abundance with increasing shoreline cottage development (Racey and Euler 1981).

Other species are able to tolerate and even increase under higher levels of development (Hoffman and Gottschang 1997). Higher densities of nesting Cooper's Hawks (Accipiter cooperii) were recorded in urban settings compared to rural settings in and around Tucson, Arizona (Boal and Mannan 1998). Schneider and Wasel (2000) found that the density of moose (Alces alces) in northern Alberta, Canada, increased near human settlement. Similarly, Racey and Euler (1982) observed increased capture success with increasing development level for eastern chipmunk (Tamias striatus), red squirrel (Tamiasciurus hudsonicus), and meadow vole (Microtus pennsylvanicus). Several other studies have documented a suite of common bird and mammal species that increase in abundance along the rural to urban gradient. Examples include the House Sparrow (Passer domesticus), European Starling (Sturnus vulgaris), American Crow (Corvus brachyrhyncos), Brown-headed Cowbird (Molothrus ater), skunk (Mephitis mephitus), raccoon (Procyon lotor), and opossum (Didelphis virginiana) (Odell and Knight 2001).

The relationship between species abundance and urbanization is often not linear; many species are most abundant at intermediate levels of development, as demonstrated by Blair (1996). Gray foxes (*Urocyon cinereoargenteus*) in several rural communities in New Mexico were found to be tolerant of RRD up to a threshold of 50–125 homes/km<sup>2</sup> (Harrison 1997). A similar nonlinear response was also documented for abundance of mule deer (*Odocoileus* spp.) in an urbanizing valley in southwest Montana (Vogel 1989). Short-tailed shrews (*Blarina brevicauda*) were documented to peak at intermediate lakeshore cottage development levels in central Ontario (Racey and Euler 1982).

The life history attributes of species that avoid or expand with urbanization are not well studied. Mc-Kinney (2002) suggested that many human-sensitive species include large mammals with low reproductive rates, birds specializing on natural habitats, and late successional plants. Species most abundant in suburbs may be edge-adapted generalists able to exploit the wider variety of habitat configurations and resources available at intermediate levels of development. Species associated with urban areas may be preadapated to human structures or able to use human-derived food or water supplies (McKinney 2002). However, more study is needed to evaluate these hypotheses.

Demographic patterns.—Patterns of reproduction, survival, and dispersal are drivers for species and community responses to exurban development, yet relatively few studies have quantified population vitality rates across the development gradient. Marzluff (2001) reviewed the literature for results of urbanization on avian breeding success. He found that most studies dealt with species that were most abundant in cities. For these species, breeding success improved with increased settlement. For other species however, research on bird nesting success indicated a negative relationship with increasing development. The abundance of human development was found to be the strongest predictor of brood parasitism by brown-headed cowbirds and reduced nest success of several species such as Yellow Warbler (Dendroica petchia) (Tewksbury et al. 1998).

In sum, three general patterns of species abundances emerge along the gradient from rural to urban: decreases, increases, and nonlinear responses (McKinney 2002). Species that decrease in abundance along the development gradient are termed "human sensitive" (Odell and Knight 2001) or "urban avoiders" (Mc-Kinney 2002). Species that increase are termed "human adapted" (Odell and Knight 2001) or "urban adapted" and "urban exploiters" (McKinney 2002). "Suburban adaptables" (Blair 1996) reach peak abundance at intermediate levels of development. At the community level, richness for native species generally decreases with increasing development while richness for nonnative species generally increases with increasing development. As a result, total community diversity often peaks at intermediate levels of development, because both native and nonnative species are present in the community (Marzluff, *in press*). The life history traits of individual species, native and nonnative, likely contribute to the variety of responses at the population and community levels.

# RURAL RESIDENTIAL DEVELOPMENT AND BIODIVERSITY

# Case study: Colorado

Colorado is representative of much of the new West. Growing at three times the nation's average, it was the sixth-fastest growing state in the United States in the 1990s (Knight 1998). Importantly, this population growth is occurring on rural landscapes as well as within urban areas. Indeed, from 1990 to 1998, population in rural areas grew faster than in urban areas in over 60% of the counties in the Rocky Mountain states (Theobald 2001, Odell et al. 2003).

In much of the Mountain West, there are three principal land uses beyond city limits: protected areas, ranches, and ranchettes. Maestas et al. (2003) examined songbirds, carnivores, and plant communities on these three land uses in Larimer County, Colorado. Importantly, their data came from sites that were similar in elevation, soil type, and plant community type. They found that the density of songbirds and carnivores were more similar between ranches and protected areas (without livestock grazing) than on the ranchettes. The songbirds and carnivores that were most abundant on the ranchettes included dogs, cats, Black-billed Magpies, European Starlings, and other human-adapted species. Songbirds and carnivores that occurred on ranches and protected areas were uncommon or did not occur on land in ranchettes. Importantly, many of these songbirds are of conservation concern, whereas the birds that did best on ranchettes are common and increasing across the West (Maestas et al. 2003).

The plant communities across these three land uses were even more distinct. Native plant species were more prevalent and nonnative species were less prevalent on ranches than in either protected areas or ranchettes (Maestas et al. 2002). The greatest number of nonnative species was found on the ranchettes, with eight of 23 nonnative species being found only on the ranchette developments. In addition, percent cover of nonnative plants was highest on the ranchettes and protected areas and was significantly lower on ranches.

The effects of RRD are often manifest as a function of distance from home site and roads. In Pitkin County, Colorado, the biodiversity responses to ranchettes extended out as far as 330 m into undeveloped areas, although most effects diminished at approximately 100 m from the homes (Odell and Knight 2001). Humanadapted species, such as Brown-headed Cowbirds,

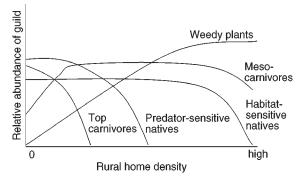


FIG. 4. Hypothesized responses of various guilds of species to rural home density.

Black-billed Magpies (*Pica pica*), and American Robins (*Turdus migratorius*), all occurred at higher densities near homes and at lower densities away from homes. Similarly, domestic dogs (*Canis familiaris*) and house cats (*Felis domesticus*) were more likely to be detected near homes than away from homes, while coyotes (*Canis latrans*) and red foxes (*Vulpes vulpes*) showed the reverse pattern (Odell and Knight 2001).

Such findings help elucidate the true ecological costs associated with RRD. Rather than simply acknowledging that rural residences perforate the landscape, one can begin to calculate the magnitude of land affected beyond the building site (Theobald et al. 1997). Assuming the depth of the house-edge effect is 100 m, and including a similar depth of road-effect (Forman 2000), Odell and Knight (2001) found that approximately one-fifth of the land area of the subdivided ranches they studied was affected by houses and roads.

# General effects of RRD on biodiversity

Compared with the urban fringe, development in rural areas distant from cities generally involves the lower intensity land uses of exurban home development. The Colorado case study suggests that this low-density housing can have effects on biodiversity that are more extreme than traditional rural land uses such as such as protected areas or ranching. The relative impacts of RRD on biodiversity compared to other rural land uses such as logging, grazing, crop agriculture, and backcountry recreation, however, are little studied. We can speculate that each has unique influences on biodiversity that are related to the nature of the land use. The plowing associated with crop agriculture likely alters soil communities to a greater extent than does RRD, but has fewer impacts associated with roads or with human disturbance. Similarly, logging may more greatly change forest structure and composition and disrupt soil layers. There may sometimes also be considerable overlap in impacts among these land use types. A study in south western Montana found that density of cowbirds and parasitism of native bird species were significantly associated with density of homes, area in

crops, and livestock densities within 6 km of riparian habitats (Hansen et al. 1999). Presumably this results because all three of these land use types provide supplemental foods that attract cowbirds. One way that RRD differs from the other rural land uses is its longevity. While logging and recovery typically occur in cycles, and livestock grazing and crop agriculture often have rest rotations, RRD is permanent on the order of decades or longer and its effects may intensify over this time.

The effect of land use is a function not only of land use type but also its intensity. In the case of RRD, home density is likely an important measure of intensity. A common perception is that homes scattered at low densities have little influence on biodiversity, while dense subdivisions have a large effect. Again, however, little research has examined how impacts on biodiversity vary with rural home density and development pattern.

As is the case with development intensity under UFD, we speculate that the relationship with rural home density under RRD varies among the different elements of biodiversity (Fig. 4). Top carnivores may be reduced even at low home densities as the expanding network of roads allows increased human access, hunting, and human disturbance. This may allow for an expansion of native or exotic meso predators and brood parasites. Consequently, native species vulnerable to predation and nest parasitism may undergo reduced survival and reproduction at low to medium densities of homes. Weedy plant diversity may increase at low home densities in association with roads, increase somewhat linearly with home density, then drop at high home densities as most of the land area is converted to lawns and ornamental plants. Suburban adaptables that benefit from human food sources and habitats may increase in proportion to home density. Finally, species richness of native species that require native habitats may decline only at higher home densities as the area of remaining habitat fall below key thresholds. Future research is needed to test these hypotheses and to identify key thresholds.

The effects of rural home density undoubtedly interact with the spatial distribution of homes and the behaviors of home owners. If homes are clustered, total road density is reduced and the ecological effects of each home overlap, allowing a larger proportion of the landscape to be free of these effects. Consequently, local planners often recommend clustered development to reduce ecological impacts and to reduce costs of government services (Daniels 1999). Also, home owners may reduce impacts on biodiversity by controlling weeds along roads, landscaping with native plant species, confining pets, covering compost, and managing livestock, pet foods, trash, and other artificial food sources including bird feeders to prevent access to wildlife.

A unique aspect of RRD compared with UFD is that rural homes are more likely to be placed in landscapes that include public lands with natural habitats and wilderness conditions. Typically, the sites productive for agriculture were claimed for private ownership, while less-productive mountain and desert settings remained under public control (Huston 2005). This has resulted in a high level of interspersion among private and public lands (Theobald 2000). An increasing number of people are now building homes on the edges of public lands for increased access to outdoor recreation, scenery, and solitude (Knight and Clark 1998). Consequently, the aura of impacts radiating from each home may extend hundreds of meters to kilometers within the public land boundary and alter biodiversity within this zone. Homes on the periphery of public lands may also attract wilderness species such as bears from the public lands, leading to increased mortality and declines in population sizes within the public lands (Mace and Waller 2002).

In the Greater Yellowstone Ecosystem, for example, national parks, national forests, and other public lands cover the majority (71.6%) of the land area. The private lands are largely in river valleys. These private lands have a longer growing season, better soils, and higher primary productivity than the public lands (Hansen et al. 2000). These same attributes make these settings attractive for native species. Consequently, the distribution of rural homes overlaps significantly with hotspots for birds (Hansen et al. 2002). The rural homes, livestock, and agriculture near the bird hotspots attract nest parasites and predators and result in reduced nest success of several native species (Hansen and Rotella 2002). P. H. Gude, A. J. Hansen, and D. A. Jones (unpublished manuscript) found that 49% of deciduous woodlands (the richest bird habitat in the area) across Greater Yellowstone are within 1 km of a home. Hence, even in this large, wilderness system, which is dominated by public lands, the effects of rural homes may extend over a substantial portion of key habitats.

We conclude that like exurban development on the urban fringe, exurban expansion in rural landscapes may have substantial negative impacts on native biodiversity. Considerable research is needed to better understand the effects of rural home density, spatial distribution, and homeowner behavior on biodiversity impacts. A particular concern about exurban development in rural areas is that it is more likely to be in close proximity to public lands and associated wilderness species.

# MECHANISMS LINKING EXURBAN DEVELOPMENT AND BIODIVERSITY

The mechanisms underlying these responses to land use are generally less well studied than the patterns described above. Case studies provide insights for some mechanisms, but adequate comparative study and experimentation is generally not available to allow for derivation of general predictive principles. Below we describe the suite of factors that have been suggested to explain biodiversity responses to exurban and urban development. These involve changes in habitats, ecological processes, interactions among species, and human-related disturbance of native species. Our goal is to encourage additional research on these mechanisms. Beyond improving scientific understanding, knowledge of these mechanisms may provide the basis for management strategies to reduce the effects of exurban development on biodiversity.

# Habitat alteration

As human settlement progresses, conversion of native habitat to roads, yards, and structures tend to fragment the landscape (Soulé et al. 1998, Marzluff and Ewing 2001). Fragmentation influences biodiversity through reduction of habitat area, creation of dispersal barriers (Trombulak and Frissell 2000, Marzluff and Ewing 2001), disruption of nutrient cycling, and increases in predation, parasitism, and competition (Marzluff and Ewing 2001). In the Seattle case study, reduction in the area of forest patches was thought to explain the loss of forest-dwelling bird species. Isolation of small canyons in California by subdivisions lessened the dispersal capabilities of and resulted in decreased species diversity for chaparral-requiring birds (Soulé et al. 1988).

In addition to habitat fragmentation, residential development may change microhabitat features. For example, decreasing abundance of native plant cover with increasing urbanization was correlated with decreasing bee, bird, and lizard species richness in Arizona (Germaine et al. 1998, Germaine and Wakeling 2001, McIntyre and Hostetler 2001). In Illinois, replacement of natural sandy patches with grassy patches in a residential area resulted in decreased snapping turtle (Chelydra serpentina) nesting success (Kolbe and Janzen 2002). Reduced course woody debris input (Christensen et al. 1996) tied to exurban development in Wisconsin and Michigan lakes reduced growth rates of bluegill sunfish (Lepomis macrohirus) but did not significantly affect largemouth bass (Micropterus salmoides) (Schindler et al. 2000).

The nonrandom location of land use relative to biophysical gradients and biodiversity may cause the resulting habitat fragmentation resulting from human settlement to have disproportionately large effects. We described above the concentration of rural residences in productive valley bottoms in mountainous landscapes (Riebsame et al. 1996, Theobald et al. 1996, Soulé et al. 1998, Hansen et al. 2002, Seabloom et al. 2002). Other favored settings for RRD include lakeshores in the upper Midwest (Beale and Johnson 1998), coastal areas (Seabloom et al. 2002), and wetlands in the coastal states (Brady and Flather 1994). Because both humans and native species tend to concentrate in such locations (Hansen et al. 2002, Seabloom et al. 2002), the impacts of exurban development may be focused on the most critical habitats (see also Huston 2005).

# Alteration of ecological processes

Less visible than habitat destruction, ecological processes such as disturbance regimes may be altered by exurban development and in turn influence habitats and biotic assemblages. In many parts of the arid west, humans have excluded fires from urbanizing landscapes to protect human property and lives. In Oklahoma, for example, such fire exclusion has led to increased juniper (Juniperus spp.) encroachment in suburban and rural habitats since 1950, as human population density increased (Coppedge et al. 2001). Correlated with the increase in juniper, the passerine community has also been altered. American Robin and Eastern Bluebird (Sialia sialis) abundance showed a unimodal trend with highest abundance at intermediate levels of juniper encroachment. Three species of potential juniper-feeders, Cedar Waxwing (Bombycilla cedrorum), Ruby-crowned Kinglet (Regulus celendula), and Yellow-rumped Warbler (Dendroica coronata), increased with juniper encroachment levels. Four species, Song Sparrow (Melospiza melodia), Whitecrowned Sparrow (Zonotricha querula), House Sparrow, and American Goldfinch (Carduelis tristis), declined with increased levels of juniper encroachment. In other urbanizing environments, in contrast, increased human ignitions have accelerated fire frequency and decreased later seral habitats (Keeley 2002).

Flood regimes may also be altered with urbanization with consequences for riparian communities. For example, plains cottonwood (*Populus deltoides*) establishment on the floodplain and terrace of Boulder Creek in Boulder, Colorado declined from 1937 to 1992 as stream diversion, straightening, stabilization, and clearing led to decreased channel movement, decreased peak flow and a decreased flooding frequency in the floodplain. Concurrently, species less tolerant to flooding events—including the exotics crack willow (*Salix rubens*) and Russian-olive (*Elaeagnus angustifolia*)— have encroached upon the floodplain (Auble et al. 1997).

Changes to nutrient cycles are also likely with conversion to exurban land uses. Along an urban-rural gradient in New York, nitrogen and phosphorous levels in oak forest soils increased with increasing urbanization (Pouyet et al. 1995). Increased nitrogen availability tends to simplify biotic communities and favor exotic species (Vitousek et al. 1997). Nutrient effects may be particularly manifest in aquatic systems. Natural-amenity exurban development around four Wisconsin lakes has affected water quality and altered diatom communities (Garrison and Wakeman 2000). As once-seasonal homes along these lakeshores were converted to year-long use, the amount of impervious surface increased and consequently run-off and sediment load to the lakes also increased. Increased levels of phosphorous, iron, and aluminum were tied to a shift from benthic to mainly planktonic diatoms and an increase in diatom taxa indicative of eutrophic conditions. Water quality in the higher alkalinity lakes showed improvement as construction slowed, but the lower alkalinity lakes appeared to be more sensitive to shoreline development, and water quality did not improve in these lower alkalinity lakes.

# Alteration of biotic interactions

As human settlement alters species distributions, interactions among species may be changed with consequences for species viability and ecosystem function (Daszak et al. 2000, Marzluff 2001). Best studied among these changes in biotic interactions are predator-prey relationships. As illustrated by the Colorado case study, both native and nonnative predators may become abundant near human development and inflict heavy prey heavily upon other native species. Similarly, Wilcove (1985) found that suburban woodlots in Maryland experienced significantly higher rates of nest predation than did rural woodlots, likely as a result of higher densities of nest predators such as the Blue Jay (Cyanocitta cristata), Common Grackle (Quiscalus quiscula), gray squirrel (Sciurus carolinensis), and raccoon. Some predators may become abundant near human dwellings due to human subsidized food supplies (Marzluff 2001). This may also result from the loss of large carnivores that are intolerant to urbanizing landscapes, and the consequential release of mesopredators that are tolerant to human influences (Soulé et al. 1988, Crooks and Soulé 1999). Herbivores are also released by the elimination of large predators in developed areas, and the increased herbivory by deer and rabbits can have a major effect on plant diversity, both in urban parks and the surrounding landscapes.

Because predator occurrence and tolerance vary geographically, biodiversity response to urbanization may vary among regions of the United States. As described above, native songbird nest success declined in Montana as cowbird density in creased with rural home density (Tewksbury et al. 1998, Hansen and Rotella 2002). In contrast, the absence of Brown-headed Cowbirds in King County, Washington, may be a factor in the lack of nest parasitism in the Seattle case study (Donnelly and Marzluff 2004).

Changes in competitive interactions induced by development are well illustrated by invasive plant interactions with native species. English Ivy (*Hedera helix*) was introduced as an ornamental plant and kills native trees through competition for light (Reichard 2000) in much of the continental United States. Similarly, Norway maple (*Acer platanoides*), a shade tree introduced to eastern deciduous forests, out-competes native maples and beeches (Webb et al. 2001).

Many examples of the spread of infectious diseases related to human settlement exist. These can be classified as (1) human facilitated dispersal or translocation of hosts and parasites, (2) supplemental feeding, and (3) disease "spill-over" from domestic to wild populations (Daszak et al. 2000). Supplemental feeding of white-tailed deer at rural home sites was found to be directly related to the maintenance of bovine tuberculosis in Michigan deer populations (Michigan Department of Natural Resources 1999). Similarly, birdfeeders were found to increase the concentration of House Finches (Carpdacus mexicanus) and other bird species, enhancing the spread of mycoplasmal conjunctivitis (Fisher et al. 1997, Nolan et al. 1998). Last, many examples of "spill-over" of infectious diseases to wildlife involve domestic dogs. Canine distemper virus, canine parvovirus, and sarcoptic mange (Sarcoptes scabiei) are three pathogens known to have spread due to domestic dog-wildlife interactions, and are suspected to have caused population declines in the endangered gray wolf (Canis lupus) and black-footed ferret (Mustela nigripes) (Daszak et al. 2000).

# Human disturbance

Finally, the presence of humans and their pets around home sites can directly influence biodiversity. Human presence in yards or on trails near homes may displace some species of wildlife. Bald Eagles (*Haliaeetus leucocephalus*), for example, may decline in number in areas with increasing human recreation (Brown and Stevens 1997, Stalmaster and Kaiser 1998). Pronghorn antelope (*Antilocapra Americana*) on Antelope Island State Park in Utah retreated further from trails once they were opened for recreational use (Fairbanks and Tullous 2002). Likewise, elk (*Cervus Canadensis*) approached by humans during calving season, were repeatedly displaced resulting in elevated calf mortality (Phillips and Alldredge 2000).

Pets may also displace, injure, or kill wildlife. Pet cats are responsible for the deaths of millions of birds in the United States every year, and in Wisconsin alone, an estimated 39 million birds per year are lost to domestic cats (Coleman and Temple 1996). Pet dogs also act as predators in many ecosystems. In Florida, pet dogs have effected the distribution of the endangered key deer (O. virginianus clavium), and are suspected to have eliminated them from several islands in the Florida Keys. In Colorado, the flushing distance of ungulates to human hikers was increased if a pet dog was present (Miller et al. 2001). Because rural pets kill more than their suburban and urban counterparts, adverse effects on native species are potentially greatest in the undisturbed habitat near new rural residential developments (Barratt 1998).

# December 2005

Another direct consequence of suburban and exurban residential growth in the United States has been an increase in vehicle miles traveled per person and per household, escalating the potential for roadkill. Between 1980 and 2000, overall per capita vehicular travel in the United States increased by 48.7%, of which the fastest growing component was "home-based" travel, including shopping, recreation, and driving to school. Although mortality of animals from collision with vehicles is best documented in large mammals, few terrestrial species are immune (Trombulak and Frissell 2000). Roadkill has affected the demographics and migrations of birds, snakes, invertebrates, and amphibians, and is a major cause of mortality for moose, lynx (Felis pardina), wolves, and American crocodile (Crocodilus acutus) in various regions of the United States (Trombulak and Frissell 2000).

## CONCLUSION

Our major conclusion is that exurban development is a pervasive and fast-growing form of land use that is substantially understudied by ecologists and has large potential to alter biodiversity. Covering about 25% of the land area of the conterminous United States in 2000 (Brown et al. 2005), area in exurban land use increased since 1974 at rates in excess of area in urban or agricultural land uses. Ecologists have traditionally focused research on wild or semi-wild lands (Miller and Hobbs 2002). The relatively few studies on exurban development are mostly done as contrasts to urban land use. Consequently, knowledge of the effects of exurban density, spatial configuration, and homeowner behavior on biodiversity, and specific mechanisms for response is poorly developed.

The relatively few studies on exurban development suggest that its impacts on biodiversity may be substantial, both in the immediate vicinity of homes and even on adjacent or even distant public lands. These impacts are summarized as follows.

1) Many native species incur reduced survival and reproduction near homes and consequently native species richness generally drops with increased exurban densities. At the same time, some exotic species and some human-adapted native species generally increase with intensity of exurban development.

2) The relationship between these elements of biodiversity and intensity of exurban development are sometimes nonlinear, with sharp thresholds were biodiversity changes abruptly with incremental increases in exurban intensity. Knowledge of these thresholds is important for managing exurban development to achieve biodiversity objectives.

3) These affects may be manifest for several decades following exurban development, so that biodiversity is likely still responding to the wave of exurban expansion that has occurred since 1950.

4) The location of exurban development is often nonrandom relative to biodiversity because both are influenced by biophysical factors such that they are concentrated in more equitable landscape settings. Consequently, the effects on biodiversity may be disproportionately large relative to the area of exurban development.

5) The effects of exurban development on biodiversity likely differ among ecosystem types. Additional research is needed to derive generalities on the types of ecosystems that are relatively vulnerable to exurban development.

6) An identifiable set of ecological mechanisms link exurban development and biodiversity. More research is needed on these mechanisms and the resulting knowledge can help with understanding, managing, and mitigating these impacts.

7) In addition to local effects, exurban development may alter ecological processes and biodiversity on adjacent and distant public lands. Consequently, exurban development in rural areas may have even more important impacts than in the urban fringe because of the elevated influence on lands dedicated to conservation and on wilderness species that are rare in human-dominated landscapes.

It is our hope that this review inspires the additional research that is needed to better understand and manage the impacts of this important type of land use.

# ACKNOWLEDGMENTS

We thank the NASA Land Cover Land Use Program, the EPA Regional Sustainability Programs, and the National Science Foundation (DEB-9875041, BCS-0120024, IGERT-0114351) for financial support. Josh Newell drafted Fig. 1. Michael Huston, two anonymous reviewers, and editor Monica Turner provided helpful comments on the manuscript.

# LITERATURE CITED

- Auble, G. T., M. L. Scott, J. M. Friedman, J. Back, and V. J. Lee. 1997. Constraints on establishment of plains cottonwood in an urban riparian preserve. Society of Wetland Scientists 17:138–148.
- Barratt, D. G. 1998. Predation by house cats (*Felis catus*) in Canberra II: factors affecting the amount of prey caught and estimates of the impact. Wildlife Research 25:475–487.
- Beale, C. L., and K. M. Johnson. 1998. The identification of recreational counties in nonmetropolitan areas of the USA. Population Research and Policy Review 17:37–53.
- Blair, R. B. 1996. Land use and avian species along an urban gradient. Ecological Applications 6:506–519.
- Blair, R. B. 1999. Birds and butterflies along an urban gradient: surrogate taxa for assessing biodiversity? Ecological Applications 9:164–170.
- Boal, C. W., and R. W. Mannan. 1998. Nest-site selection by Cooper's Hawks in an urban environment. Journal of Wildlife Management 62:864–871.
- Bock, C. E., K. T. Vierling, S. L. Haire, J. D. Boone, and W. W. William. 2002. Patterns of rodent abundance on openspace grasslands in relation to suburban edges. Conservation Biology 16:1653–1658.
- Brady, S. J., and C. H. Flather. 1994. Changes in wetlands on nonfederal rural land of the conterminous United States from 1982 to 1987. Environmental Management 18:693– 705.

- Brown, B. T., and L. E. Stevens. 1997. Wintering Bald Eagle distribution is inversely correlated with human activity along the Colorado River, Arizona. Journal of Raptor Research 31:7–10.
- Brown, D. G., K. M. Johnson, T. R. Loveland, and D. M. Theobald. 2005. Rural land-use trends in the conterminous United States, 1950–2000. Ecological Applications 15: 1851–1863.
- Christensen, D. L., B. R. Herwig, D. E. Schindler, and S. R. Carpenter. 1996. Impacts of lakeshore residential development on coarse woody debris in north temperate lakes. Ecological Applications 6:1143–1149.
- Coleman, J. S., and S. A. Temple. 1996. On the prowl. Wisconsin Natural Resources 20:4–8.
- Coppedge, B. R., D. M. Engle, S. D. Fuhlendorf, R. E. Masters, and M. S. Gregory. 2001. Urban sprawl and juniper encroachment effects on abundance of wintering passerines in Oklahoma. Pages 225–242 *in* J. M. Marzluff, R. Bowman, and R. Donnelly, editors. Avian ecology and conservation in an urbanizing world. Kluwer Academic Publishers, Boston, Massachusetts, USA.
- Cromartie, J. B., and J. M. Wardwell. 1999. Migrants settling far and wide in the rural West. Rural Development Perspectives. 14:2–8.
- Crooks, K. R, and M. E. Soulé. 1999. Mesopredator release and avifaunal extinctions in a fragmented system. Nature 400:563–566.
- Daniels, T. 1999. When city and country collide: managing growth in the metropolitan fringe. Island Press, Washington, D.C., USA.
- Daszak, P., A. A. Cunningham, and A. D. Hyatt. 2000. Wildlife ecology—emerging infectious diseases of wildlife threats to biodiversity and human health. Science **287**:443– 449.
- Denys, C., and H. Schmidt. 1998. Insect communities on experimental mugwort (*Artemesia vulgaris* L.) plots along an urban gradient. Oecologia 113:269–277.
- Donnelly, R. 2002. Design of habitat reserves and settlements for bird conservation in the Seattle metropolitan area. Dissertation. University of Washington, Seattle, Washington, USA.
- Donnelly, R., and J. M. Marzluff. 2004. Importance of reserve size and landscape context to urban bird conservation. Conservation Biology 18:733–745.
- Fairbanks, W. S., and R. Tullous. 2002. Distribution of pronghorn (*Antilocapra americana* Ord) on Antelope Island State Park, Utah, USA, before and after establishment of recreational trails. Natural Areas Journal 22:277–282.
- Fischer, J. R., D. E. Stallknecht, M. P. Luttrell, A. A. Dhondt, and K. A. Converse. 1997. Mycoplasmal conjuctivistis in wild songbirds: the spread of a new contagious disease in a mobile host population. Emerging Infectious Disease 3: 69–72.
- Forman, R. T. T. 2000. Estimate of the area affected ecologically by the road system in the United States. Conservation Biology **14**:31–35.
- Garrison, P. J., and R. S. Wakeman. 2000. Use of paleolimnology to document the effect of shoreland development on water quality. Journal of Paleolimnology 24:369–393.
- Germaine, S. S., S. S. Rosenstock, R. E. Schweinsburg, and W. S. Richardson. 1998. Relationships among breeding birds, habitat, and residential development in greater Tucson, Arizona. Ecological Applications 8:680–691.
- Germaine, S. S., and B. F. Wakeling. 2001. Lizard species distributions and habitat occupation along an urban gradient in Tucson, AZ, U.S.A. Biological Conservation 97: 229–237.
- Gersh, J. 1996. Subdivide and conquer: concrete, condos, and the second conquest of the American West. Amicus Journal **18**:14–20.

- Hansen, A. J., R. Rasker, B. Maxwell, J. J. Rotella, A. Wright, U. Langner, W. Cohen, R. Lawrence, and J. Johnson. 2002. Ecology and socioeconomics in the New West: a case study from Greater Yellowstone. BioScience 52:151–168.
- Hansen, A. J., and J. J. Rotella. 2002. Biophysical factors, land use, and species viability in and around nature reserves. Conservation Biology 16:1112–1122.
- Hansen, A. J., J. J. Rotella, and M. L. Kraska. 1999. Dynamic habitat and population analysis: a filtering approach to resolve the biodiversity manager's dilemma. Ecological Applications 9:1459–1476.
- Hansen, A. J., J. J. Rotella, M. L. Kraska, and D. Brown. 2000. Spatial patterns of primary productivity in the Greater Yellowstone Ecosystem. Landscape Ecology 15:505– 522.
- Harrison, R. L. 1997. A comparison of gray fox ecology between residential and undeveloped rural landscapes. Journal of Wildlife Management **61**:112–122.
- Healy, R. G., and J. L. Short. 1981. The market for rural land: trends, issues and policies. Conservation Foundation, Washington, D.C., USA.
- Hoffmann, C. O., and J. L. Gottschang. 1997. Numbers, distribution, and movements of a raccoon population in a suburban residential community. Journal of Mammology 58: 623–636.
- Huston, M. A. 2005. The three phases of land-use change: implications for biodiversity. Ecological Applications 15: 1864–1878.
- Ianni, C. 2004. Birds on loan: measuring the extinction debt of urbanization. Thesis. University of Washington, Seattle, Washington, USA.
- Johnson, K. M. 1998. Renewed population growth in rural America. Research in Rural Sociology and Development 7:23–45.
- Keeley, J. E. 2002. Fire management of California shrubland landscapes. Environmental Management 29:395–408.
- Knight, R. L. 1998. A field report from the New West. Pages 181–200 in C. Meine, editor. Wallace Stegner and the continental vision. Island Press, Washington, D.C., USA.
- Knight, R. L., and T. W. Clark. 1998. Boundaries between public and private lands: defining obstacles, finding solutions. Pages 175–191 *in* R. L. Knight and P. B. Landres, editors. Stewardship across boundaries. Island Press, Washington, D.C., USA.
- Kolbe, J. J., and F. J. Janzen. 2002. Impact of nest-site selection on nest success and nest temperature in natural and disturbed habitats. Ecology **83**:269–281.
- Lehtinen, R. M., S. M. Galatowitsch, and J. R. Tester. 1999. Consequences of habitat loss and fragmentation for wetland amphibian assemblages. Wetlands 9:1–12.
- Mace, R. D., and J. S. Waller. 2002. Population trend of grizzly bears in the Swan Mountains, Montana. Conservation Biology 12:1005–1016.
- Maestas, J. D., R. L. Knight, and W. C. Gilgert. 2002. Cows, condos, or neither: what's best for rangeland ecosystems? Rangelands 24:36–42.
- Maestas, J. D., R. L. Knight, and W. C. Gilgert. 2003. Biodiversity across a rural land-use gradient. Conservation Biology 17:1425–1434.
- Marzluff, J. M. 2001. Worldwide urbanization and its effects on birds. Pages 19–48 in J. M. Marzluff, R. Bowman, and R. Donnelly, editors. Avian ecology and conservation in an urbanizing world. Kluwer Academic Publishers, Boston, Massachusetts, USA.
- Marzluff, J. M. *In press*. Island biogeography for an urbanizing world: how extinction and colonization may determine biological diversity in human dominated landscapes. Urban Ecosystems.
- Marzluff, J. M., and K. Ewing. 2001. Restoration of fragmented landscapes for the conservation of birds: a general

framework and specific recommendations for urbanizing landscapes. Restoration Ecology **9**:280–292.

- McGranahan, D. A. 1999. Natural amenities drive population change. Pages 1–24*in* Report 781. Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture, Washington, D.C., USA.
- McIntyre, N. E., and M. E. Hostetler. 2001. Effects of urban land use on pollinator (Hymenoptera: Apoidea) communities in a desert metropolis. Basic and Applied Ecology 2:209–218.
- McKinney, M. L. 2002. Urbanization, biodiversity, and conservation. BioScience 52:883–890.
- Miller, J. R., J. M. Fraterrigo, N. T. Hobbs, D. M. Theobald, and J. A. Wiens. 2001. Urbanization, avian communities, and landscape ecology. Pages 117–136 *in* J. M. Marzluff, R. Bowman, R. McGowan, and R. Donnelly, editors. Avian ecology in an urbanizing world. Kluwer, Boston, Massachusetts, USA.
- Miller, J. R., and R. J. Hobbs. 2002. Conservation where people live and work. Conservation Biology 16:330–337.
- Miyashita, T., A. Shinaki, and T. Chida. 1998. The effects of forest fragmentation on web spider communities in urban areas. Biological Conservation **86**:357–364.
- Nelson, P. B. 1999. Quality of life, nontraditional income, and economic growth: new development opportunities for the rural West. Rural Development Perspectives. 14:32–37.
- Nolan, P. M., G. E. Hill, and A. M. Stroehr. 1998. Sex, size, and plumage redness predict house finch survival in an epidemic. Proceedings of the Royal Society of London, Series B, Biological Sciences 256:961–965.
- Odell, E. A., and R. L. Knight. 2001. Songbird and mediumsized mammal communities associated with exurban development in Pitkin County, Colorado. Conservation Biology 15:1143–1150.
- Odell, E. A., D. M. Theobald, and R. L. Knight. 2003. Incorporating ecology into land use planning: the songbirds' case for clustered development. Journal of the American Planning Association 69:72–82.
- Phillips, G. E., and A. W. Alldredge. 2000. Reproductive success of elk following disturbance by humans during calving season. Journal of Wildlife Management 64:521– 530.
- Pouyet, J. L., M. J. McDonnell, and S. T. A. Pickett. 1995. Soil characteristics of oak stands along an urban-rural gradient. Journal of Environmental Quality 24:516–526.
- Racey, G. D., and D. L. Euler. 1982. Small mammal and habitat response to shoreline cottage development in central Ontario. Canadian Journal of Zoology 60:865–880.
- Raish, C., W. Yong, and J. M. Marzluff. 1997. Contemporary human use of southwestern ponderosa pine forests. Pages 28–42 *in* D. M. Finch and W. M. Block, editors. Songbird ecology in southwestern ponderosa pine forests. General technical report RM-292. USDA Forest Service, Fort Collins, Colorado, USA.
- Rasker, R., and A. J. Hansen. 2000. Natural amenities and population growth in the Greater Yellowstone region. Human Ecology Review 7:30–40.
- Reichard, S. 2000. *Hedera helix*. Pages 212–216 in J. M. Randall, C. Bossard, and M. C. Hoshovesky, editors. Invasive plants of California wildlands. University of California Press, Berkeley, California, USA.
- Riebsame, W. E., H. Gosnell, and D. M. Theobald. 1996. Land use and landscape change in the Colorado mountains

I: theory, scale and pattern. Mountain Research and Development **16**:395–405.

- Robinson, L., J. P. Newell, and J. M. Marzluff. 2005. Twentyfive years of sprawl in the Seattle region: growth management responses and implications for conservation. Landscape and Urban Planning 71:51–72.
- Rudzitis, G. 1999. Amenities increasingly draw people to the rural West. Rural Development Perspectives. **14**:9–13.
- Schindler, D. E., S. I. Geib, and M. R. Williams. 2000. Patterns of fish growth along a residential development gradient in north temperate lakes. Ecosystems 3:229–237.
- Schneider, R. R., and S. Wasel. 2000. The effect of human settlement on the density of moose in northern Alberta. Journal of Wildlife Management 64:513–520.
- Seabloom, E. W., A. P. Dobson, and D. M. Stoms. 2002. Extinction rates under nonrandom patterns of habitat loss. Proceedings of the National Academy of Science (USA) 99:11 229–11 234.
- Soulé, M. E., D. T. Bolger, A. C. Alberts, J. Wright, M. Sorice, and S. Hill. 1988. Reconstructed dynamics of rapid extinctions of chapparal-requiring birds in urban habitat islands. Conservation Biology 2:75–92.
- Stalmaster, M. V., and J. L. Kaiser. 1998. Effects of recreational activity on wintering bald eagles. Wildlife Monographs 137:5.
- Tewksbury, J. J., S. J. Hejl, and T. E. Martin. 1998. Breeding productivity does not decline with increasing fragmentation in a western landscape. Ecology **79**:2890–2903.
- Theobald, D. M. 2000. Fragmentation by inholdings and exurban development. Pages 155–174 in R. L. Knight, F. W. Smith, S. W. Buskirk, W. H. Romme, and W. L. Baker, editors. Forest fragmentation in the southern Rocky Mountains. University of Colorado Press, Fort Collins, Colorado, USA.
- Theobald, D. M. 2001. Land-use dynamics beyond the American urban fringe. Geographical Review **91**:544–564.
- Theobald, D. M., H. Gosnell, and W. E. Riebsame. 1996. Land use and landscape change in the Colorado Mountains II: a case study of the East River Valley. Mountain Research and Development 16:407–418.
- Theobald, D. M., J. R. Miller, and N. T. Hobbs. 1997. Estimating the cumulative effects of development on wildlife habitat. Landscape and Urban Planning 39:25–36.
- Trombulak, S. C., and C. A. Frissell. 2000. Review of ecological effects of roads on terrestrial and aquatic communities. Conservation Biology 14:18–30.
- Ullman, E. 1954. Amenities as a factor in regional growth. Geographic Review 44:119–132.
- Vitousek, P. M., J. D. Aber, R. H. Howarth, G. E. Likens, P. A. Matson, D. W. Schindler, W. H. Schlesinger, and D. G. Tilman. 1997. Human alteration of the global nitrogen cycle: source and consequences. Ecological Applications 7: 737-750.
- Vogel, W. O. 1989. Response of deer to density and distribution of housing in Montana. Wildlife Society Bulletin 17:406-413.
- Webb, S. L., T. H. Pendergast, and M. E. Dwyer. 2001. Response of native and exotic maple seedling banks to removal of the exotic, invasive Norway maple (*Acer platanoides*). Journal of the Torrey Botanical Society **128**:141– 149.
- Whitney, G. G. 1985. A quantitative analysis of the flora and plant communities of a representative midwestern U.S. town. Urban Ecology **9**:143–160.
- Wilcove, D. S. 1985. Nest predation in forest tracts and the decline of migratory songbirds. Ecology 66:1211–1214.

# EXHIBIT 6



# DOMESTIC CAT PREDATION ON BIRDS AND OTHER WILDLIFE



# How many birds and other wildlife do domestic cats kill each year in the U.S.?

Exact numbers are unknown, but scientists estimate that nationwide, cats kill hundreds of millions of birds, and more than a billion small mammals, such as rabbits, squirrels, and chipmunks, each year. Cats kill common species such as Cardinal, Blue Jay, and House Wren, as well as rare and endangered species such as Piping Plover, Florida Scrub-Jay, and California Least Tern.

There are more than 77 million pet cats in the United States. A 1997 nationwide poll showed that only 35% are kept exclusively indoors, leaving the majority of owned cats free to kill birds and other wildlife at least some of the time. In addition, millions of stray and feral cats roam our cities, suburbs, farmlands and natural areas. Abandoned by their owners or lost (stray), or descendants of strays and living in the wild (feral), these cats are victims of human irresponsibility due to abandonment and failure to spay or neuter pets. No one knows how many homeless cats there are in the U.S., but estimates range from 60 to 100 million. These cats lead short, miserable lives.

Loss of wildlife habitat and fragmentation due to human development are the leading causes of declining bird populations. However, scientists now list invasive species, including cats, as the second most serious threat to bird populations worldwide. Habitat fragmentation provides cats and other predators easier access to wildlife forced to live on smaller tracts of land. Rather than havens for wildlife, these areas can be death traps.

# Cats Are Not a Natural Part of Ecosystems

The domestic cat, *Felis catus*, is a descendant of the European and African wild cats. Domesticated in Egypt more than 4,000 years ago, cats may be the most widespread predator in the world. In the U.S., cats were not abundant until the late 1800s when they were brought to help control burgeoning rodent populations associated with agriculture. Some people view cat predation of rodents as beneficial, but native small mammals are important to maintaining biologically diverse ecosystems. Field mice and shrews are also important prey for birds such as Great Horned Owl and Red-tailed Hawk.



Great Horned Owl

# **Cats Compete With Native Predators**

Owned cats have huge advantages over native predators. They receive protection from disease, predation, competition, and starvation—factors which control native predators such as owls, bobcats, and foxes. Cats with dependable food sources are not as vulnerable to changes in prey populations. Unlike many native predators, cats are not strictly territorial. As a result, cats can exist at much higher densities and may out-compete native predators for food. Unaltered cats are also prolific breeders. In warmer climates, a female cat can have 3 litters per year, with 4 to 6 kittens per litter.

# Cats Transmit Disease to Wildlife

Unvaccinated cats can transmit diseases, such as rabies, to other cats, native wildlife and humans. Cats are the domestic animal most frequently reported to be rabid to the Centers for Disease Control and Prevention. Cats are also suspected of spreading fatal feline diseases to native wild cats such as mountain lion, the endangered Florida panther, and bobcat. For more information, see the fact sheet, **The Great Outdoors Is No Place For Cats at** <u>www.abcbirds.org/cats</u>.

# **Cat Predation Studies**

Extensive studies of the feeding habits of free-roaming domestic cats have been conducted over the last 55 years in Europe,



North America, Australia, Africa, and on many islands. These studies show that the number and types of animals killed by cats varies greatly, depending on the individual

California Quail

cats, the time of year, and availability of prey. Roughly 60% to 70% of the wildlife cats kill are small mammals; 20% to 30% are birds; and up to 10 are amphibians, reptiles, and insects. However, birds can be up to 100% of a cat's prey on some islands.

Some free-roaming domestic cats kill more than 100 animals each year. One well-fed cat that roamed a wildlife experiment station was recorded to have killed more than 1,600 animals (mostly small mammals) over 18 months. Rural cats take more prey than suburban or urban cats. Birds that nest or feed on the ground, such as California Quail, are the most susceptible to cat predation, as are nestlings and fledglings of many other bird species.

# The following are summaries of specific studies:

East Bay Regional Park District, CA: A two-year study was conducted in two parks with grassland habitat. One park had no cats, but more than 25 cats were being fed daily in the other park. There were almost twice as many birds seen in the park with no cats as in the park with cats. California Thrasher and California Quail, both ground-nesting birds, were seen during surveys in the no-cat area, whereas they were *never* seen in the cat area. In addition, more than 85% of the native deer mice and harvest mice trapped were in the no-cat area, whereas 79% of the house mice, an exotic pest species, were trapped in the cat area. The researchers concluded, "Cats at artificially high densities, sustained by supplemental feeding, reduce abundance of native rodent and bird populations, change the rodent species composition, and may facilitate the expansion of the house mouse into new areas." (Hawkins, C.C., W.E. Grant, and M.T. Longnecker. 1999. Effect of subsidized house cats on California birds and rodents. Transactions of the Western Section of The Wildlife Society 35:29-33).

**San Diego, CA**: In a study of the relationships between coyote, mid-sized predators such as cats, and scrub-dwelling birds, cat owners living along the rims of canyons collected the prey their cats brought home. These canyons are isolated pockets of habitat with species that may not occur elsewhere. On average, each outdoor cat that hunted returned 24 rodents, 15 birds, and 17 lizards to the residence per year. Birds were 26.7% of the prey killed by

cats. The researchers estimated that cats surrounding mid-sized canyons return 840 rodents, 525 birds, and 595 lizards to residences each year. This level of predation appears to be unsustainable. The study



Cat catching Yellow-rumped Warbler

also found that in small canyons where the coyote was absent, there was an increase in mid-sized predators such as cats, and a drastic decline in diversity or elimination of scrub-breeding birds. But in the larger canyons where coyotes were still present, the scrub-breeding birds were also present. (Crooks, K.R. and M.E. Soule. 1999. Mesopredator release and avifaunal extinctions in a fragmented system. *Nature* 400:563-566).

**England**: The Mammal Society conducted a survey of animals brought home by domestic cats. During a five-month period in 1997, 964 cats killed more than 14,000 animals. The mean number of catches or kills per cat was 16.7, and birds were 24% of the prey. The mean kill rates for belled cats was 19 and for no-bells 15. In other words, cats wearing bells killed more. Only 162 rats were killed by the cats, making them very poor ratters. The researchers concluded, "Although it is unlikely that cats alone will cause any species to become endangered in Britain, for those which are already under pressure for other reasons, such as thrushes, harvest mice, grass snakes, and slow worms, cats could become significant."(The Mammal Society. 1998. Look what the cat's brought in! www.abdn.ac.uk/mammal/catkills).

Wichita, KS: In a study of cat predation in an urban area, 83% of the 41 study cats killed birds. In all but one case, when feathers were found in scat, the owner was unaware that their cat had ingested a bird. In fact, the majority of cat owners reported their cats did not bring prey to them. Instead, the owners observed the cats with the bird or found remains in the house or in other locations. A declawed cat killed more animals than any other cat in the study. (Fiore, C. and K. B. Sullivan. Domestic cat (*Felis catus*) predation of birds in an urban environment. <u>www.geocities.com/the\_srco/Article.html</u>).

**Wisconsin:** Researchers at the University of Wisconsin coupled their four-year cat predation study with data from other studies, and estimated that *rural* free-roaming cats kill at least 7.8 million and perhaps as many as 217 million birds a year in Wisconsin. Suburban and urban cats add to that toll. In some parts of the state, free-roaming cat densities reach 114 cats per square mile, outnumbering all similar-sized native predators. (Coleman, J.S., S.A. Temple, and S.R. Craven. 1997. Cats and Wildlife: A

Conservation Dilemma. 6 pp. <u>www.wisc.edu/extension/</u> <u>catfly3.htm</u>). In an ongoing, but unpublished, study of cat prey items including stomach contents, scat analysis, observations of kills, and prey remains, birds were 19.6% of 1,976 prey captured by 78 outdoor cats (Temple, S.A, Univ. of WI, personal communication, 1/22/04).

**Virginia**: Researchers compared a free-roaming domestic pet cat in a rural area with 4 urban cats. The rural cat captured a total of 27 native species (8 bird, 2 amphibian, 9 reptile, and 8 mammal, including the star-nosed mole, a species of special state concern). The 4 urban cats captured 21 native species (6 bird, 7 reptile, and 8 mammal). Between January and November 1990 each cat caught, on average, 26 native individuals in the urban area, and 83 in the rural area. The study did not count prey killed and completely consumed, prey killed and left elsewhere, prey that escaped but died later from infection or injury, or non-native prey. (Mitchell, J. and R.A.Beck. 1992. Free-ranging domestic cat predation on native vertebrates in rural and urban Virginia. *Virginia Journal of Science* 43:197-206).

**Cats on Islands**: Because some island bird populations evolved in the absence of mammalian predators, they have no defense mechanisms against them. When cats are introduced or abandoned

on an island, elimination

populations can result.

Domestic cats are

considered primarily

responsible for the

extinction of 8 island

bird species, including

Stephens Island Wren,

bird

entire

of



Wedge-tailed Shearwater

Chatham Island Fernbird, and Auckland Island Merganser, and the eradication of 41 bird species from New Zealand islands alone. On Marion Island in the Sub-Antarctic Indian Ocean, cats were estimated to kill 450,000 seabirds annually prior to cat eradication efforts. (Veitch, C.R. 1985. Methods of eradicating feral cats from offshore islands in New Zealand. *ICBP Technical Publication* 3: 125-141).

**Cats in Habitat Islands:** Cats can have significant impacts on local wildlife populations, especially in habitat "islands" such as suburban and urban parks, wildlife refuges, and other areas surrounded by human development. The loss of bird species from habitat islands is well documented, and nest predation is an important cause of the decline of neotropical migrants. (Wilcove, D.S. 1985. Nest predation in forest tracts and the decline of migratory songbirds. *Ecology* 66: 1211-1214). The endangered Point Arena mountain beaver, Stephen's kangaroo rat, and Pacific pocket mouse now live on habitat islands created by destruction and fragmentation of their habitat in California. Predation by pet and

feral cats on these species is a serious threat to their future existence. (Thelander, C.G. and M. Crabtree. 1994. Life on the Edge. A Guide to California's Endangered Natural Resources: Wildlife. BioSystems Books, Santa Cruz, California).

# Cat Predation of Federally-Protected Wildlife

The Migratory Bird Treaty Act (MBTA) prohibits the hunting, taking, capturing, or killing of any migratory bird. In seeming violation of this landmark law, owners of free-roaming cats permit their pets to kill birds protected by the MBTA. As noted above, domestic cats are also killing birds and other wildlife protected under the Endangered Species Act (ESA).



Cat with Blackpoll Warbler

Through the ESA, the federal government protects and restores wildlife at risk of extinction. Although cats may not be responsible for the perilous status of endangered wildlife, the loss of even a single animal can be a setback to the survival of some species.

# The Truth About Cats and Birds:

**Well-fed Cats** <u>Do</u> **Kill Birds.** Well-fed cats kill birds and other wildlife because the hunting instinct is independent of the urge to eat. In one study, six cats were presented with a live small rat while eating their preferred food. All six cats stopped eating the food, killed the rat, and then resumed eating the food. (Adamec, R.E. 1976. The interaction of hunger and preying in the domestic cat (*Felis catus*): an adaptive hierarchy? *Behavioral Biology* 18: 263-272).

**Cats With Bells on Their Collars Do Kill Birds.** Studies have shown that bells on collars are not effective in preventing cats from killing birds or other wildlife. Birds do not necessarily associate the sound of a bell with danger, and cats with bells can learn to silently stalk their prey. Even if the bell on the collar rings, it may ring too late, and bells offer no protection for helpless nestlings and fledglings.

Most BirdsThat Seem to Escape Don't Survive Wildlife rehabilitation centers report that most small animals injured by cats die. Cats carry many types of bacteria and viruses in their mouths, some of which can be transmitted to their victims. Even if treatment is administered immediately, only about 20% of these patients survive the ordeal. A victim that looks perfectly healthy may die from internal hemorrhaging or injury to vital organs. A large percentage of patients at wildlife rehabilitation centers are cat attack victims and animals orphaned by cats. At Wildlife Rescue, Inc. in Palo Alto, California, approximately 25% of



their patients between May and June 1994 were native cat-caught birds, and almost half were fledglings. Thirty percent of birds, and 20% of mammals at the

Cat attacked Western Scrub-Jay

Lindsay Wildlife Museum in California were caught by cats. Cat predation of wildlife is especially frustrating to wildlife rehabilitators. These losses are totally unnecessary because unlike other predators, pet cats do not need to kill these animals to survive.

**Cat Colonies** <u>Are</u> a Problem for Birds and Other Wildlife: Domestic cats are solitary animals, but groups often form around an artificial feeding source, such as garbage dumps or food specifically put out for them. These populations can grow very quickly, can have significant impacts on wildlife populations, and can cause significant health risks to other cats, wildlife, and humans. Feeding these cats does not prevent the predation of birds and other wildlife.

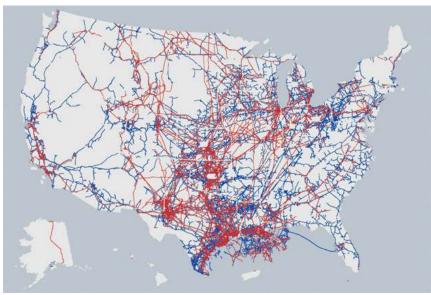
**Conclusion**: Cats are not ultimately responsible for killing our native wildlife—people are. <u>The only way to prevent domestic cat</u> predation on wildlife is for owners to keep their cats indoors!

For more information, contact: **AMERICAN BIRD CONSERVANCY** CATS INDOORS! THE CAMPAIGN FOR SAFER BIRDS AND CATS 1731 Connecticut Avenue, NW, 3rd Floor Washington, DC 20009 Phone: 202/234-7181; Fax: 202/234-7182; E-mail: abc@abcbirds.org; Web site: www.abcbirds.org

# EXHIBIT 7



# Pipelines Explained: How Safe are America's 2.5 Million Miles of Pipelines?



Map of major natural gas and oil pipelines in the United States. Hazardous liquid lines in red, gas transmission lines in blue. Source: Pipeline and Hazardous Materials Safety Administration.

## by Lena Groeger ProPublica, Nov. 15, 2012, 1:27 p.m

At 6:11 p.m. on September 6, 2010, San Bruno, Calif. 911 received an urgent call. A gas station had just exploded and a fire with flames reaching 300 feet was raging through the neighborhood. The explosion was so large that residents suspected an airplane crash. But the real culprit was found underground: a ruptured pipeline spewing natural gas caused a blast that left behind a 72 foot long crater, killed eight people, and injured more than fifty.

Over 2,000 miles away in Michigan, workers were still cleaning up another pipeline accident, which spilled 840,000 gallons of crude oil into the Kalamazoo River in 2010. Estimated to cost \$800 million, the accident is the most expensive pipeline spill in U.S. history.

Over the last few years a series of incidents have brought pipeline safety to national – and presidential – attention. As Obama begins his second term he will likely make a key decision on the controversial Keystone XL pipeline [1], a proposed pipeline extension to transport crude from Canada to the Gulf of Mexico.

The administration first delayed the permit for the pipeline on environmental grounds [2], but has left the door open to future proposals for Keystone's northern route. Construction on the southern route is already underway [3], sparking fierce opposition [4] from some landowners and environmentalists.

The problem, protesters say, is that any route will pose hazards to the public. While pipeline operator TransCanada has declared that Keystone will be the safest pipeline ever built [5] in North America, critics are skeptical.

"It's inevitable that as pipelines age, as they are exposed to the elements, eventually they are going to spill," said Tony Iallonardo of the National Wildlife Federation. [6] "They're ticking time bombs."

Critics of the Keystone proposal point to the hundreds of pipeline accidents that occur every year. They charge that system wide, antiquated pipes, minimal oversight and inadequate precautions put the public and the environment at increasing risk. Pipeline operators point to billions of dollars spent on new technologies and a gradual improvement over the last two decades as proof of their commitment to safety.

Pipelines are generally regarded as a safe way to transport fuel, a far better alternative to tanker trucks or freight trains. The risks inherent in transporting fuel through pipelines are analogous to the risks inherent in traveling by airplane. Airplanes are safer than cars, which kill

about 70 times as many people a year (highway accidents killed about 33,000 people in 2010 [7], while aviation accidents killed 472). But when an airplane crashes, it is much more deadly than any single car accident, demands much more attention, and initiates large investigations to determine precisely what went wrong.

The same holds true for pipelines. Based on fatality statistics from 2005 through 2009 [8], oil pipelines are roughly 70 times as safe as trucks, which killed four times as many people during those years, despite transporting only a tiny fraction of fuel shipments. But when a pipeline does fail, the consequences can be catastrophic (though typically less so than airplane accidents), with the very deadliest accidents garnering media attention and sometimes leading to a federal investigation.

While both air travel and pipelines are safer than their road alternatives, the analogy only extends so far. Airplanes are replaced routinely and older equipment is monitored regularly for airworthiness and replaced when it reaches its safety limits. Pipelines, on the other hand, can stay underground, carrying highly pressurized gas and oil for decades – even up to a century and beyond. And while airplanes have strict and uniform regulations and safety protocols put forth by the Federal Aviation Administration, such a uniform set of standards does not exist for pipelines.

Critics maintain that while they're relatively safe, pipelines should be safer. In many cases, critics argue, pipeline accidents could have been prevented with proper regulation from the government and increased safety measures by the industry. The 2.5 million miles of America's pipelines suffer hundreds of leaks and ruptures every year, costing lives and money. As existing lines grow older, critics warn that the risk of accidents on those lines will only increase.

While states with the most pipeline mileage – like Texas, California, and Louisiana – also have the most incidents, breaks occur throughout the far-flung network of pipelines. Winding under city streets and countryside, these lines stay invisible most of the time. Until they fail.

Since 1986, pipeline accidents have killed more than 500 people, injured over 4,000, and cost nearly seven billion dollars in property damages. Using government data, ProPublica has mapped thousands of these incidents in a new interactive news application [9], which provides detailed information about the cause and costs of reported incidents going back nearly three decades.

Pipelines break for many reasons – from the slow deterioration of corrosion to equipment or weld failures to construction workers hitting pipes [10] with their excavation equipment. Unforeseen natural disasters also lead to dozens of incidents a year. This year Hurricane Sandy wreaked havoc [11] on the natural gas pipelines on New Jersey's barrier islands. From Bay Head to Long Beach Island, falling trees, dislodged homes and flooding caused more than 1,600 pipeline leaks. All leaks have been brought under control [12] and no one was harmed, according to a New Jersey Natural Gas spokeswoman. But the company was forced to shut down service to the region, leaving 28,000 people without gas, and it may be months before they get it back.

One of the biggest problems contributing to leaks and ruptures is pretty simple: pipelines are getting older. More than half of the nation's pipelines are at least 50 years old [13]. Last year in Allentown Pa., a natural gas pipeline exploded underneath a city street, killing five people who lived in the houses above and igniting a fire that damaged 50 buildings. The pipeline – made of cast iron – had been installed in 1928.



Feb. 2011

A fire rages through Allentown, PA, after a gas line explosion in

Not all old pipelines are doomed to fail, but time is a big contributor to corrosion, a leading cause of pipeline failure. Corrosion has caused between 15 and 20 percent of all reported "significant incidents" [14], which is bureaucratic parlance for an incident that resulted in a death, injury or extensive property damage. That's over 1,400 incidents since 1986.

Corrosion is also cited as a chief concern of opponents of the Keystone XL extension. The new pipeline would transport a type of crude called diluted bitumen [15], or "dilbit." Keystone's critics make the case [16]that the chemical makeup of this heavier type of oil is much more corrosive than conventional oil, and over time could weaken the pipeline.

Operator TransCanada says that the Keystone XL pipeline will transport crude similar [15] to what's been piped into the U.S. for more than a decade, and that the new section of pipeline will be built and tested to meet all federal safety requirements. And in fact, none of the 14 spills that happened in the existing Keystone pipeline since 2010 were caused by corrosion, according to an investigation by the U.S. Department of State [17].

The specific effects of dilbit on pipelines – and whether the heavy crude would actually lead to more accidents – is not definitively understood by scientists. The National Academies of Science is currently in the middle of study on dilbit and pipeline corrosion [18], due out by next year. In the meantime, TransCanada has already begun construction of the southern portion of the line, but has no assurance it will get a permit from the Obama administration to build the northern section. (NPR has a detailed map of the existing and proposed routes [1].)

# Little Government Regulation for Thousands of Miles

While a slew of federal and state agencies oversee some aspect of America's pipelines, the bulk of government monitoring and enforcement falls to a small agency within the Department of Transportation called the Pipeline and Hazardous Materials Safety Administration – [19] pronounced "FIM-sa" by insiders. The agency only requires that seven percent of natural gas lines and 44 percent of all hazardous liquid lines be subject to their rigorous inspection criteria and inspected regularly. The rest of the regulated pipelines are still inspected, according to a PHMSA official, but less often.

The inconsistent rules and inspection regime come in part from a historical accident. In the 60's and 70's, two laws established a federal role in pipeline safety [20] and set national rules for new pipelines. For example, operators were required to conduct more stringent testing to see whether pipes could withstand high pressures, and had to meet new specifications for how deep underground pipelines must be installed.

But the then-new rules mostly didn't apply to pipelines already built – such as the pipeline that exploded in San Bruno. That pipeline, which burst open along a defective seam weld, would never have passed modern high-pressure requirements according to a federal investigation [21]. But because it was installed in 1956, it was never required to.

"No one wanted all the companies to dig up and retest their pipelines," explained Carl Weimer, executive director of the Pipeline Safety Trust [22], a public charity that promotes fuel transportation safety. So older pipes were essentially grandfathered into less testing, he said.



A burned out car and charred remains of a home in San Bruno,

C.A. after a pipeline explosion in Sept. 2010

Later reforms in the 1990's mandated more testing for oil pipelines, and today PHMSA requires operators to test pipelines in "high consequence" areas, which include population centers or areas near drinking water. But many old pipelines in rural areas aren't covered by the same strict regulations.

Some types of pipelines – such as the "gathering" lines that connect wells to process facilities or larger transmission lines – lack any PHMSA regulation at all. A GAO report [23] estimates that of the roughly 230,000 miles of gathering lines, only 24,000 are federally

regulated. Because many of these lines operate at lower pressures and generally go through remote areas, says the GAO, the government collects no data on ruptures or spills, and has no enforced standards for pipeline strength, welds, or underground depth on the vast majority of these pipes.

The problem, critics argue [24], is that today's gathering lines no longer match their old description. Driven in part by the rising demands of hydraulic fracturing, operators have built thousands of miles of new lines to transport gas from fracked wells. Despite the fact that these lines are often just as wide as transmission lines (some up to 2 feet in diameter) and can operate under the same high pressures, they receive little oversight.

Operators use a risk-based system to maintain their pipelines – instead of treating all pipelines equally, they focus safety efforts on the lines deemed most risky, and those that would cause the most harm if they failed. The problem is that each company use different criteria, so "it's a nightmare for regulators," Weimer said.

However, Andrew Black, the president of the Association of Oil Pipe Lines, a trade group whose members include pipeline operators, said that a one-size-fits-all approach would actually make pipelines less safe, because operators (not to mention pipelines) differ so widely.

"Different operators use different pipe components, using different construction techniques, carrying different materials over different terrains," he said. Allowing operators to develop their own strategies for each pipeline is critical to properly maintaining its safety, he contended.

# Limited Resources Leave Inspections to Industry

Critics say that PHMSA lacks the resources to adequately monitor [25] the millions of miles of pipelines over which it *does* have authority. The agency has funding for only 137 inspectors, and often employs even less than that (in 2010 the agency had 110 inspectors on staff). A Congressional Research Service report [26] found a "long-term pattern of understaffing" in the agency's pipeline safety program. According to the report, between 2001 and 2009 the agency reported a staffing shortfall of an average of 24 employees a year.

A New York Times investigation last year found that the agency is chronically short of inspectors because it just doesn't have enough money to hire more [27], possibly due to competition from the pipeline companies themselves, who often hire away PHMSA inspectors for their corporate safety programs, according to the CRS.

Given the limitations of government money and personnel, it is often the industry that inspects its own pipelines. Although federal and state inspectors review paperwork and conduct audits, most on-site pipeline inspections are done by inspectors on the company's dime.

The industry's relationship with PHMSA may go further than inspections, critics say. The agency has adopted, at least in part, dozens of safety standards written by the oil and natural gas industry. [28]

"This isn't like the fox guarding the hen house," said Weimer. "It's like the fox designing the hen house."

Operators point out that defining their own standards allows the inspection system to tap into real-world expertise. Adopted standards go through a rulemaking process that gives stakeholders and the public a chance to comment and suggest changes, according to the agency.

Questions have also been raised about the ties between agency officials and the companies they regulate [29]. Before joining the agency in 2009, PHMSA administrator Cynthia Quarterman worked as a legal counsel for Enbridge Energy, the operator involved in the Kalamazoo River accident. But under her leadership, the agency has also brought a record number of enforcement cases against operators [30], and imposed the highest civil penalty in the agency's history [31] on the company she once represented.

# **Proposed Solutions Spark Debate**

How to adequately maintain the diversity of pipelines has proved to be a divisive issue – critics arguing for more automatic tests and safety measures and companies pointing to the high cost of such additions.

One such measure is the widespread installation of automatic or remote-controlled shutoff valves, which can quickly stop the flow of gas or oil in an emergency. These valves could help avoid a situation like that after the Kalamazoo River spill, which took operators 17 hours from the initial rupture to find and manually shut off. Operators use these valves already on most new pipelines, but argue that replacing all valves would not be cost-effective and false alarms would unnecessarily shut down fuel supplies. The CRS estimates that even if automatic valves were only required on pipelines in highly populated areas, replacing manual valves with automatic ones could cost the industry hundreds of millions of dollars.



of almost a million gallons from a ruptured pipeline in July 2010

Other measures focus on preventing leaks and ruptures in the first place. The industry already uses robotic devices called "smart pigs" [32]

to crawl through a pipeline, clearing debris and taking measurements to detect any problems [33]. But not all pipelines can accommodate smart pigs, and operators don't routinely run the devices through every line.

Just last month, a smart pig detected a "small anomaly" in the existing Keystone pipeline, prompting TransCanada to shut down the entire line. Environmentalists pointed out that this is not the first time TransCanada has called for a shut down, and won't be the last.

"The reason TransCanada needs to keep shutting down Keystone," the director of the National Wildlife Federation contended in a statement [34], "is because pipelines are inherently dangerous."

Last January, Obama signed a bill [35] that commissioned several new studies [36] to evaluate some of these proposed safety measures, although his decision on extending the Keystone pipeline may come long before those studies are completed.

Image credits: The Associated Press, Thomas Hawk [37], Kevin Martini [38]

Like this story? Sign up for our daily newsletter [39] to get more of our best work.

- 1. http://stateimpact.npr.org/texas/tag/keystone-xl-pipeline/
- $2. \ http://www.whitehouse.gov/the-press-office/2011/11/10/statement-president-state-departments-keystone-xl-pipeline-announcement$
- 3. http://articles.latimes.com/2012/aug/16/nation/la-na-nn-keystone-xl-pipeline-20120816
- 4. http://www.nytimes.com/2012/10/13/us/protesters-gather-at-keystone-xl-site-in-texas.html
- 5. http://www.transcanada.com/6059.html
- 6. http://www.nwf.org/
- 7. http://www.ntsb.gov/data/index.html
- 8. http://www.manhattan-institute.org/html/ir\_17.htm
- 9. http://projects.propublica.org/pipelines/
- 10. http://www.call811.com/
- $11. \ http://www.philly.com/philly/news/new_jersey/20121104\_Million-plus\_in\_N\_J\_still\_lack\_power.html$
- 12. http://www.njng.com/safety/hurricane-sandy-updates/index.asp
- 13. http://opsweb.phmsa.dot.gov/pipelineforum/docs/Secretarys Infrastructure Report\_Revised per PHC\_103111.pdf
- 14. http://primis.phmsa.dot.gov/comm/reports/safety/sigpsi.html
- $15. \ http://insideclimatenews.org/news/20120626/dilbit-primer-diluted-bitumen-conventional-oil-tar-sands-Alberta-Kalamazoo-Keystone-XL-Enbridge-State-Sta$
- 16. http://www.nrdc.org/energy/tarsandssafetyrisks.asp
- 17. http://keystonepipeline-xl.state.gov/documents/organization/181185.pdf
- 18. http://www8.nationalacademies.org/cp/projectview.aspx?key=49461
- 19. http://www.phmsa.dot.gov/
- 20. http://phmsa.dot.gov/pipeline/state-programs
- 21. http://www.ntsb.gov/doclib/reports/2011/PAR1101.pdf
- 22. http://www.pstrust.org/
- 23. http://www.gao.gov/products/GAO-12-388
- 24. http://switchboard.nrdc.org/blogs/amall/many\_hazards\_from\_natural\_gas.html
- $25. \ http://www.philly.com/philly/news/special_packages/inquirer/marcellus-shale/20111210\_Federal\_pipeline\_oversight\_agency\_was\_troubled\_from\_the\_start.html$

- 26. http://www.fas.org/sgp/crs/homesec/R41536.pdf
- 27. http://www.nytimes.com/2011/09/10/business/energy-environment/agency-struggles-to-safeguard-pipeline-system.html?ref=danfrosch
- 28. http://washingtonindependent.com/94743/oil-and-gas-industry-writes-its-own-pipeline-standards
- $29. \ http://www.nytimes.com/gwire/2010/09/17/17greenwire-critics-fault-oil-and-gas-pipeline-regulators-i-9153.html$
- 30. http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Press Releases/Record Enforcement Orders Closed\_02-08-12.pdf
- 31. http://www.freep.com/article/20120911/NEWS05/309110050/Enbridge-pays-3-7M-penalty-in-10-oil-spill
- $32. \ http://www.buckeye.com/pipelineawareness/keepingyousafepipelinesecurity/smartpigs/tabid/106/default.aspx$
- 33. http://www.npr.org/templates/story/story.php?storyId=5627707
- $34.\ http://blog.nwf.org/2012/10/original-keystone-pipeline-shuts-down-safety-a-concern/$
- 35. http://www.propublica.org/article/congress-moves-toward-tougher-stand-on-pipeline-safety-but-is-it-enough
- 36. http://www.gpo.gov/fdsys/pkg/BILLS-112hconres93enr/pdf/BILLS-112hconres93enr.pdf
- 37. http://www.flickr.com/photos/thomashawk/5006359844/in/set-72157624991763214/
- 38. http://www.flickr.com/photos/k6martini/4942160951/
- $39. \ http://www.propublica.org/forms/newsletter_daily_email?utm_campaign=subscribe&utm_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_term=footer_so$

© Copyright 2013 Pro Publica Inc.

## Steal Our Stories

Unless otherwise noted, you can republish our stories for free if you follow these rules.



# EXHIBIT 8



# CITY OF PITTSBURG DEVELOPMENT SERVICES DEPARTMENT PLANNING DIVISION 65 CIVIC AVENUE PITTSBURG, CA 94565

# **PROJECT PIPELINE LIST**

# SINGLE-FAMILY RESIDENTIAL

PROJECT	APPLICATION NO(S).	DEVELOPER	NO.	SITE	LOCATION	STATUS	MEETING(S)
				ACREAGE			
Alves Ranch	AP-08-516	Alves Ranch, LLC	167	40.42	North of West	Approved	01-20-09 (CC)
	(SUB, DR, MP)	(925) 831-1854	(SFD)		Leland Road at		02-10-09 (PC)
					Alves Ranch		
					Road		
Bancroft Gardens II	AP-03-78	Discovery Builders	28	5.79	Western	Subdivision	10-26-04 (PC)
	(SUB 8805, DR);	(925) 682-6419			terminus	Approved; DR	
	AP-11-730 (DR)				Birchwood Drive	application	
						pending	
Lawlor Estates	GP-02-03, RZ-02-14;	Discovery Builders	50	10.8	West Leland	49 of 50 units -	_
	SUB 8112;	(925) 682-6419			Road, east of	Built	07-07-03 (CC);
	AP-05-268 (DR);				Bailey Road		02-14-06 (PC);
	AP-06-391 (DA)						12-12-06 (PC);
							01-29-07 (CC)

City of Pittsburg Project Pipeline List Updated December 2012

PROJECT	APPLICATION NO(S).	DEVELOPER	NO. UNITS	SITE ACREAGE	LOCATION	STATUS	MEETING(S)
Mariner Walk	AP-04-126 (GP, PD/RZ, SUB 8869, DR)	Mariner Pittsburg Holdings, LLC (925) 753-4007	123	15	West of Herb White Way	Under Construction	08-23-05 (PC); 10-03-05 (CC); 10-11-05 (PC)
Montreux	AP-10-684 (RZ, SUB 8279, Annexation)	Louis Parsons, Altec Homes/ Seecon Financial (925) 671-7711	368	148.3	West of Kirker Pass, just south of city limits	Pending	
San Marco Development	SUB 7362; DR-00-26; VA-00-01; DR-01-10; DR-02-23; DR-02-24; AP-05-199 (DR); AP-06-336 (DR); AP-06-346 (RZ, SUB); AP-11-779 (RZ, SUB,DR)	Discovery Builders (925) 682-6419	1,412	421	South of Hwy 4 at Willow Pass Road	Under Construction	01-19-93 (PC); 11-28-00 (PC); 02-13-01 (PC); 08-28-01 (PC); 09-10-02 (PC); 03-25-05 (ZA); 07-11-06 (PC); 08-21-06 (CC) 12-07-06 (ZA) 10-15-12 (PC) 12-11-12 (PC)
Sky Ranch	RZ-02-21, SUB 8475, DR-02-48	Discovery Builders (925) 682-6419	415	163	Buchanan Road, west of Somersville Road	Approved	05-08-07 (PC); 06-04-07 (CC) 05-14-08 (LAFCO)
Sunnyside Estates	AP-11-810 (GP, RZ, SUBD)	Jackie Seeno 925-682-6419	33	4.4	Carion Court	Pending	
Tuscany Meadows	AP-12-843 (SUBD)	Discovery Builders (925) 682-6419	917	135.6	Buchanan Road at Somersville	Pending	
Vista del Mar	AP-03-33 (GP, RZ, SUB, DR); AP-06-379 (SR) AP-12-857 (AD)	William Lyon Homes (925) 543-5500	518	104	South of West Leland Road at Alves Ranch Road	Under Construction	11-23-04 (PC); 12-06-04 (CC); 06-28-05 (PC) 08-30-12 (ZA)

PROJECT	APPLICATION NO(S).	DEVELOPER	NO.	SITE	LOCATION	STATUS	MEETING(S)
			UNITS	ACREAGE			
Almenara Condominiums	AP-10-670 (DR, SUB)	Meridian Modular	20	52.	NE corner of	Built	04-13-10 (PC)
		Homes (858) 490-3624			Beacon and W. 10 <sup>th</sup> Streets		
Almenara – Phase II	AP-11-777 (DB)	Domus	44	1.9	SW corner of	Pending	
		Development			W 10 <sup>th</sup> &	0	
		(415) 856-0010			Beacon		
Alves Ranch	AP-08-516	Alves Ranch, LLC	364 to	40.42	North of West	Approved	01-20-09 (CC)
	(SUB, DR, MP)	(925) 682-9862	393		Leland Road at	(DR approval	02-10-09 (PC)
					Alves Ranch	for 98 units	
					Road	only)	
Los Medanos Apartments	AP-11-742 (DR)	Domus	30	65.	SE Corner of	Approved	06-28-11 (PC);
		Development			Los Medanos &		08-15-11 (CC)
		(415) 856-0010			E. 9 <sup>th</sup> Street		
Oak Hills Apartments –	AP-08-567 (AD)	Sierra Pacific	264	17.2	2201 Oak Hills	Approved	01-15-09 (ZA)
Clubhouse Remodel		(925) 427-3700			Circle		02-02-12 (ZA)
Peppertree Apartments –	AP-09-598 (AD)	Discovery	429	45	300 Peppertree	Approved	04-16-09 (ZA)
Clubhouse Remodel		Builders, Inc.			Way		05-29-12 (ZA)
		(323) 002-0413				A	
san Marco Development	SUB /362;	SEECON	1,526	141	South of Hwy 4	Approved;	01-24-95 (PC);
	AP-U6-346 (HZ, SUB)	11//-1/9 (GZE)			at Willow Pass Boad	330 Units Built	0/-11-06 (PC); 08-21-06 (CC)
Stoneman Village Rooftop	AP-12-844 (AD)	Donovan	148	2.67	390 East	Built	05-29-12 (ZA)
Railing	~	Rittenbach, Allied			Leland Rd		~
)		Construction					
		Service					
Woodland Hills Apartments – Clubhouse Remodel	AP-09-599 (AD)	Discovery Builders (925) 682-6419	220	10.28	241 West Buchanan Rd.	Approved	04-16-09 (ZA) 05-31-12 (ZA)
Woods Manor Apartments	AP-08-530 (DR)	BRIDGE Housing	82	5.8	850 East	Under	07-08-08 (PC)
Remodel		Corp.			Leland Rd.	Construction	07-14-09 (PC)
		(415) 989-1111					

# APARTMENTS/CONDOMINIUMS

City of Pittsburg Project Pipeline List Updated December 2012

Page 3 of 10

40
<u>(</u> )
$\mathbf{O}$
Ш
~
U
ſ
Δ
ш
S
Š
$\overline{\mathbf{m}}$
$\mathbf{X}$
2

PROJECT	APPLICATION NO(S). DEVELOPER	DEVELOPER	RES.	<b>NONRES</b>	SITE	LOCATION	STATUS	MEETING(S)
			UNITS	UNITS SQ. FT.	ACREAGE			
Siena Court Senior	AP-09-583 (DR)	Domus	111	10,300	1.98	Western side	Built	03-10-09 (PC)
Apartments		Development				of the 700		
		(415) 856-0010				block of		
						Railroad Ave		
Vidrio – Block B	AP-05-225 (DR)	Pittsburg RDA	75	11,558 sq. 2.41	2.41		Built	01-24-06 (PC)
				ft.		of 600 block		
						of Railroad		
						Avenue		

# COMMERCIAL

PROJECT	APPLICATION NO(S).	DEVELOPER/	BLDG.	SITE	LOCATION	STATUS	MEETING(S)
		APPLICANT	SQ. FT.	ACREAGE			
2110 Railroad Avenue	AP-12-888 (DR)	DCI	8,250	062	2110 Railroad	Pending	
Retail Shell Building		(916) 934-0106			Avenue	1	
3811 Railroad Building	AP-11-751 (AD)	Richard Mao	5,700	1.92	3811 Railroad	Under	04-13-11 (ZA)
Remodel		(510) 552-1687			Avenue	Construction	
All Star Ford	AP-12-882 (UP)	Brian Nokes	44,027	2	3800 Century Ct.	Approved	12-27-12 (PC)
Burger King Remodel	AP-12-894 (AD)	Anthony Sacca	3,405	.92	2162 Railroad Ave.	Pending	
		(707) 486-2771					
Burlington Coat Factory	AP-10-738 (DR)	Discovery Builders	6,360		4105 Century Blvd.	Built	02-08-11 (PC)
Addition		(925) 682-6419	(add'n)				
California Theater	AP-08-533 (DR)	City of Pittsburg,	16,000	.23	351 Railroad Ave.	Under	10-14-08 (PC)
Remodel		Attn: Dick Abono				Construction	
		(925) 252-4044					
Century Plaza Remodel	AP-06-353 (DR)	Sierra Pacific	439,830	50.0	Century Blvd at	Approved	09-26-06 (PC);
		(925) 427-3700			Somersville Road	(expires	09-22-09 (PC)
						9/26/14)	10-25-11 (PC)
Chili's Remodel	AP -12-816 (DR)	Robert	2,897	1.68	4330 Century Blvd	Built	02-07-12 (ZA)
		Montgomery,					
		Brinker International					
		(972) 770-7227					
Clear Channel Digital	AP-12-825 (SR)	Robert Hatton	n/a	2.79	Frontage Road at	Pending	
Sign		510-446-7216			Dover Way		

Page 4 of 10

PROJECT	APPLICATION NO(S).	DEVELOPER/ APPLICANT	BLDG. SQ. FT.	SITE ACREAGE	LOCATION	STATUS	MEETING(S)
Continental Tow	AP-12-818 (UP)	Chris Rockenbaugh (925 250-5465	n/a	1.43	2731 Pittsburg / Antioch Highway	Pending	
Contra Costa County Fire Prevention Bureau Office Building	AP-09-642 (DR) AP-11-744 (SR) AP-11-745 (SR)	(G III O ) )	6,227	1.91	2331 Loveridge Road	Built	12-08-09 (PC)
Delta Gateway Pad 12	AP-12-889 (DR)	Discovery Builders (925) 682-6419	10,623	1.04	Western Terminus of Delta Gateway Boulevard	Pending	
EJ Phair	AP-07-496 (DR)	John Phair (925) 595-1687	13,331	0.16	200 Cumberland Street	Built	05-13-08 (PC)
EJ Phair	AP-10-691 (UP)	John Phair (925) 595-1687	13,331	0.16	200 Cumberland Street	Approved	07-27-10 (PC)
El's Smog Shop	AP-12-881 (UP)	Aristotle Ramiro 925-252-0707	7,000	0.48	2172 Piedmont Way	Pending	01-08-13
Fermin's Autobody	AP-08-546	Fermin Ruiz	3,213	7,500 sq.ft.	437 W. 10 <sup>th</sup> Street	Under Construction	10-01-09 (ZA) 01-25-12 (ZA)
Ford Relocation Remodel	AP-12-883 (AD)	Brian Nokes	44,027	7	3800 Century Ct.	Under Construction	12-06-12 (ZA)
Granite Expo Outlet	AP-12-823 (VA)	Jacky Li 510-507-0999	50200	4.66	3033 Harbor Street	Approved	3/29/2012 (ZA)
Island Pacific Supermarket	AP-12-812 (UP, AD)	Island Pacific Enterprises	15,026	3.18	2100 North Park Blvd.	Under Construction	02-28-12 (UP, AD)
La Marina Laundromat	AP-09-659 (AD)	Mercedes Grandez (925) 938-8019	4,500	11,415	301 East 10 <sup>th</sup> St.	Built	04-29-10 (ZA)
Lumpy's Diner Rear Outdoor Patio Cover	AP-12-828 (AD)	City of Pittsburg, Attn: Kolette Simonton	535 (new structure)	<u>.08</u>	615 Railroad Ave.	Built	03-27-12 (PC)
Marina Commercial Center	AP-07-461 (VA, DR)	Palm Plaza Development (925) 392-6611	22,861	9.73	Northeast side of Marina Blvd	Built	09-25-07 (PC) 04-22-08 (PC)
Maya Cinemas	AP-12-832 (AD)	Doug Messner, Sierra Pacific Propeties	60,836	1.039	4085 Century Blvd.	Built	04-30-12 (PC)
McDonalds Remodel	AP-11-773 (DR)	Ware Malcomb Architects (925) 244-9620	3,907	.55	460 Atlantic Ave.	Built	07-26-11 (PC)
My Beauty Salon and Supply Company,	AP-12-837 (AD)	Bobby White (925) 522-1687	8,321	13,500	777 Railroad	Approved	9-7-2012 (ZA)
New Bethel Missionary Baptist Church	AP-08-543 (DR) AP-09-624 (UP, DR)	Frances Greene (925) 432-4566	20,600	2.41	360 Central Ave	Under Construction	10-14-08 (PC) 11-17-09 (PC)

Page 5 of 10

City of Pittsburg Project Pipeline List Updated December 2012

PROJECT	APPLICATION NO(S).	DEVELOPER/ APPLICANT	BLDG. SQ. FT.	SITE ACREAGE	LOCATION	STATUS	MEETING(S)
New Mecca Restaurant Expansion	AP-08-582 (DR, OD, SE)	Redevelopment Agency of the City of Pittsburg; Guillermo & Teresa Muniz	7225	0.23	306 & 324 Railroad Ave.	Built	02-10-09 (PC)
MoMo Restaurant	AP-812-817 (UP,OD)	Philip Yang (510) 334-2577	3,360	.47	610 Railroad Ave.	Under Construction	03-27-12 (PC)
North Park Commercial Center Expansion	AP-12-890 (UP, DR, VA); AP-12-891 (UP, DR, VA); AP-12-892 (UP, DR); AP-12-893 (DR, VA)	Discovery Builders (925) 682-6419	63,151	10.5	North Park Boulevard	Pending	
PBA Chapel Project	AP-12-867 (AD)	Elden Limmeo (925) 439-3660	28,517	1.46	310 Central Ave	Pending	
Pittsburg Library Café (1,280 square foot addition)	AP-10-707 (ADR)	City of Pittsburg 925-252-4015	7,000	1.75	80 Power Avenue	Under Construction	08-10-10 (PC)
Pittsburg Library Addition (2,050 square foot addition)	AP-11-746 (ADR)	City of Pittsburg 925-252-4105	7,000	1.75	80 Power Avenue	Under Construction	05-09-11 (ZA)
Red Lobster Remodel	AP-12-813 (ADR)	GHA Architecture and Development 972-239-8884	8,493	0.395	4095 Century Boulevard	Built	01-31-12 (ZA)
San Marco Gas Station & Convenience Store	AP-09-588 (RZ, UP, DR)	Discovery Builders (925) 682-6419	6,000	1.44	Northwest corner, San Marco Blvd. & West Leland Road	Approved	07-19-10 (CC) 07-27-10 (PC)
St. Claire Cigars	AP-12-878	Aaron Turner 707-290-2121	880	0.18	64 E. 4 <sup>th</sup> Street	Pending	
Synergy Charter School	AP-12-848 (UP)	Margie DiGiorgio	6,800	.38	355 East Leland Rd.	Built	07-10-12 (PC)
The Post	AP-12-885 (UP)	Eric Huber 925-852-9740	4,550	0.33	501 Railroad Avenue	Pending	
Tow Workx	AP-12-851 (ZA)	Robert Porter	4,600	7.38	100A Bliss Ave.	Approved	08-14-12 (ZA)
Trench Plate Above Ground Fuel Storage Tank	AP-12-814 (UP)	Caspar Busalacchi 415-990-116	2,400	3.25	530 Garcia Avenue	Built	02-28-12 (PC)
Wilson's Dance Studio	AP-12-886	Hannah Wilson 925-207-6097	2,574	0.143	1187 Railroad Lane	Pending	1-08-13

City of Pittsburg Project Pipeline List Updated December 2012

Page 6 of 10

				AL				
PROJECT	APPLICATION NO(S).	DEVELOPER	BLDG. SQ. FT.	SITE ACREAGE	LOCATION	STATUS	PC MEETING	
All Bay Vehicle Donations	AP-09-615 (UP)	Robert Knox (925) 427-4483	006	1.56	1225 Loveridge Road	Approved; Appeal Pending	11-09-10 (PC)	
Avila Road RV Storage Yard and Caretaker's Quarters	AP-12-863 (UP) and AP-12-880 (AD)	Legacy Framers 925-427-1011	1,198	12.5	101 Avila Road	Approved	12-11-12 (UP, AD)	1
Columbia Solar Energy	AP-12-879 (DR, RZ, DA)					Pending		-
DDSD Solar Carport Canopies	AP-11-776 (AD)	DDSD - Irene O'Sullivan (925) 756-1917	23,735	69 <sup>.</sup>	2500 Pittsburg- Antioch Hwy	Approved	08-19-11 (ZA)	
DDSD Fueling Station Replacement	AP-12-859 (UP)	Patricia Chapman	n/a	14.69	2500 Loveridge Road	Approved	9-13-12 (PC)	1
Dow Alpha MRU and T-3	AP-12-831 (AD)	Phil McAllister, DOW Chemical Company		248.27	900 Loveridge Road	Approved	04-09-12 (ZA)	
Family Medical Transport	AP-12-871 (UP)	Amelia Younis	13,680	1.15	2250 Freed Ave	Approved	11-13-12 (PC)	
Gelateria Naia	AP-12-872 (UP)	Trevor Morris	5,500		671 Willow Pass Road #7	Approved	11-13-12 (PC)	-
Irish Construction	AP-11-769 (UP, DR)	Irish Construction (626) 288-8530	7,770	2.45	2141/2151 Piedmont Way	Built	07-26-11 (PC	
K 2 Pure	AP-08-573 (UP, DR)	Tim Morris (715) 421-2814	40,000+	15	950 Loveridge Road	Under Construction	10-19-09 (PC)	1
K2 Pure Fuel Cells	AP-11-792 (AD)	Peter Ellefson			950 Loveridge Road	Built	11-17-11 (ZA)	1
K 2 Pure, Phase III – HCI Skid Project	AP-11-793 (DR)	Tim Morris (715) 421-2814			950 Loveridge Road	Built	01-24-12 (PC)	
LA-SRDC, LLC/ Scrap Metal Loading Project	AP-12-815 (UP, DR)	JinHo (David) Huh (773) 329-0598	320	÷	900 Loveridge Road	Approved	02-28-12 (PC)	
Lara's Concrete	AP-07-430 (UP)	Luis Lara (925) 458-6304	4,800	5	104 Avilla Road	Pending		
Marine Express Site Improvements	AP-12-864 (DR)	Randy Esch	168	2.86	695 East 3 <sup>rd</sup> Street	Pending		
MDR, Inc. Contractor Yard	AP-12-846 (UP, DR)				2139 Harbor St.	Pending		
Mount Diablo Recycling Center – Expansion of Use Permit	AP-09-654 (UP)	Dave Adler 925-682-7492	82,611	11.05	1300 Loveridge Road	Approved	01-12-10 (PC)	

INDUSTRIAL

City of Pittsburg Project Pipeline List Updated December 2012

Page 7 of 10

PROJECT	APPLICATION NO(S).	DEVELOPER	BLDG. SQ. FT.	SITE ACREAGE	LOCATION	STATUS	PC MEETING
Mount Diablo Resource Recovery Park – Modification of Transfer Station/Recycling Center Permits	AP-10-712 (UP)	Dave Adler 925-682-7492	82,611	17.5	1300 Loveridge Road	Pending	
PraxAir Temporary Modular Office Trailer	AP-12-869	Lee Sahagan, PraxAir	1,200	31.5	2000 Loveridge Rd.	Approved	09-27-12 (ZA)
Ramar Foods Solar Panels	AP-10-681 (DR)	Primo Quesada (925) 439-9009	31,230	2.27	355 Central Ave	Approved	05-08-10 (PC)
Ramar Foods Fuel Cell Installation	AP-12-839 (AD)	Primo Quesada (925) 439-9009	31,230	2.27	355 Central Ave	Approved	06-18-12 (ZA)
Rege Yard	AP-11-775 (UP)	David Rege (510) 599-9076	Portion of 217,800	5	111 Avila Road	Pending	
Trans Bay Cable	AP-04-157 (DA); AP-07-500 (DR)	Trans Bay Cable, LLC (415) 618-3301	25,150	5.6	570-610 West Tenth Street	Built	10-24-06 (PC); 11-06-06 (CC); 11-27-06 (CC); 01-29-07 (CC)
United Spiral Pipe Manufacturing Plant	AP-07-445 (UP, VA, DR, MS-676-07)	United Spiral Pipe, LLC (925) 439-6442	352,000	44.8	900 East Third Street	Built	09-25-07 (PC); 10-23-07 (PC)
Walmart Limited Remodel	AP-11-8907 (AD, SR)	Shade Lawrence O'Quinn (214) 749-0626	125,999	12.475	2203 Loveridge Road	Built	02-10-12 (ZA)
WesPac Energy – Pittsburg Terminal	AP-11-761 (UP, DR)	Art Deifenbach, WesPac Energy (949) 478-3158		164	696 West 10 <sup>th</sup> Street	Pending	

# LONG RANGE PLANNING PROJECTS

PROJECT	APPLICATION NO(S).   SITE	SITE	LOCATION	STATUS	MEETING(S)
		ACREAGE			
Hillside Development	n/a	TBD		On Hold (indefinitely)	
Standards & Design					
Guidelines					

	7-26-11 (PC) 8-15-11 (CC) 10-17-11 (CC)	5-12-09 (PC); 6-1-09 (CC); Amendments Adopted 7-6-10 (CC)	07-06-09 (CC); 08-11-09 (PC); 09-21-09 (CC); 10-19-09 (CC); 11-02-09 (CC)	
Pending; Environmental review (Draft EIR) underway	Approved	Approved; and certified by the State Department of Housing and Community Development.	Approved	Pending; Environmental review underway
South of the existing city limits and east of Kirker Pass Road.	Vacant land and parking lots surrounding the existing BART Station	City-wide`	Area within ½-mile of future eBART Station at State Route 4 and Railroad Avenue	Southwest Hills
TBD	Approx. 55 acres	City-wide	1,076	606
n/a	n/a	<u>Click Here for More</u> Information	<u>Click Here for More</u> Information	AP-10-717 (Annexation, RZ) <u>Applicant</u> : Faria Land Investors, LLC. (925) 682-6419
James Donlon Blvd. Extension (Buchanan Bypass) & Southeast Hills Annexation, including General Plan Amendment and Rezoning	Pittsburg Bay Point BART Master Plan	Pittsburg Housing Element	Railroad Avenue Specific Plan (eBART)	Southwest Hills/Faria Annexation

List of Abbreviations of Permits:

# 

# Other Abbreviations:





Board of Directors Scott Hein President

Amara Morrison *Secretary* 

Burt Bassler *Treasurer* 

Heath Bartosh Joe Canciamilla Ken Dami John Gallagher Claudia Hein Scott Hein Gary Johnson Doug Knauer Brian Kruse Sue Ohanian Marty Reed Malcolm Sproul *Directors* 

**Staff Directors** 

Ronald Brown Executive Director

Seth Adams Land Program Director

Julie Seelen Advancement Director

Monica E. Oei *Finance Director* 

Founders Arthur Bonwell Mary L. Bowerman

Proud Member of

Land Trust Alliance California Council of Land Trusts Bay Area Open Space Council January 9, 2013

Kristin Pollot Associate Planner City of Pittsburg, Planning Department 65 Civic Av. Pittsburg, CA 94565

# **RE:** Comments on the Montreux Residential Subdivision Draft Environmental Impact Report State Clearinghouse #2013032079

Dear Ms. Pollot,

Thank you for the opportunity to comment on the draft Environmental Impact Report (dEIR) for the Montreux Residential Subdivision (Project) as proposed by Altec Homes, Inc. and Seecon Financial, Inc. (Applicants). We appreciate the chance to provide input on this Project. Save Mount Diablo and several other organizations own protected open space in the vicinity of the Project. As an organization dedicated to the preservation, defense, restoration, and enjoyment of open space, we are very interested in the effects this Project will have on surrounding areas. Our core concerns of open space scenic value, recreational opportunity, and wildlife habitat, are all relevant to the Project. We have strong concerns about the Project's inconsistency with Pittsburg's General Plan policies and the Project's effect on the aesthetic quality of the southern hills, as well as inadequacies in the dEIR.

# Summary of Main Concerns

One of our main concerns is that the project is fundamentally inconsistent with policy guidance provided in the General Plan<sup>1</sup>, especially with regard to development on hillsides and viewshed aesthetics. No fewer than 16 specific policies contained in the General Plan would be violated if the Project is carried out in its current form.

The project would significantly degrade the aesthetic quality of the hills to the south of Pittsburg that form a scenic backdrop of open space for the entire city. The "leap-frog" development proposed by the Applicants would require mass grading of most of the site and substantial reconfiguration of the northern ridgeline, which



1

<sup>&</sup>lt;sup>1</sup> <u>http://www.ci.pittsburg.ca.us/index.aspx?page=228</u>

is visible from SR-4 and many parts of Pittsburg. While the northern ridgeline will not be entirely removed, visual simulation figures 5.1-4 through 5.1-7 in the dEIR clearly show that instead of clustering development so that it fits with the natural landscape, the knolls and hills in the lower portions of the site, and a large part of the northern ridgeline and a portion of the southern ridgeline, will be graded. Additional visual simulations taken from north of the Project should be included in the dEIR. In addition, the Project does not follow a number of General Plan policies meant to safeguard the visual character of Pittsburg's southern hills.

The cumulative impacts of the Project and other projects currently being constructed or proposed by the Applicants and affiliated-companies in the vicinity of the Project have not been adequately analyzed. Impacts of the Major Projects listed in dEIR section 5.0 have only been cursorily analyzed. Another project that is being proposed by a company linked to the Applicants (Discovery Builders), the Pointe project in Antioch, was not even included in the list of Major Projects and if approved, will be located at the eastern end of the proposed James Donlon Boulevard Extension. The EIR should include the Pointe as a Major Project and the cumulative impacts analysis should be revised to include the impacts of the Pointe.

The public services that the dEIR describes as servicing the Project seem to be overwhelmed by existing development, as the dEIR itself recognizes. Fire and police response times both currently do not meet established guidelines, and the schools identified as the ones that will service the Project already operate at over-capacity. The Project should not be considered until it is proved that public services can adequately service the residential areas that currently exist and can also service additional developments like the Project.

# **Project Location and Description**

The approximately 165 acre project site, which includes a 148.3 acre main project site and a 16.8 acre off-site parcel, lies south of Pittsburg on the west side of Kirker Pass Rd. and approximately one mile south of Buchanan Rd. The off-site parcel lies just to the north on the west side of the main project site. The main project site is currently undeveloped grazing land and consists of a broad Y-shaped valley framed by hills and ridges to the north, south, and west (see Figure 1). The northern ridge lies in the Railroad Av./SR-4 viewshed while the southern ridge contains designated Major and Minor Ridgelines and is part of the Kirker Pass Rd. viewshed (see Figure 4-1). The main project site is located outside the City Limits but the off-site parcel is within City Limits. Residential units border the project site to the north, while open space surrounds the project in all other directions. To the west is the protected Keller Canyon open space area, to the south are East Bay Regional Park District protected areas covering the Concord Naval Weapons Station to Black Diamond Mines Regional Park corridor and the Thomas Home Ranch property protected and owned by Save Mount Diablo (across Kirker Pass Rd.), and to the east across Kirker Pass Rd. is unprotected open space (see Figure 2).





Figure 1. Photo of Montreux main project site looking west toward Kirker Pass Rd. Note the small hills and other terrain features of the valley and the rock outcroppings of the ridgeline on the right. Such natural elements would be destroyed under the current Montreux site plan. Photo courtesy of Scott Hein.



Figure 2. Map showing the location of the Montreux residential subdivision relative to open space in the area. The Montreux main project site and off-site parcel are colored pink (note that most of the area shaded pink consists of the main project site and off-site parcel, but not all of it. The pink shading denotes the property owned by Seeno companies). Protected open space is colored green, light-green, and green hash marks. East Bay Regional Parks and Save Mount Diablo own the protected open space immediately south of Montreux (the box outlined in red). Black Diamond Mines Regional Park is visible in the lower-right corner of the figure. The Thomas Ranch, which is unprotected open space, is colored yellow and red. The red color is the location of the proposed James Donlon Boulevard Extension passing through the ranch.



The Project calls for: the construction of 356 single family homes with average lot sizes of 7,668 sq. ft., construction of three stormwater retention basins (one of which would be constructed on the off-site parcel), placement of a partially buried water tank at the top of the hill at the northern boundary of the main project site, rezoning of the main project site from its current pre-zoning designation of Hillside Planned Development (HPD) to Single-Family Residential 6,000 sq. ft. minimum lots sizes (RS-6) pre-zoning (to allow for a greater density of homes), and annexation of the main project site into the City of Pittsburg, Contra Costa Water District (CCWD) Service Area, and the Delta Diablo Sanitation District (DDSD) Service Area.

Most of the existing topography would be graded and re-contoured, except for most of the southern portion of the main project site which might remain in its natural state—if it's not affected by grading, and if the applicant doesn't attempt to develop it later as he has tried in other locations—such as the offsite area on the existing project just to the north. Approximately 77 acres of the main project site would be devoted to residential uses and 71 acres would be set aside for open space, including approximately 42 acres of undeveloped land along the southern portion of the main project site to provide a required "greenwall." The valley and northern ridgeline would be substantially reconfigured for residential construction and placement of a water tank, respectively. Grading would include cuts to the hillslopes of approximately 75 ft. in some locations and fills of 10-85 ft. of graded soil in the low portions of the site.

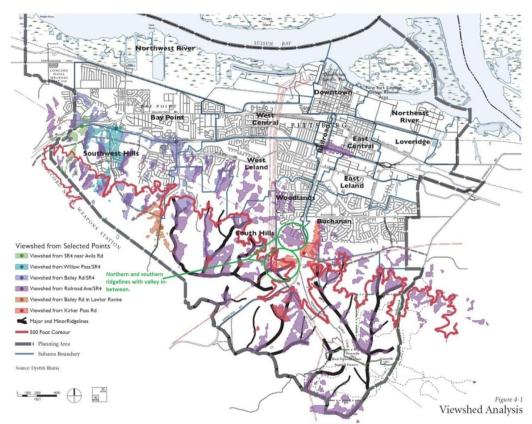


Figure 4-1. Viewshed analysis figure from Urban Design chapter of the Pittsburg General Plan. Modified to highlight the location of the ridgelines the Project would affect.



## Comments on Project's Inconsistency with the General Plan

The Project conflicts with 16 specific policies in the Pittsburg General Plan. These policies relate to the Land Use, Urban Design, and Resource Conservation chapters of the General Plan. Here we provide a list of these policies, and after each, a brief discussion of how the Project conflicts with the specific policy (bolding has been added to highlight particular text):

- 2-P-21: Revise the City's Hillside Preservation Ordinance to reflect General Plan policy direction. Revisions may include, but are not limited to:
  - Designating protected ridgelines, creeks, and other significant resource areas, along with daylight plane or setback standards;
  - Defining protected viewsheds;
  - Designating location and density of low-density hillside residential development based on slope stability and visual impact;
  - Provision of well-designed hillside projects that provide larger, familyoriented lots; and
  - Protection of significant ridgelines and **incorporation of hill forms into project design.**

The City of Pittsburg has not yet finalized the Hillside Preservation Ordinance, which was started several years ago and then apparently put on hold. It would be worthwhile to finalize the Ordinance before the Project is considered given that the Project consists of development on a hillside and massive grading of the northern ridgeline and its effects on viewsheds and significant ridgelines. In addition, hill forms have not been incorporated into Project design given the massive amount of grading called for on the northern ridgeline, in clear opposition to potential revisions called for in 2-P-21. By the same token, the Applicants are seeking to rezone the main project site for smaller lots to increase the number of houses they can construct, instead of providing larger, family-oriented lots as called for in the above policy 2-P-21.

• 2-P-23: **Restrict development on minor and major ridgelines** (as identified in Figure 4-2). Encourage residential construction on flatter natural slopes or non-sensitive graded areas that reduce environmental and visual impacts. **Minimize cut-and-fill of natural hillsides.** 

While the Project will not develop the Major and Minor ridgelines on the southern ridgeline on the south end of the main project site, construction of stormwater detention basins would require grading on the eastern end of the southern ridgeline to recontour the ridge. This is inconsistent with the intent of policy 2-P-23. In addition, the Project calls for cuts to hillslopes of approximately 75 ft. in some locations and fills of 10-85 ft. of graded soil in the low portions of the site. This massive cutting and filling clearly contradicts the minimization of such activities called for in this policy.



• 2-P-24: Prohibit new development on designated ridgelines. Ensure that residential developers cluster housing units to reduce both environmental and visual impact of hillside development.

The delay in developing the Hillside Ordinance means there are no designated ridgelines at this time, yet the Project would develop and substantially alter the northern ridgeline and recontour the east side of the southern ridgeline, which consists of Major and Minor ridgelines. However, there is no doubt that housing units will not be clustered under the Project (see Figure 3.0-6 below), it is a standard residential subdivision that will result in denser housing than originally intended under the current pre-zoning designation. Examining the density of housing planned under the Project and their uniform distribution in the lower valley and the southern-facing slopes of the northern ridgeline make it clear that the Project does not even attempt to cluster development.

• 2-P-27: Minimize single-access residential neighborhoods in the hills; maximize access for fire and emergency response personnel.

The Project is located outside the 1.5 mile response radius of existing or planned fire stations and would not meet the response time guideline of six minutes 90% of the time. According to Figure 3.0-6 (below) in the dEIR, the majority of residential units will use only one street to enter and exit the subdivision. One third of the subdivision would likely use a smaller street entrance/exit, but since this street would lack a traffic signal, it could be even less than that.

• 2-P-28: During development review, ensure that the design of new hillside neighborhoods minimizes potential land use incompatibilities with any grazing/agricultural activities in the southern hills.

Construction of the Project as is currently envisioned would terminate the current use of the property as grazing land. The number and density of houses would eliminate most ranching. In addition, the dEIR assumes that the James Donlon Extension (formerly the Buchanan Road Bypass) would be constructed and be able to service the Project. The James Donlon Extension would bisect the Wayne Thomas Ranch property, likely eliminating grazing activities and a livelihood for the Thomas family as well. So grazing activities would end on not just one, but two properties due to this Project and another associated with it.

- 2-P-73: Allow Low Density Residential development in selected areas along Kirker Pass Road and other valley floors as appropriate, under the following criteria:
  - Permanent greenbelt buffers be established to encompass: 1) the southerly 1/5 (approximately) of the Montreux property; and 2) the area south of the existing PG&E transmission corridor and south of the final alignment of the Buchanan Road Bypass, just east of Kirker Pass Road.

The City will consider, in conjunction with subdivision applications on these properties and related environmental analysis, general plan and/or the transfer of lost development rights as a result of the these greenbelts to other portions of



these properties, while not increasing the overall number of units permitted on these properties

- Natural topography be retained to the maximum extent feasible, and large-scale grading discouraged;
- **No development on minor and major ridgelines** (as identified in Figure 4-2), with residential construction on flatter natural slopes encouraged;
- Development designed and clustered so as to be minimally visible from Kirker Pass Road;
- Creeks and adjacent riparian habitat protected;
- $\circ$   $\,$  An assessment of biological resources completed; and
- $\circ$  Be limited to a maximum density of 3.0 du/ac.

The Project as it is currently proposed would require a massive amount of grading--1.4 million cubic yards—that would recontour both north and south ridgelines and place development on a substantial portion of the south facing slope of the northern ridgeline. A portion of the southern ridgeline, which contains Major and Minor Ridgelines, would be graded and recontoured to accommodate stormwater detention basins. As the visual simulations in Chapter 5 of the dEIR make clear, the Project would be extremely visible from Kirker Pass Road and require the flattening of a large part of the northern ridge. The Applicants characterize their Project as being "clustered" in Section 4.0 *Plans and Policies* because they say they largely limit their development to the valley floor of the main project site. In fact, a significant portion of the southern ridgeline would be developed. Far from being placed in a clustered fashion like that shown in Figure 4-4 (below), houses would be uniformly spaced without any accommodation for natural terrain features in the lower portions of the main project site.

# • 2-P-75: Cluster new residential development within the hills to maximize preservation of open space resources and viewsheds.

As already discussed above with respect to policy 2-P-73, the Project is a standard residential subdivision that proposes no clustering and massive grading (see Figure 3.0-6 below). The Project would develop and grade what is currently designated as open space, and severely degrade the northern ridgeline which is visible from a large portion of Pittsburg and lies in the Railroad Av./SR-4 viewshed (see Figure 4-1). The eastern portion of the southern ridgeline, which lies in the Kirker Pass Rd. viewshed and contains designated Major and Minor Ridgelines, would be graded and recontoured.

• 2-P-105: **Preserve all designated hillsides as open space**, according to the General Plan Land Use Diagram (Figure 2-2).

As discussed above, there are no designated ridgelines due to the delay in development of the Pittsburg Hillside Ordinance. However, Fig. 2-2 in the General Plan designates the northern and southern ridgelines of the main project site as open space. The Project proposes to substantially grade and recontour the northern ridgeline and place residential units on its lower south facing



slopes, while recontouring the eastern end of the southern ridgeline. This is most definitely not preservation of open space as called for in the above policy.

• 4-P-10: **Minimize grading of the hillsides**. Amend the City's Zoning Ordinance to allow density bonuses of 10 percent (maximum) for new hillside development that preserves 40 percent of natural hill contours.

As discussed above, the Project calls for massive grading of most of the main project site and a smaller portion of the off-site parcel. A large part of the northern ridgeline would be graded and the natural contours of the valley bottom would be completely lost. In addition, a portion of the southern ridgeline would be graded.

• 4-P-15: Minimize the visual prominence of hillside development by taking advantage of existing site features for screening, such as tree clusters, depressions in topography, setback hillside plateau areas, and other natural features.

Instead of taking advantage of site features to screen development and reduce their visual impact as this policy mandates, the Project would flatten the knolls and hills in the lower portion of the site and grade and reshape most of the northern ridgeline. No effort would be made to preserve existing topography except at the southern ridgeline, and even then part of the ridgeline will be graded.

• 4-P-16: Allow flag lots with common driveways within hillside neighborhoods, in order to encourage terracing of buildings while minimizing roadway cut-and-fill (see Figure 4-4 below).

The Project proposes a standard residential subdivision without common driveways or flag lots. Such non-uniform spacing and placement of residential units (see Figure 4-4 below) would better preserve the knolls and hills below the ridgelines and reduce the amount of grading that would be required. As far as cut-and-fill, the Project currently calls for cuts to the hill slopes of approximately 75 ft. in some locations and fills of 10-85 ft. of graded soil in the low portions of the site. This is a massive amount of cut-and-fill that will obliterate terrain features in much of the main project site.



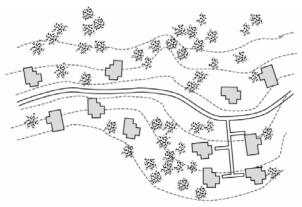


Figure 4-4: Flag Lots

Figure 4-4 from the Pittsburg General Plan.

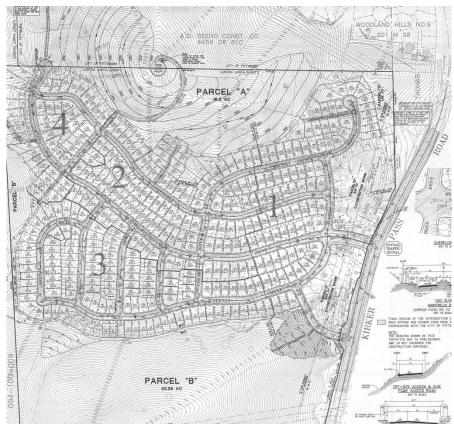


Figure 3.0-6. Conceptual Site Plan for the Project. Portion of original Figure 3.0-6 in dEIR.

• 4-P-17: Encourage clustering of Hillside Low-Density units in the southern hills, with resulting pockets of open space adjacent to major ridgelines and hillside slopes. Allow density bonuses of 10 percent (maximum) for preservation of 60 percent or more of a project's site area as open space.



As discussed above, the Project does not propose clustering of housing units, but a standard "cookie-cutter" residential subdivision that does not accommodate terrain on the lower levels of the site or the northern ridgeline. Contrast the housing configurations in Figure 4-4 with those in Figure 3.0-6 (above) to get a sense of the difference between clustered development, and the dense "cookie-cutter" residential subdivision proposed by the Project.

• 4-P-61: Retain views of the southern hills from the State Route 4 corridor, through implementation of ridgeline preservation policies (as described in Section 4.1).

The eastern edge of the southern ridgeline at the main project site, which consists of designated Major and Minor Ridgelines, would be graded and recontoured if the Project goes forward. The northern ridgeline, which lies in the Railroad Av./SR-4 viewshed, would be substantially altered. Massive grading on the south-side slopes for development would dramatically degrade views of this area from Kirker Pass Rd., while recontouring the ridge itself would alter the natural appearance of the ridgeline from northern viewpoints.

• 9-P-6: In order to preserve viewsheds of the southern hills, preserve major ridgelines (shown in Figure 9-1) throughout the Planning Area. Revise the Municipal Code per Policy 4-P-1: building pads and structural elements shall be located at least 150 feet away from (horizontally) the crest of a major ridgeline.

The southern ridgeline contains Major and Minor Ridgelines, and under the current Project plan its eastern end would be graded and recontoured.

• 9-P-7: During the design of hillside residential projects, encourage clustering of housing to preserve large, unbroken blocks of open space, particularly within sensitive habitat areas. Encourage the provision of wildlife corridors to ensure the integrity of habitat linkages.

As has been previously discussed, the Project calls for massive grading to construct a "cookiecutter" residential development that does not use clustering as a method to preserve terrain features such as knolls and small hills. The Project would fragment open space since a portion of open space would remain adjacent to existing development to the north, but would be cut off from the proposed "greenwall" at the southern ridgeline by development in the valley and southern slope of the northern ridge at the main project site.

• 9-P-8 As a condition of approval of new development, ensure revegetation of cut-and-fill slopes with native plant species.

The massive grading that would occur under the Project would require a large amount of revegetation to the valley, slopes of ridges, and even the higher portions of ridges that have been recontoured, as well as the off-site parcel. Mitigation Measure AES-2 as described in Section 5.1 *Aesthetics*, says "the developer shall hydro-seed all disturbed, yet undeveloped, slopes...in order to encourage growth of new vegetation on disturbed hillsides." However, the dEIR does not specify if the Applicants would revegetate disturbed areas with only native species, a native-



introduced species, mix, or just introduced species. The EIR should identify a list of native species that would be used to revegetate disturbed areas, and include a management plan to ensure that native species dominate revegetated areas years after initial seeding. For the last several hundred years native grass species have been outcompeted in California by introduced annual grasses, which now dominate the Project site. If the Project is going to cause even greater disturbance, efforts should be made to restore the area so that it supports native species.

Section 4.0 *Plans and Policies* in the dEIR describes the Project as being consistent with 16 specific policies in the General Plan. We have listed six of the same policies the dEIR calls out, and dispute their assertions that the Project is consistent with these policies in terms of grading, clustered development, and preservation of ridgelines. To carpet the valley floor of the main project site and portions of the northern ridgeline with dense housing is not clustering, and basically demolishing the northern ridgeline and recontouring it to hide massive grading cannot be considered minimization of grading or true preservation of viewsheds.

Chapter 1 of the General Plan states that, "A city's general plan has been described as its constitution for development – the framework within which decisions on how to grow, provide public services and facilities, and protect and enhance the environment must be made." It also states that, "*policies* provide more specific direction on how to achieve goals. Policies outline actions, procedures, programs, or techniques to attain the goals." If the Project conflicts with at least 16 policies that are designed to provide specific direction on how to achieve Pittsburg's General Plan goals, and if the General Plan is the framework within which decisions *must* be made, then how can the current proposed Project be in alignment with the goals and best interests of Pittsburg?

## Comments on dEIR Section 5.1, Aesthetics

## Significant and Unavoidable Impacts to Viewsheds

While the ridgeline in the northern portion of the main project site is not a designated Major or Minor Ridgeline, it is visible over a large swath of Pittsburg and contains a broad rock outcropping, the preservation of which is encouraged in General Plan goal 4-G-4. This ridgeline would be excavated, reduced in elevation by about 75 ft., and be developed on its lower south facing slopes. The visual simulations included in the dEIR from the vantage point of Kirker Pass Rd. give some indication of how much the massive grading proposed on the Project would carve out of the northern ridgeline and how degraded the scenery would be in the process. A water tank would be visible from the north as well. While the Applicants maintain that the majority of Pittsburg would not be able to view the development or a degraded ridgeline since it would be recontoured to look more natural, in truth, the heart of the ridge will be carved out from the southern end and its total height will be substantially reduced. The ridge would, in essence, be a prop screen with only the facade of being natural. In addition, large numbers of residents pass the site daily on Kirker Pass Road, from which the development would be highly visible.

Perhaps the only positive component of the Project is that it calls for a "greenbelt" along the southern ridgeline, but even this is soured by the fact that the Project calls for grading the eastern portion of this Major Ridgeline. This is discussed further below.



Existing policy direction makes it clear that preserving the quality and character of the southern hills and ridges is of the utmost importance for Pittsburg. As such, the EIR should include an alternative that preserves all portions of the northern and southern ridgelines at the main project site, without the grading, recontouring, and development on the south-facing lower slopes of the northern ridgeline and without the grading of the southern Major Ridgeline. If necessary, a water tank could still be a component of this alternative. It is likely that a much lower number of houses would be required for such an alternative to be possible. If the number of residential units for the Project were reduced, then clustered development that preserves terrain features as called for in the General Plan could be put in place and the Project would be consistent with Pittsburg's land use and development policy goals. While the dEIR includes a Ridgeline Preservation Alternative, this alternative does not preserve all portions of the ridges in project site.

Another benefit would be that the significant and unavoidable impacts to at-risk persons living near the proposed Project in the Woodlands neighborhood, such as the young, elderly, and people with respiratory problems, would not be as severely impacted by emission of PM2.5 because the amount of grading would be reduced. As the dEIR recognizes, impacts to sensitive persons by PM2.5 emissions, which is identified as a Toxic Air Contaminant by the State of California, would still be a significant and unavoidable impact even after all mitigation measures are implemented.

### Impacts to Major and Minor Ridgelines in the Southern Ridgeline

As the above discussion of policy 2-P-23 describes, the eastern portion of the Major and Minor Ridgelines of the southern ridgeline on the main project site would be graded to recontour the ridge for stormwater retention basins. This would alter a view visible over a large swath of Pittsburg and surrounding areas from a natural to an artificial-looking terrain, and with the substantial grading and lowering of the northern ridgeline, together constitute a significant and unavoidable impact to the aesthetics of the area. While the Applicants propose hydroseeding and recontouring the northern ridgeline to make it look natural, the ridgeline would indeed be artificial and no mitigation measure can adequately make a 75 foot lowering of a ridge less than significant.

With regard to the Major Ridgeline that would be recontoured, the EIR should include an alternative scenario that does not involve altering the southern ridgeline (as called for above). If the alteration is necessary for the Project as it is currently proposed, the scenario should be adjusted to exclude the stormwater detention basin that necessitates recontouring the southern ridgeline and any residential units associated with the excluded basin. Avoiding modification to the Major and Minor Ridgelines in the southern portion of the main project site would be consistent with the spirit of many of Pittsburg's specific General Plan policies (see above discussion).

#### Inadequacy of Visual Simulations Included in the dEIR

The dEIR does not include visual simulations looking south toward the Project from the north, so the visual impacts of the most severe grading (the lowering and excavation of the northern ridgeline), cannot be adequately evaluated. Most people that see the project area do so from the



north, from Pittsburg, and the ridgeline that will be most substantially altered under the Project lies in the Railroad Av./SR-4 viewshed. The EIR should include visual simulations of the effects of the Project from vantage points along Railroad Av. and SR-4.

## Comments on Cumulative Impacts Analysis

The list of Major Projects included in the dEIR to be analyzed in the Cumulative Analysis include Sky Ranch II, Black Diamond Ranch, Tuscany Meadows, and the James Donlon Boulevard Extension (JDBE). If approved, the latter project would be the one located closest to the Project. In a few short sentences, the dEIR states that because the JDBE is a roadway and no other improvements would be made in the area of that project, "views of the hillsides to the east would not substantially alter lands to the east of the project." How could a major arterial roadway located in steep, landslide-prone hills where currently no development exists, not substantially alter the aesthetics of the hills? Extreme amounts of grading and cut-and-fill will be necessary to construct the JDBE, which will also affect the views of these hills. In addition, the impact on local agriculture of the Project and the JDBE together is not discussed in the dEIR. If the Project is approved and built, ranching activity will largely end at the Project site, but considered together with the JDBE, ranching would be rendered much more difficult over a wide swath of the Pittsburg southern hills due to the JDBE bisecting a large working cattle ranch. Where is this discussion of cumulative impacts in the dEIR?

Taken together, the Major Projects and the Project represent more than 2,000 new homes and a major roadway in the vicinity of the southern hills of Pittsburg. This is not even the whole story, as the Pointe project, a project being proposed by Discovery Builders, which along with the Applicants is owned by the Seeno family, is not even listed with the Major Projects. This is puzzling, since it lies only 2.3 miles away from the main project site and is located at the other end of the JDBE. Given that the Pointe would actually demolish an entire hill and require even more grading and excavating than the Project, and would add traffic and other impacts that could affect the Project since it is also a residential subdivision, how is the Pointe not included in the list of Major Projects? How could the construction of more than 2,000 homes and a major roadway in the southern limits of Pittsburg and Antioch not be severely growth inducing and not cumulatively have major impacts on the southern hills?

The cumulative impacts analysis in the dEIR should include the Pointe project and be redone to fully account for the significant impacts that taken together all these projects would have in terms of traffic, air quality, greenhouse gas emissions, aesthetics, biological resources, land use and planning, and other impact categories.

## Comments on dEIR Section 5.6, Public Services

Section 5.6 of the dEIR identifies some of the public services that are expected to serve the Project as well as the adequacy of service provided. It is striking that even before the West Leland Fire Station was closed in July 2013, Pittsburg was unable to meet established fire



response time guidelines (Leach 2011<sup>2</sup>). Now that there is one less fire station to serve the area, it is reasonable to say that fire services would be further strained by adding a significant number of residential units, as the Project calls for. In addition, the Project is beyond the current city limits, accessible only by one road, and as discussed above, the subdivision itself seems to have only one main entrance (most of the division will likely use one entrance due to accessibility issues and a traffic signal). So not only would the Project add an additional burden on already inadequate resources, but the accessibility of the Project itself is limited. If fire resources are unable to adequately serve residential neighborhoods as they exist now, what sense does it make to add more housing that will make service increasingly inadequate?

These same points are also true for police response time. Even if we only consider housing that already exists in Pittsburg, the Pittsburg Police Department is not meeting its goal for emergency calls (LAFCO 2011<sup>3</sup>). The same question must then be asked, what sense does it make to place additional burdens on an already overburdened system?

Regarding the schools that are expected to service the Project, the elementary and junior high schools were operating at or over capacity three years ago, and the high school was just barely under capacity (SCI 2010<sup>4</sup>). The high school (Pittsburg High School) currently has 2,950 students enrolled, which is nearly at their maximum capacity of 3,000 students (Williams pers. comm.<sup>5</sup>). Why is Pittsburg even considering placing additional students in schools that are already at or beyond their maximum capacity to accept more students?

Given that fire, police, and school services, cannot adequately serve the Pittsburg communities that already exist, let alone serve an additional community of the size that the Project plans, wouldn't the logical thing to do be to not develop new residential areas when those that already exist cannot be serviced within established guidelines? The Project should not be considered until public services can adequately service the residential areas that currently exist.

## Other Comments on the dEIR

The Applicants are not identified anywhere in the main dEIR document. They should be named in the Executive Summary and/or Project Description sections and clearly identified as the Applicants for this Project.

The dEIR's Section 4.0, *Plans and Policies*, regards the Project as consistent with a number of specific General Plan policies that we find the Project to be remarkably inconsistent with. In addition, since the section discussed a topic typically found in an EIR's Land Use and Planning

<sup>&</sup>lt;sup>5</sup> Williams, Beverly. 2014. Phone conversation with Pittsburg High School employee Beverly Williams. Enrollment and capacity figures provided by Principal Todd Whitmire.



<sup>&</sup>lt;sup>2</sup> Leach, Ted. 2011. Fire Inspector, Contra Costa County Fire Protection District. Personal communication via electronic mail with Paul Stephenson, Impact Sciences, December 15.

<sup>&</sup>lt;sup>3</sup> Contra Costa County. 2011. Contra Costa Local Agency Formation Commission (LAFCO), East County Sub-Regional Municipal Services Review. December 10.

<sup>&</sup>lt;sup>4</sup> SCI Consulting Group. 2010. Comment by Pittsburg Unified School District on the Montreux Annexation and Subdivision Application. October 5.

section, we ask why the Applicants decided to label this section as they did. The change from a standard component in an EIR seems unnecessary and confusing. The section should be retitled and revised, and an honest, realistic discussion of the Project's inconsistency's with the General Plan included.

## **Closing Remarks**

Save Mount Diablo supports development that is planned and executed in a sustainable, environmentally sensitive manner. Infill of areas already surrounded by development or the revitalization of run-down neighborhoods would be types of development that we could support. However, this Project lies outside of the Pittsburg City Limits, is not connected to other development, calls for massive grading of ridgelines, and would degrade important viewsheds. The Project is nothing more imaginative than another "cookie-cutter" residential subdivision that makes no attempt to preserve terrain features or cluster development to incorporate natural elements into overall project design. To propose this Project next to several lands that have been protected for open space and wildlife values is inconsistent with the overall character of the area and flies in the face of the various goals and policies established by Pittsburg that have already been discussed. The cumulative impacts of this Project and others being proposed or already under construction would also significantly change the appearance and character of the southern hills. The public services that would service the Project are already inadequate for the amount of development that already exists. How can it be a good idea to place more burdens on an already over-burdened system?

We are opposed to this Project and those like it. However, if the process must move forward, major changes to the Project should be made, including preservation (no grading or excavation) of both the northern and southern ridgelines and clustered development in the valley. Serious inadequacies in the dEIR must also be addressed.

Thank you for the opportunity to provide comments on the Project.

Sincerely, Juan Pablo Galván Land Use Planner

Cc:

Meredith Hendricks, Save Mount Diablo
Ron Brown, Save Mount Diablo
Mayor Sal Evola, City of Pittsburg
Vice Mayor Pete Longmire, City of Pittsburg
Council Member Ben Johnson, City of Pittsburg
Council Member Will Casey, City of Pittsburg
Council Member Nancy Parent, City of Pittsburg
Bob Doyle, East Bay Regional Parks
Joel Devalcourt, Greenbelt Alliance
Dick Schneider, Sierra Club
Mack Casterman, California Native Plant Society







April 29, 2013

Kristin Vahl Pollot, AICP Associate Planner City of Pittsburg Civic Center 65 Civic Avenue Pittsburg, California 94565

# Subject: Notice of Preparation (NOP) for the Montreux Residential Subdivision Project (APN: 089-020-009; 011; 014; and 015).

Dear Ms. Vahl Pollot:

Save Mount Diablo (SMD) appreciates the opportunity to comment on the Notice of Preparation for the proposed Montreux Residential Subdivision project. SMD is a nonprofit conservation organization founded in 1971 which acquires land for addition to parks on and around Mt. Diablo, and monitors land use planning which might affect protected lands and resources. Save Mount Diablo has an interest in the lands surrounding Black Diamond Mines Regional Preserve, and between it and the Keller Landfill and the Naval Weapons Station Concord. SMD supports open space preservation in the vicinity of these areas in order to preserve open space scenic values, recreational opportunities and wildlife habitat, especially in the corridor between these areas.

#### **General Comments**

The setting of the Montreux property is open space. It is surrounded by the PG&E buffer and Keller Preserve to the west; the East Bay Regional Park District's Black Diamond Mines Preserve to the east; Save Mount Diablo's Wayne Thomas property across Kirker Pass Road; and the Concord Naval Weapons Station property to the south. These properties have been preserved to protect endangered species, agriculture, recreation resources and open space. Our fundamental question is: *How would a cookie cutter subdivision that proposes to fill in drainages, remove trees and entire hillsides be* 



1901 Olympic Blvd., # 320, Walnut Creek, CA 94596 • T (925) 947-3535 • SaveMountDiablo.org • Tax ID # 94-2681735

consistent in the steep and landslide-prone hills south of Pittsburg, surrounded by properties that have been preserved for endangered species, recreation, open space and their aesthetic values?

The project has been around for decades. Why would it be proposed at this time given the large number of units that have been approved but not built or are still under consideration in Sky Ranch II, Tuscany Meadows and other projects? Also, what is the disposition of the open space to the north, and why would the City of Pittsburg consider allowing the removal of hillsides within this open space that form the aesthetic backdrop for the entire City and wider region?

### Specific Comments

In reviewing the NOP, SMD is concerned about the following issues and requests that information be included in the DEIR to address these critical matters.

- 1) The Project Description is Incomplete: The DEIR project description should include the architectural design plans to allow for evaluation of the project in relation to policy direction related to maintaining rural character. According to the NOP, "No architectural design plans have been submitted at this time, and the future design of the units would be subject to design review". Particularly, given the visual sensitivity of the project proposed within the southern hills of Pittsburg, the architectural plans and specifications should be included in the DEIR. It is premature to evaluate the project without this information. The Project Description should also describe the existing PG&E pipeline that appears to cross the property and how it would be affected by the proposed project.
- 2) The Project design is fundamentally inconsistent with the policy guidance provided in the General Plan for Hillside Areas. The NOP notes that "Grading would include cuts to the hill slopes of approximately 75 vertical feet in some locations and fills of between 10 and 85 feet of graded soil in the low portions of the site. The northern ridgeline (with an elevation of up to 655 feet) would be significantly reconfigured. Most of the existing ridgeline would be graded and re-contoured, with the crest of the ridge shifted toward the north and graded to conform to the topography of the north side of the hills. A partially buried water tank would be added at the top of the hill on the northern boundary of the site."

General Plan Policy 4-G-4 indicates "Encourage development that preserves unique natural features such as topography, rock outcroppings, mature trees, creeks and ridgelines in the design of hillside neighborhoods." <u>The project as proposed</u> <u>removes key features such as ridgelines, rock-outcroppings, mature trees, and ephemeral drainages.</u>

Policy 2-P-75 indicates: "Cluster new residential development within the hills to maximize preservation of open space resources and viewsheds." <u>The proposed</u> project does not cluster units. It is a standard residential subdivision.

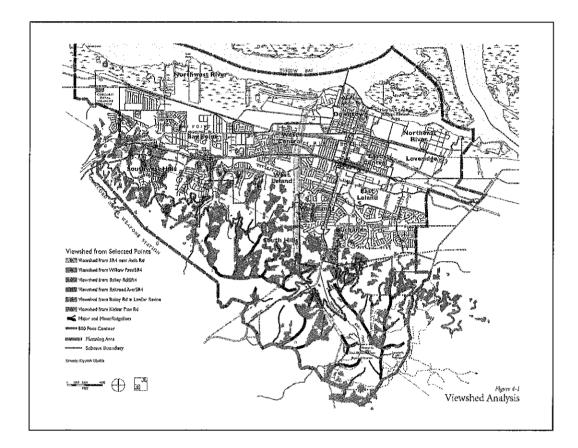
Other General Plan policy direction that should be considered in the DEIR includes:

- "Natural topography be retained to the maximum extent feasible, and largescale grading discouraged". <u>The project involves massive grading, and removal</u> <u>of an entire hillside and ridgeline.</u>
- "No development on minor and major ridgelines (as identified on Figure 4-2, above) with residential construction on flatter slopes encouraged." <u>The site is</u> <u>being flattened and northerly ridgelines removed.</u>
- "Development designed and clustered so as to be minimally visible from Kirker Pass Road". <u>Units are not clustered</u>. <u>The development would dramatically affect</u> <u>views from Kirker Pass Road</u>.

Given the inconsistency of the proposed project with policies applicable to hillside areas, the Initial Study Land Use Section 10 (b) should be identified as a **Potentially Significant Impact**, and should be fully evaluated in the DEIR. The DEIR should include a comprehensive analysis of the level of consistency of the project with existing plans and policies.

3) The Project is fundamentally inconsistent with the Viewshed Protection objectives stated in the General Plan. The project consists of a standard urban subdivision located within the visually sensitive hills south of the City of Pittsburg. The Aesthetic section of the DEIR should include visual simulations from Kirker Pass Road, the Black Diamond Mines Regional Preserve, and from the City of Pittsburg. The hills form a key aesthetic backdrop to the City; General Plan Figure 4-1, the Viewshed Analysis, identifies the 500-foot Contour and Major and Minor Ridgelines that

should be protected. The project as proposed would dramatically affect the topography of the site by lowering and re-contouring key ridgelines, thereby significantly affecting visual quality of these hillsides.



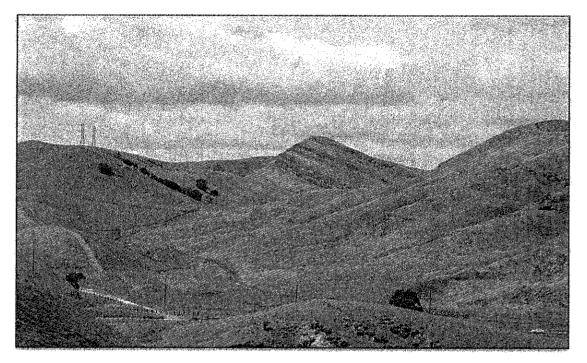
General Plan Policy 2-P-23 indicates: "Restrict development on minor and major ridgelines (as defined by Figure 4-2). Encourage residential construction on flatter natural slopes or non-sensitive graded areas that reduce environmental and visual impacts. Minimize cut-an-fill of natural hillsides." <u>The proposed project does not protect these ridgelines and does not encourage construction on flatter natural slopes.</u> Instead, the project proposes massive grading to flatten slopes and ridgelines. It is designed in a manner that is diametrically opposed to this policy direction.

Similarly, General Plan Policy 2-G-8 indicates: Ensure that hillside development enhances the built environment, improves safety through slope stabilization, is respectful of topography and other natural constraints and preserves ridgelines and viewsheds. <u>Again, the proposed project is designed in a manner that is fundamentally</u> <u>inconsistent with this direction.</u> The DEIR should include an extensive consistency analysis of the project in relation to existing plans and policies, particularly policies related to hillside development.

4) The Project consists of 'Leap Frog' Development: The project represents leap-frog development that contradicts current land use practices that promote development that is close to public transportation and existing urban services. By proposing a project outside of the existing city limits and service boundaries, the applicant is creating a project that would result in much higher greenhouse gases during construction and over the long term than would be the case for sites already within the city limits and already served with urban services.

The DEIR should evaluate the project in relation to General Plan Policy 2-G-1: "Maintain compact urban form within the City's projected municipal boundary. Ensure that hillside lands not environmentally suitable for development are maintained as open space."

- 5) The Project design should protect Wetlands and Creek Channels. According to the NOP, a total of 0.468 acres of wetlands and creek channels were delineated on the project site. This total includes 0.342 acres of jurisdictional waters of the US, including wetlands and 0.126 acres of non-jurisdictional isolated wetlands and ephemeral creeks. Degradation of these resources conflicts with General Plan Policy 2-P-25 "As a condition of approval, ensure that residential developers incorporate natural creeks as open space amenities into the design of residential neighborhoods." Initial Study Issue 9 (d) should be evaluated more completely, given the alteration of site drainage that would result from the project. The DEIR should study potentially significant impacts related to biological resources and hydrology.
- 6) Mature Trees should be Protected: The project site supports a number of mature oak trees along drainage and hillside areas. The DEIR should describe and evaluate trees that would be affected by the proposed project. Mitigation measures should be included to protect or replace impacted trees.



View across Kirker Pass Road toward the Montreux Project site (Photo by Scott Hein; original photo cropped to focus on the Montreux property)

The Seeno companies have a long history of grading, encroaching on streams, cutting trees and performing work on various properties they control, prior to environmental analysis and without permits. This was the case for the trees removed without a permit on the Montreuxu site, in 1999, and is part of a pattern.

7) The Mass Grading that is proposed would result in Potentially Significant Impacts to Air Quality and Greenhouse Gases. Removal/ flattening of the northern hillside within the project site not only conflicts with the policy direction in the General Plan, but also results in potentially significant impacts related to air quality and greenhouse gases. Both issues should be studied in the DEIR as potentially significant impacts and cumulative impacts.

The NOP mentions that basic construction mitigation measures would be implemented as indicated in Table 8-1 of the BAAQMD CEQA Guidelines (May 2011) (*8-1 Basic Construction Mitigation Measures*). As a project involving massive grading and removal of entire ridgelines, at minimum, the additional mitigation measures included in Table 8-2 *Additional Construction Mitigation Measures*, should also be identified in the DEIR to mitigate construction impacts. The NOP seems to vastly underestimate construction emissions. NOP *Table 1: Estimate Construction Emissions* indicates that "The PM10 and PM2.5 emissions are for the vehicle exhaust component only." However, the BAAQMD CEQA Guidelines, on page B-10, indicate that URBEMIS assumes that fugitive PM dust emissions from soil disturbance activities and travel on unpaved roads account for approximately 79 percent and 21 percent of total the fugitive PM dust emissions, respectively. The NOP Appendix B Air Quality and GHG Modeling Data indicates that PM10 levels in 2014 would be 82.84 lbs per day mitigated. The BAAQMD threshold indicated in Table 1 on page 28 of the NOP is 82 lbs per day, so the project appears to exceed the threshold of significance. The DEIR should provide further clarification regarding the project's impact related to fugitive particulate matter dust emissions.

8) The DEIR should include Alternatives that are designed to be consistent with the General Plan policy direction provided for Hillside development and an Alternative Located within the Existing City Limits. The proposed project appears to have been designed in a manner that ignores the policy framework related to Hillside Development. The DEIR should include an environmentally sensitive alternative which is designed in a manner that is consistent with the policy direction for hillside development, and that is also consistent with the existing pre-zoning for the site (Hillside Planned Development (HPD) and Open Space (OS)). Given the standard urban subdivision that is proposed, an off-site alternative located on a flatter site within the existing city limits should also be considered.

The NOP notes that "with the approval of the proposed change from HPD to RS-6, the proposed project would be consistent with the City of Pittsburg Zoning Ordinance." However, currently, the proposed project is not consistent with the existing zoning. In 2005, Pittsburg voters approved the City of Pittsburg Voter Approved Urban Limit Line and Prezoning Act. Measure P included prezoning of the site for HPD and OS. While prezoning can be changed by either a subsequent vote of the voters at a city election or by a majority vote of the City Council, SMD believes that the prezoning as HPD and OS is critical for preserving the hillsides south of Pittsburg. Apart from the No Project Alternative and an off-site alternative located within the city limits, the alternatives considered should be consistent with the HPD and OS pre-zoning, given the visually sensitive location in the hills south of the City of Pittsburg.

9) Cumulative and Growth Inducing Impacts: The project should be evaluated together with the James Donlon Extension, Tuscany Meadows, and Sky Ranch II projects. Together, these developments are likely to result in a surplus of housing that will be growth-inducing for the region. Unlike projects that are built near city centers served by public transportation, cumulative and growth-inducing impacts related to aesthetics,

traffic, air quality, geology, hydrology, land use, noise, public services and utilities will all be unnecessarily aggravated, and should be studied in the DEIR.

**10)** The Hillside Preservation Ordinance is Needed to Evaluate this Project: The project is premature and should not be considered until the City of Pittsburg has finalized its Hillside Preservation Ordinance which was started several years ago, and then apparently put on-hold. General Plan Policy 2-P-21 indicates:

"Revise the City's Hillside Preservation Ordinance to reflect General Plan policy direction. Revisions may include but are not limited to:

- Designating protected ridgelines, creeks and other significant resources areas, along with daylight plane or setback standards;
- Defining protected viewsheds;
- Designating location and density of low-density hillside residential development based on slope stability and visual impact;
- Provision of well-designed hillside projects that provide larger, family-oriented lots and
- Protection of significant ridgelines and incorporation of hill forms into project design."

Since the City of Pittsburg has not yet finalized its Hillside Preservation Ordinance, the DEIR should evaluate the project in relation to the direction provided by Policy 2-P-21 indicated above.

Thank you for the opportunity to submit comments on the proposed Montreux Residential Subdivision NOP and the information required in the DEIR to comply with the California Environmental Quality Act (CEQA).

Save Mount Diablo also requests notification of all materials distributed related to the project and associated environmental process, and all public discussions, meetings and hearings conducted.

Sincerely,

Tanky Woltering

Nancy Woltéring Land Conservation Analyst



#### **MEMBERS**

Public Member

Federal Glover

County Member

Michael R. McGill

Special District Member

Donald A. Blubaugh

#### Mary N. Piepho County Member Rob Schroder City Member Igor Skaredoff Special District Member

Don Tatzin

City Member

September 14, 2016 (Agenda)

Contra Costa Local Agency Formation Commission 651 Pine Street. Sixth Floor Martinez, CA 94553

# LAFCO Agricultural & Open Space Preservation Policy

Dear Commissioners:

This report from LAFCO's Policies & Procedures Committee ("Committee") transmits the revised draft LAFCO Agricultural & Open Space Preservation Policy (AOSPP) - Version 1 (applicant proposed mitigation) - Attachments 1a (clean) and 1b (tracked), and Version 2 (required mitigation) - Attachment 2. The LAFCO Executive Officer worked closely with the Committee on the issues discussed below and concurs with the Committee's recommendations.

#### BACKGROUND

Development of a LAFCO AOSPP was identified years ago as part of the Commission's ongoing efforts to update its Policies & Procedures. The discussion was elevated in March 2015, at which time the Committee presented a report to the Commission that included a summary of relevant LAFCO statutes and a collection of LAFCO policies and procedures representing 18 different LAFCOs from around the State.

In July 2015, LAFCO hosted an Agriculture & Open Space Preservation Workshop to engage stakeholders in a conversation as to whether or not LAFCO should develop an AOSPP, and if so, what the policy should address. There was broad support for a LAFCO AOSPP.

Since July 2015, there has been extensive outreach, and throughout the process, LAFCO has received valuable input from agriculture, building, environmental, legal, farming, local government and other interest groups, along with members of the general public (for a full chronology of the AOSPP progression, please refer to the July 13, 2016 Committee report). The Committee and LAFCO staff sincerely thank all those who participated in the evolution of the draft policy and provided thoughtful comments.

Lou Ann Texeira Executive Officer

> City Member Stanley Caldwell Special District Member

September 14, 2016 Agenda Item 8

ALTERNATE MEMBERS

Candace Andersen

County Member

Sharon Burke

Public Member

Tom Butt

### DISCUSSION

At the July 13, 2016 LAFCO meeting, the Commission received a revised draft AOSPP reflecting both the Commission's guidance and comments, as well as comments from the stakeholders, during and following the March 2016 LAFCO meeting. In response to the policy presented in July, LAFCO received dozens of written comments and heard from 13 speakers at the July meeting. Many of the commenters requested that stronger mitigation measures be required in LAFCO's policy.

While the Commission agreed that the draft policy presented in July was more robust, the Commission requested further clarifications and refinement of the policy. In addition, the Commission asked that the Committee also prepare an alternative version of the policy to include required mitigation.

Since the July LAFCO meeting, the Committee has had further discussions with building, environmental and farming representatives. Also, on September 1<sup>st</sup>, Commissioners Blubaugh, Skaredoff and Tatzin, along with Tomi Riley, Chief of Staff for Supervisor Mary N. Piepho, and the LAFCO Executive Officer received a tour of Frog Hollow Farms.

The revised policies – both Version 1 (applicant proposed mitigation) and Version 2 (required mitigation) - reflect the Commission's prior comments and direction, and many of the comments received from interested parties.

Revisions to Version 1 include the following:

- Revised Policy 5 in response to the development community's concerns.
- Added clarification regarding the meaning of "right to farm" based on Contra Costa County's right to farm ordinance.
- Provided clarification to the land use inventory. Many public agencies prepare land use inventories in accordance with their Housing Element and economic development strategic plans.
- Provided clarification regarding buffers.
- Expanded the language regarding comparable mitigation examples (e.g., habitat conservation plan or other similar plans).
- Added Guideline 7 relating to timing and fulfillment of mitigation.

LAFCO received comments requesting that the "Observations" at the end of the policy be removed or retained. The Committee recommends retaining these as they provide valuable ideas and perspective.

LAFCO also received comments regarding LAFCO's relationship to urban limit lines and urban growth boundaries. The Commission's policies relating to these growth boundaries include the following provision: "The Commission will generally favor adopted plans that are supportive of the Commission's responsibility to discourage urban sprawl, preserve open space and prime agricultural lands, provide for efficient public services and encourage the orderly formation and development of local agencies." The LAFCO AOSPP is not intended to change these policies.

In addition, pursuant to the Commission's direction, the Committee prepared an alternative LAFCO AOSPP (Version 2) which provides for required mitigation. The tracked changes in Version 2 reflect the differences between Version 1 and Version 2.

Finally, in an effort to provide further clarification on key issues, and respond to a number of recurrent questions and misperceptions, the Committee prepared a Frequently Asked Questions (FAQ) – Attachment 3. The FAQ, as currently written, primarily coincides with Version 1 of the AOSPP. Should the Commission adopt Version 2, some additional questions and modified answers will be needed.

### POLICY AND OTHER ISSUES

### A. Agriculture Enterprise

In reviewing the City of Brentwood's *Agricultural Enterprise Program and Agricultural Mitigation Fee*, and in visiting Frog Hollow Farm and experiencing that approach to farming, the Committee concludes that efforts to enhance agriculture enterprise are necessary, albeit LAFCO's potential role in this endeavor is limited. The LAFCO policy supports agriculture enterprise, and encourages economically viable agriculture-based businesses that will keep agriculture production high.

Other possible components of LAFCO's effort to support agriculture enterprise might include revisions to LAFCO's out of agency service policy to allow for municipal services to support agriculture business. If the Commission wants to consider this addition, the Committee recommends that the Commission provide direction to modify LAFCO's out of agency service policy, rather than make further revisions to the AOSPP for this purpose.

LAFCO encourages the County and municipalities to review their General Plans and other policies in terms of supporting and enhancing agriculture enterprise.

## B. LAFCO's Authority

On August 31, 2016, LAFCO received a letter from Kristina Lawson, attorney with Manatt Phelps & Phillips expressing a number of concerns (included in Attachment 4). In her letter, Ms. Lawson implies that LAFCO's draft AOSPP exceeds the scope of LAFCO's authority under the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH).

As we have previously stated, LAFCO is *required to establish written policies and procedures and exercise its powers pursuant to the CKH in a manner consistent with those policies and procedures* (Gov. Code section 56300). The proposed AOSPP is one of numerous policies contained in the Contra Costa LAFCO Commissioner Handbook.

The CKH grants LAFCO broad authority to carry out its statutory responsibilities to encourage the orderly formation of cities and special districts, discourage urban sprawl, and preserve agricultural and open space lands.

LAFCO has the authority to approve, with or without conditions, or deny an application. LAFCO has broad discretion to deny an application, including for the absence of, or inadequate mitigating measures included in an application to LAFCO. LAFCO also has authority to impose a range of terms and conditions when approving an application pursuant to Gov. Code §§56885.5, 56886-56890.

# C. CEQA and LAFCO's PROPOSED AOSPP

In her August 16<sup>th</sup> letter, Ms. Lawson indicates that LAFCO's draft AOSPP constitutes a project subject to review under the California Environmental Quality Act (CEQA). Ms. Lawson notes that Santa Clara LAFCO prepared an initial study in conjunction with its agricultural mitigation policies.

Prior to developing the draft AOSPP, the LAFCO Policy Committee reviewed agriculture and open space preservation policies covering 18 other LAFCOs. Of those LAFCOs with the most substantial policies (e.g., Monterey, San Luis Obispo, Santa Clara, Stanislaus, Yolo), only Santa Clara prepared an Initial Study/Negative Declaration. Monterey, San Luis Obispo, Stanislaus and Yolo LAFCOs found their policies exempt from CEQA.

It has been determined that Contra Costa LAFCO's draft AOSPP (Versions 1 and 2) is not a project under CEQA.

## **RECOMMENDATIONS:**

Approve desired version of the LAFCO AOSPP. If Version 2 (required mitigation) is desired, provide direction regarding Guideline 3b 1(a), (b) and (c) and the Commission's preferred ranges/ratios.

Respectfully submitted,

# Sharon Burke and Don Tatzin

c: Distribution

Attachment 1a – Version 1 - Clean Revised Draft LAFCO AOSPP Attachment 1b – Version 1 - Tracked Revised Draft LAFCO AOSPP Attachment 2 – Version 2 Attachment 3 – Frequently Asked Questions Attachment 4 - Comments to Draft LAFCO Agricultural & Open Space Preservation Policy

# 4.1 DRAFT AGRICULTURAL AND OPEN SPACE PRESERVATION POLICY – VERSION 1

# PREFACE

LAFCO's enabling and guiding legislation, the Cortese Knox Hertzberg (CKH) Act, begins with the following statement.

"The Legislature finds and declares that it is the policy of the state to encourage orderly growth and development which are essential to the social, fiscal, and economic well-being of the state. The Legislature recognizes that the logical formation and determination of local agency boundaries is an important factor in promoting orderly development and in balancing that development with sometimes competing state interests of discouraging urban sprawl, preserving open-space and prime agricultural lands, and efficiently extending government services." (§56001)

Beginning in the late 1800s, farmers and ranchers made Contra Costa County an important source of agricultural products. Much of the County has good soils, a mild climate, and adequate water. Western and central Contra Costa were used for agriculture well into the twentieth century. John Muir farmed and ranched approximately 2,600 acres in what is now Martinez, Concord, and the Alhambra Valley. While the County's population was increasing, by current standards, the County's population was small. The 1910 census recorded 31,764 residents, less than the 2015 population of Pleasant Hill.

Development, which began in earnest after World War II, transformed Contra Costa County. As urban and suburban development occurred, Contra Costa County experienced significant reduction in the amount and economic importance of agricultural lands. Simultaneously, critical open space habitat for sensitive species declined. By 2010, the Census reported that Contra Costa had 1,049,025 people, representing 3,300% growth since 1910. Contra Costa County's 2040 population is forecast to be 1,338,400.

As a result of population and job growth, agricultural land was converted to houses, schools, commercial centers, job centers, and transportation corridors. In 2015, there were about 30,000 acres of active agricultural land in Contra Costa County, excluding rangeland and pastureland, most of it located in the eastern portion of the County. There are approximately 175,000 acres of rangeland and pastureland in the County.

Agriculture in Contra Costa County is worth approximately \$128.5 million (farm production) in 2015 and is an important economic sector. The value of agricultural production has risen in recent years.<sup>2</sup> However, some worry that Contra Costa's agricultural industry may approach a tipping point beyond which agriculture becomes less viable due to a lack of labor, suppliers, and processors located nearby.<sup>3</sup>

The pressure on agricultural land also extends to wildlife and riparian areas. In some cases, conversion of these lands through development disrupts an ecosystem that used to depend on the now developed land as a travel route, or a seasonal or permanent source of food and water.

The County and some cities are active in efforts to preserve agricultural and open space lands. For example, in the 1970s, the County created a County Agricultural Core to the east and south of Brentwood. The City of Brentwood has an agricultural mitigation program that collected more than \$12 million in

<sup>2</sup> 2008-2015 Crop and Livestock Reports, Contra Costa County Agricultural Commissioner

<sup>&</sup>lt;sup>1</sup> 2015 Crop and Livestock Report, Contra Costa County Agricultural Commissioner

<sup>&</sup>lt;sup>3</sup> Sustaining our Agricultural Bounty: An Assessment of the Current State of Farming and Ranching in the San Francisco Bay Area – A white paper by the American Farmland Trust, Greenbelt Alliance and Sustainable Agriculture Education (SAGE), January 2011

mitigation fees and through conservation organizations, and acquired the development rights over approximately 1,000 acres of agricultural lands. In 2006, the voters adopted Urban Limit Lines (ULLs) for the County and each municipality, and these actions helped protect undeveloped land outside the ULLs. Furthermore, the County adopted the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCCHCP/NCCP) that protects sensitive habitat for plants and animals in East Contra Costa.

LAFCO embraces its objectives of encouraging orderly growth and development while discouraging urban sprawl, efficiently extending government services, and preserving open space and prime agricultural lands. Through the review and approval or denial process of boundary changes and other applications, LAFCO has considerable authority to provide for the preservation of open space and agricultural land, and impose terms and conditions. (§§56885 -56890).

While LAFCO has authority to achieve the objectives of the CKH Act, there are things that LAFCO cannot do, for example, directly regulate land use.<sup>4</sup> Therefore, successful preservation of prime agricultural, agricultural and open space lands and of agriculture as a business requires that both applicants and other agencies also lead. At the end of this policy are observations about other opportunities facing residents, advocacy organizations, and governmental agencies that could also strengthen and preserve agriculture and open space lands.

# **AUTHORITY OF LAFCO**

LAFCO's authority derives from the CKH Act. Among the purposes of LAFCO are to encourage planned, orderly, and efficient urban development while at the same time giving appropriate consideration to the preservation of prime agricultural, agricultural and open space lands (\$56300). The CKH Act includes provisions that grant LAFCO the authority to consider and provide for the preservation of open space and agricultural lands. Among these provisions is \$56377 which describes the intent of the legislation with regard to agricultural lands:

"56377. In reviewing and approving or disapproving proposals which could reasonably be expected to induce, facilitate, or lead to the conversion of existing open space lands to uses other than open space uses, the commission shall consider all of the following policies and priorities:
(a) Development or use of land for other than open space uses shall be guided away from existing prime agricultural lands in open space use toward areas containing non-prime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.
(b) Development of existing vacant or non-prime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the SOI of a local agency should be encouraged before any proposal is approved that would allow for or lead to the development of existing open space lands for non-open space uses that are outside of the existing jurisdiction of the local agency or outside of the existing jurisdiction of the local agency."

LAFCO is specifically charged in some instances with protecting open space and agricultural land. For example, an island annexation may not be approved if the island consists of prime agricultural land [§56375.3(b)(5)]. LAFCO may not approve a change to an SOI where the affected territory is subject to a Williamson Act contract or farmland security zone unless certain conditions exist (§§56426 and 56426.5).

<sup>&</sup>lt;sup>4</sup> "A commission shall not impose any conditions that would directly regulate land use density or intensity, property development, or subdivision requirements" [§§56375(6), 56886].

When making a decision, LAFCO must consider whether an application and its effects conform to both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities in Sections 56377 and 56668(d). Finally, LAFCO must consider the effect of an application on maintaining the physical and economic integrity of agricultural lands [§56668 (e)].

An application for a change of organization, reorganization, the establishment of or change to a sphere of influence (SOI), the extension of extraterritorial services, and other LAFCO actions as contained in the CKH Act will be evaluated in accordance with LAFCO's adopted Agricultural and Open Space Preservation Policy.

# PURPOSE OF THE POLICY

The purpose of this policy is threefold: 1) to provide guidance to the applicant on how to assess the impacts on prime agricultural, agricultural and open space lands of applications submitted to LAFCO, and enable the applicant to explain how the applicant intends to mitigate those impacts; 2) to provide a framework for LAFCO to evaluate and process in a consistent manner, applications before LAFCO that involve or impact prime agricultural, agricultural and/or open space lands; and 3) to explain to the public how LAFCO will evaluate and assess applications that affect prime agricultural, agricultural and/or open space lands.

# **DEFINITIONS**

Several terms are important in understanding LAFCO's responsibility and authority to preserve prime agricultural, agricultural and open space lands. These terms and definitions are found below and are applicable throughout these policies. The CKH Act contains the following definitions for agricultural land, prime agricultural land and open space:

**56016**. "**Agricultural lands**" means land currently used for the purpose of producing an agricultural commodity for commercial purposes, land left fallow under a crop rotational program, or land enrolled in an agricultural subsidy or set-aside program.

**56064.** "**Prime agricultural land**" means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:

(a) Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.

(b) Land that qualifies for rating 80 through 100 Storie Index Rating.

(c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Range and Pasture Handbook, Revision 1, December 2003.

(d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars (\$400) per acre.(e) Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars (\$400) per acre.

**56059**. **"Open space"** means any parcel or area of land or water which is substantially unimproved and devoted to an open-space use, as defined in Section 65560.

**65560**. (a) "Local open-space plan" is the open-space element of a county or city general plan adopted by the board or council, either as the local open-space plan or as the interim local open-space plan adopted pursuant to Section 65563.

(b) "Open-space land" is any parcel or area of land or water that is essentially unimproved and devoted to an open-space use as defined in this section, and that is designated on a local, regional, or state open-space plan as any of the following:

(1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays, and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, greenways, as defined in Section 816.52 of the Civil Code, and watershed lands.

(2) Open space used for the managed production of resources, including, but not limited to, forest lands, rangeland, agricultural lands, and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; bays, estuaries, marshes, rivers, and streams that are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

(3) Open space for outdoor recreation, including, but not limited to, areas of outstanding scenic, historic, and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas that serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, greenways, and scenic highway corridors.

(4) Open space for public health and safety, including, but not limited to, areas that require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs, and areas required for the protection and enhancement of air quality.

(5) Open space in support of the mission of military installations that comprises areas adjacent to military installations, military training routes, and underlying restricted airspace that can provide additional buffer zones to military activities and complement the resource values of the military lands.

(6) Open space for the protection of places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code (i.e., Native American Historical, Cultural and Sacred Sites).

#### **GOALS, POLICIES AND GUIDELINES**

The following Goals, Policies, and Guidelines are consistent with the legislative direction provided in the CKH Act. The Goals are intended to be the outcome LAFCO wants to achieve. The Policies provide direction with regard to how those Goals should be achieved by providing specific guidance for decision makers and proponents. Guidelines give stakeholders procedures and practical tips regarding what information LAFCO commissioners and staff need to evaluate an application that affects prime agricultural, agricultural and/or open space lands.

#### **GOALS**

Agriculture and open space are vital and essential to Contra Costa County's economy and environment. Accordingly, boundary changes for urban development should be proposed, evaluated, and approved in a manner that is consistent with the continuing growth and vitality of agriculture within the county. Open space lands provide the region with invaluable public benefits for all who visit, live and work in Contra Costa County. The following goals will help guide LAFCO's decisions regarding prime agricultural, agricultural and open space lands.

**Goal 1**. Minimize the conversion of prime agricultural land and open space land to other land uses while balancing the need to ensure orderly growth and development and the efficient provision of services. <sup>5</sup>

**Goal 2**. Encourage cities, the county, special districts, property owners and other stakeholders to work together to preserve prime agricultural, agricultural and open space lands.

**Goal 3**. Incorporate agricultural and open space land preservation into long range planning consistent with principles of smart growth at the state, county, and municipal levels.

Goal 4. Strengthen and support the agricultural sector of the economy.

**Goal 5**. Fully consider the impacts an application will have on existing prime agricultural, agricultural and open space lands.

Goal 6. Preserve areas that sustain agriculture in Contra Costa County.

# **POLICIES**

It is the policy of Contra Costa LAFCO that, consistent with the CKH Act, an application for a change in organization, reorganization, for the establishment of or change to an SOI, the extension of extraterritorial services, and other LAFCO actions as contained in the CKH Act ("applications"), shall provide for planned, well-ordered, efficient urban development patterns with appropriate consideration to preserving open space, agricultural and prime agricultural lands within those patterns. LAFCO's Agricultural and Open Space Preservation Policy provides for a mitigation hierarchy which 1) encourages avoidance of impacts to prime agricultural, agricultural and open space lands, 2) minimizes impacts to these lands, and 3) mitigates impacts that cannot be avoided while pursuing orderly growth and development.

The following policies support the goals stated above and will be used by Contra Costa LAFCO when considering an application that involves prime agricultural, agricultural and/or open space lands:

**Policy 1**. The Commission encourages local agencies to adopt policies that result in efficient, coterminous and logical growth patterns within their General Plan, Specific Plans and SOI areas, and that encourage preservation of prime agricultural, agricultural and open space lands in a manner that is consistent with LAFCO's policy.

**Policy 2.** Vacant land within urban areas should be developed before prime agricultural, agricultural and/or open space land is annexed for non-agricultural and non-open space purposes.<sup>6</sup>

**Policy 3**. Land substantially surrounded by existing jurisdictional boundaries (e.g., islands) should be annexed before other lands.

**Policy 4**. Where feasible, and consistent with LAFCO policies, non-prime agricultural land should be annexed before prime agricultural land.

<sup>&</sup>lt;sup>5</sup> In minimizing the conversion of open space land, the Commission may give lower priority to rangeland per 65560.b.2.

<sup>&</sup>lt;sup>6</sup> The Commission recognizes there may be instances in which vacant land is planned to be used in a manner that is important to the orderly and efficient long-term development of the county and land use agency and that differs from the proposed use of the area in an application to LAFCO. LAFCO will consider such situations on a case-by-case basis.

**Policy 5.** While annexation of prime agricultural lands, agricultural lands and open space lands is not prohibited, in general, urban development should be discouraged in these areas. For example, agricultural land should not be annexed for non-agricultural or non-open space purposes when feasible alternatives exist that allow for orderly and efficient growth. Large lot rural development that places pressure on a jurisdiction to provide services, and causes agricultural areas to be infeasible for farming or agricultural business, is discouraged.

**Policy 6**. The continued productivity and sustainability of agricultural land surrounding existing communities should be promoted by preventing the premature conversion of agricultural land to other uses and, to the extent feasible, minimizing conflicts between agricultural and other land uses. Buffers and/or local right to farm ordinances should be established to promote this policy. Contra Costa County has a Right to Farm ordinance which requires notification of purchases and users of property adjacent to or near agricultural operations of the inherent potential problems associates with such purchase or residential use.

Policy 7. Development near agricultural land should minimize adverse impacts to agricultural operations.

Policy 8. Development near open space should minimize adverse impacts to open space uses.

**Policy 9**. The Commission will consider feasible mitigation (found in the following guidelines) if an application would result in the loss of prime agricultural, agricultural and/or open space lands.

**Policy 10**. Any mitigations that are conditions of LAFCO's approval of an application should occur close to the location of the impact and within Contra Costa County.

# **GUIDELINES**

These Guidelines are intended to provide further direction regarding the application of LAFCO's Goals and Policies; to advise and assist the public, agencies, property owners, farmers, ranchers and other stakeholders with regard to LAFCO's expectations in reviewing an application that involves prime agricultural, agricultural and/or open space lands; and to provide sample mitigation measures.

**Guideline 1.** Applications submitted to LAFCO involving prime agricultural, agricultural and/or open space lands shall include an Agricultural and Open Space Impact Assessment. At a minimum the following shall be addressed as part of the assessment:

- a. An application must discuss how it balances the State's interest in preserving prime agricultural and/or open space lands against the need for orderly development (§56001).
- b. An application must discuss its effect on maintaining the physical and economic integrity of agricultural lands [§56668 (e)].
- c. An application must discuss whether it could reasonably be expected to induce, facilitate, or lead to the conversion of existing open space land to uses other than open space uses (§56377).
- d. An application must describe whether, and if so, how it guides development away from prime agricultural, agricultural and/or open space lands.
- e. An application must describe whether, and if so, how it facilitates development of existing vacant or non-agricultural and/or non-open space lands for urban uses within the existing boundary or SOI of a local agency.

f. An application must discuss what measures it contains that will preserve the physical and economic integrity of adjacent prime agricultural, agricultural and/or open space land uses.

**Guideline 2.** If an application involves a loss of prime agricultural, agricultural and/or open space lands, property owners, cities and towns, the county, special districts, and other agricultural and open space conservation agencies should work together as early in the process as possible to either modify the application to avoid impacts or to adequately mitigate the impacts.

**Guideline 3.** The following factors should be considered for an annexation of prime agricultural, agricultural and/or open space lands:

- a. The applicant should reference and include a land use inventory that indicates the amount of available land within the subject jurisdiction for the proposed land use. The land use inventory may be one that has been prepared by the applicable land use agency.
- b. The applicant should provide an evaluation of the effectiveness of measures proposed by the applicant to mitigate the loss of prime agricultural, agricultural and/or open space lands, and to preserve adjoining lands for prime agricultural, agricultural and/or open space use to prevent their premature conversion to other uses. Examples of such measures include, but are not limited to:
  - 1. Acquisition or dedication of prime agricultural and agricultural land (e.g., substitution ratio of at least 1:1 for the prime agricultural land annexed), development rights, bringing qualified land into an open space plan, open space and agricultural conservation easements to permanently protect adjacent or other prime agricultural, agricultural and/or open space lands within the county. Any land previously protected should not be used as the mitigation for any other project.
  - 2. Participation in other local development programs that direct development towards urban areas in the county (such as transfer or purchase of development credits).
  - 3. Payment to local government agencies and/or recognized non-profit organizations working in Contra Costa County for the purpose of preserving prime agricultural, agricultural and/or open space lands; payment should be sufficient to fully fund the acquisition, dedication, restoration and maintenance of land which is of equal or better quality.
  - 4. Establishment of buffers of at least 300 feet to protect adjacent prime agricultural, agricultural and/or open space lands from the effects of development. Such buffers many be permanent, temporary, or rolling, and may take many forms (e.g., easements, dedications, appropriate zoning, streets, parks, etc.).
  - 5. Where applicable, compliance with the provisions of the ECCCHCP/NCCP or a similar plan enacted by the County, cities or another regional, state or federal permitting agency.
  - 6. Other measures agreed to by the applicant and the land use jurisdiction that meet the intent of replacing prime agricultural and agricultural lands at a minimum 1:1 ratio.
  - 7. Participation in an advanced mitigation plan for prime agricultural, agricultural and/or open space lands.
  - 8. Participation in measures to promote and/or enhance the viability of prime agricultural and agricultural lands and the agricultural industry in Contra Costa County.

**Guideline 4.** Detachment of prime agricultural, agricultural and/or open space lands should be encouraged if consistent with the SOI for that agency.

**Guideline 5**. Annexation for land uses in conflict with an existing agricultural preserve contract shall be prohibited, unless the Commission finds that it meets all the following criteria:

- a. The area is within the annexing agency's SOI.
- b. The Commission makes findings required by Gov. Code Section 56856.5.
- c. The parcel is included in an approved city specific plan.
- d. The soil is not categorized as prime agricultural land.
- e. Mitigation for the loss of agricultural land has been secured in the form of agricultural easements to the satisfaction of the annexing agency and the county.
- f. There is a pending, or approved, cancelation for the property that has been reviewed by the local jurisdictions and the Department of Conservation.
- g. The Williamson Act contract on the property has been non-renewed and final approval of the non-renewal has been granted.

**Guideline 6**. Property owners of prime agricultural and agricultural lands adjacent to land that is the subject of a LAFCO application shall be notified when an application is submitted to LAFCO.

**Guideline 7**. Regarding the timing and fulfillment of mitigation, if the mitigation measure is not in place prior to LAFCO's approval, the responsible entity (e.g., government agency, recognized non-profit organization) should provide LAFCO with information as to how the entity will ensure that the mitigation is provided at the appropriate time. Following LAFCO's approval, the responsible entity should provide LAFCO with an annual update on the status of agricultural mitigation fulfillment until the mitigation commitment is fulfilled.

# **OBSERVATIONS**

LAFCO identified other actions that are not within its purview but that if followed could reduce the impacts of new development on prime agricultural, agricultural, and open space lands. These are provided here so that applicants, other governmental agencies, advocacy organizations, and the public might consider them.

**Observation 1.** LAFCO will evaluate all applications that are submitted and complete. However, LAFCO notes that over a period the impact of new applications is likely to be reduced if applicants adopt a hierarchy that gives preference to those projects that have no impacts on prime agricultural, agricultural and/or open space lands, followed by those that minimize impacts, and lastly those that require mitigation of their impacts.

**Observation 2.** Undeveloped prime agricultural, agricultural and open space lands exist primarily in east Contra Costa County, as does much of the remaining open space; however, most of the historical conversion of this land occurred elsewhere in the county. In order to preserve the remaining land, a countywide effort involving funding may be appropriate.

**Observation 3.** Any jurisdiction that contains prime agricultural, agricultural and/or open space land can periodically review whether its land use and other regulations strike the proper balance between discouraging development and conversion of prime agricultural, agricultural and open space lands with encouraging economically viable agriculture-based businesses that will keep agriculture production high.

#### 4.1 DRAFT AGRICULTURAL AND OPEN SPACE PRESERVATION POLICY - VERSION 1

#### **PREFACE**

LAFCO's enabling and guiding legislation, the Cortese Knox Hertzberg (CKH) Act, begins with the following statement.

"The Legislature finds and declares that it is the policy of the state to encourage orderly growth and development which are essential to the social, fiscal, and economic well-being of the state. The Legislature recognizes that the logical formation and determination of local agency boundaries is an important factor in promoting orderly development and in balancing that development with sometimes competing state interests of discouraging urban sprawl, preserving open-space and prime agricultural lands, and efficiently extending government services." (§56001)

Beginning in the late 1800s, farmers and ranchers made Contra Costa County an important source of agricultural products. Much of the County has good soils, a mild climate, and adequate water. Western and central Contra Costa <u>waswere</u> used for agriculture well into the twentieth century. John Muir farmed and ranched approximately 2,600 acres in what is now Martinez, Concord, and the Alhambra Valley. While the County's population was increasing, by current standards, the County's population was small. The 1910 census recorded 31,764 residents, less than the 2015 population of Pleasant Hill.

Development, which began in earnest after World War II, transformed Contra Costa County. As urban and suburban development occurred, Contra Costa County experienced significant reduction in the amount and economic importance of agricultural lands. Simultaneously, critical open space habitat for sensitive species declined. By 2010, the Census reported that Contra Costa had 1,049,025 people, representing 3,300% growth since 1910. Contra Costa County's 2040 population is forecast to be 1,338,400.

As a result of population and job growth, agricultural land was converted to houses, <u>schools</u>, commercial centers, job centers, and transportation corridors. In 2015, there were about 30,000 acres of active agricultural land in Contra Costa County, excluding rangeland and pastureland, most of it located in the eastern portion of the County. There <u>isare</u> approximately 175,000 acres of rangeland and pastureland in the County.<sup>1</sup>

Agriculture in Contra Costa County is worth approximately \$128.5 million (farm production) in 2015 and is an important economic sector. The value of agricultural production has risen in recent years.<sup>2</sup> However, some worry that Contra Costa's agricultural industry may approach a tipping point beyond which agriculture becomes less viable due to a lack of labor, suppliers, and processors located nearby.<sup>3</sup>

The pressure on agricultural land also extends to wildlife and riparian areas. In some cases, conversion of these lands through development disrupts an ecosystem that used to depend on the now developed land as a travel route, or a seasonal or permanent source of food and water.

The County and some cities are active in efforts to preserve agricultural and open space lands. For example, in the 1970s, the County created a County Agricultural Core to the east and south of Brentwood.

Formatted: Font: 12 pt

<sup>&</sup>lt;sup>1</sup> 2015 Crop and Livestock Report, Contra Costa County Agricultural Commissioner

<sup>&</sup>lt;sup>2</sup> 2008-2015 Crop and Livestock Reports, Contra Costa County Agricultural Commissioner

<sup>&</sup>lt;sup>3</sup> Sustaining our Agricultural Bounty: An Assessment of the Current State of Farming and Ranching in the San Francisco Bay Area – A

Wwhite paper by the American *fF*armland Trust, Greenbelt Alliance and Sustainable Agriculture Education (SAGE), January 2011

The City of Brentwood has an agricultural mitigation program that collected more than \$12 million in mitigation fees and through conservation organizations, and acquired the development rights over approximately 1,000 acres of agricultural lands. In 2006, the voters adopted Urban Limit Lines (ULLs) for the County and each municipality, and these actions helped protect undeveloped land outside the ULLs. Furthermore, the County adopted the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCCHCP/NCCP) that protects sensitive habitat for plants and animals in East Contra Costa.

LAFCO embraces its objectives of encouraging orderly growth and development while discouraging urban sprawl, efficiently extending government services, and preserving open space and prime agricultural lands. Through the review and approval or denial process of boundary changes and other applications, LAFCO has considerable authority to provide for the preservation of open space and agricultural land, and impose terms and conditions. (§§56885 -56890).

While LAFCO has authority to achieve the objectives of the CKH Act, there are things that LAFCO cannot do, for example, directly regulate land use.<sup>4</sup> Therefore, successful preservation of prime agricultural, agricultural and open space lands and of agriculture as a business requires that both applicants and other agencies also lead. At the end of this policy are observations about other opportunities facing residents, advocacy organizations, and governmental agencies that could also strengthen and preserve agriculture and open space lands.

#### **AUTHORITY OF LAFCO**

LAFCO's authority derives from the CKH Act. Among the purposes of LAFCO are <u>to encourage planned</u>, <u>orderly</u>, <u>and efficient urban development while at the same time giving appropriate consideration to the</u> <u>preservation of prime agricultural and open space lands discouraging urban sprawl and preserving</u> <del>open space and agricultural lands</del> (§56300). The CKH Act includes provisions that grant LAFCO the authority to consider and provide for the preservation of open space and agricultural lands. Among these provisions is §56377 which describes the intent of the legislation with regard to agricultural lands:

"56377. In reviewing and approving or disapproving proposals which could reasonably be expected to induce, facilitate, or lead to the conversion of existing open space lands to uses other than open space uses, the commission shall consider all of the following policies and priorities:
(a) Development or use of land for other than open space uses shall be guided away from existing prime agricultural lands in open space use toward areas containing non-prime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.
(b) Development of existing vacant or non-prime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the SOI of a local agency should be encouraged before any proposal is approved that would allow for or lead to the development of existing open space lands for non-open space uses that are outside of the existing jurisdiction of the local agency or outside of the existing jurisdiction of the local agency."

LAFCO is specifically charged in some instances with protecting open space and agricultural land. For example, an island annexation may not be approved if the island consists of prime agricultural land [§56375.3(b)(5)]. LAFCO may not approve a change to an SOI where the affected territory is subject to a Williamson Act contract or farmland security zone unless certain conditions exist (§§56426 and 56426.5).

<sup>&</sup>lt;sup>4</sup> "A commission shall not impose any conditions that would directly regulate land use density or intensity, property development, or subdivision requirements" [§§56375(6), 56886].

Contra Costa LAFCO encourages planned, orderly, and efficient urban development while at the same time giving appropriate consideration to the preservation of prime agricultural, agricultural and open space lands (\$56300).

When making a decision, LAFCO must consider whether an application and its effects conform to both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities in Sections 56377 and 56668(d). Finally, LAFCO must consider the effect of an application on maintaining the physical and economic integrity of agricultural lands [§56668 (e)].

An application for a change of organization, reorganization, the establishment of or change to a sphere of influence (SOI), the extension of extraterritorial services, and other LAFCO actions as contained in the CKH Act will be evaluated in accordance with LAFCO's adopted <u>Agricultural and Open Space policy on the Preservation Policy of Open Space and Agricultural Land</u>.

#### PURPOSE OF THE POLICY

The purpose of this policy is threefold: 1) to provide guidance to the applicant on how to assess the impacts on prime agricultural, agricultural and open space lands of applications submitted to LAFCO, and <u>enable the applicant</u> to explain how the applicant intends to mitigate those impacts; 2) to provide a framework for LAFCO to evaluate and process in a consistent manner, applications before LAFCO that involve or impact prime agricultural, agricultural and/or open space lands; and 3) to explain to the public how LAFCO will evaluate and assess applications that affect prime agricultural, agricultural and/or open space lands.

#### **DEFINITIONS**

Several terms are important in understanding LAFCO's responsibility and authority to preserve prime agricultural, agricultural and open space lands. These terms and definitions are found below and are applicable throughout these policies. The CKH Act contains the following definitions for agricultural land, prime agricultural land and open space:

**56016**. "**Agricultural lands**" means land currently used for the purpose of producing an agricultural commodity for commercial purposes, land left fallow under a crop rotational program, or land enrolled in an agricultural subsidy or set-aside program.

**56064.** "**Prime agricultural land**" means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:

(a) Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.

(b) Land that qualifies for rating 80 through 100 Storie Index Rating.

(c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Range and Pasture Handbook, Revision 1, December 2003.

(d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars (\$400) per acre.

(e) Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars (\$400) per acre for three of the previous five calendar years.

**56059**. **"Open space"** means any parcel or area of land or water which is substantially unimproved and devoted to an open-space use, as defined in Section 65560.

**65560**. (a) "Local open-space plan" is the open-space element of a county or city general plan adopted by the board or council, either as the local open-space plan or as the interim local open-space plan adopted pursuant to Section 65563.

(b) "Open-space land" is any parcel or area of land or water that is essentially unimproved and devoted to an open-space use as defined in this section, and that is designated on a local, regional, or state open-space plan as any of the following:

(1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays, and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, greenways, as defined in Section 816.52 of the Civil Code, and watershed lands.

(2) Open space used for the managed production of resources, including, but not limited to, forest lands, rangeland, agricultural lands, and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; bays, estuaries, marshes, rivers, and streams that are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

(3) Open space for outdoor recreation, including, but not limited to, areas of outstanding scenic, historic, and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas that serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, greenways, and scenic highway corridors.

(4) Open space for public health and safety, including, but not limited to, areas that require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs, and areas required for the protection and enhancement of air quality.

(5) Open space in support of the mission of military installations that comprises areas adjacent to military installations, military training routes, and underlying restricted airspace that can provide additional buffer zones to military activities and complement the resource values of the military lands.

(6) Open space for the protection of places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code (i.e., Native American Historical, Cultural and Sacred Sites).

#### **GOALS, POLICIES AND GUIDELINES**

The following Goals, Policies, and Guidelines are consistent with the legislative direction provided in the CKH Act. The Goals are intended to be the outcome LAFCO wants to achieve. The Policies provide direction with regard to how those Goals should be achieved by providing specific guidance for decision makers and proponents. Guidelines give stakeholders procedures and practical tips regarding what information LAFCO commissioners and staff need to evaluate an application that affects prime agricultural, agricultural and/or open space lands.

#### **GOALS**

Agriculture and open space are vital and essential to Contra Costa County's economy and environment. Accordingly, boundary changes for urban development should be proposed, evaluated, and approved in a manner that is consistent with the continuing growth and vitality of agriculture within the county. Open space lands provide the region with invaluable public benefits for all who visit, live and work in Contra Costa County. The following goals will help guide LAFCO's decisions regarding prime agricultural, agricultural and open space lands.

**Goal 1**. Minimize the conversion of prime agricultural land <u>and open space land</u> to other land uses while balancing the need to ensure orderly growth and development and the efficient provision of services.<sup>5</sup>

**Goal 2**. Encourage cities, the county, special districts, property owners and other stakeholders to work together to preserve prime agricultural, agricultural and open space lands.

**Goal 3**. Incorporate agricultural <u>and open space</u> land preservation into long range planning consistent with principles of smart growth at the state, county, and municipal levels.

Goal 4. Strengthen and support the agricultural sector of the economy.

**Goal 5**. Fully consider the impacts an application will have on existing prime agricultural, agricultural and open space lands.

Goal 6. Preserve areas that sustain agriculture in Contra Costa County.

#### POLICIES

It is the policy of Contra Costa LAFCO that, consistent with the CKH Act, an application for a change in organization, reorganization, for the establishment of or change to an SOI, the extension of extraterritorial services, and other LAFCO actions as contained in the CKH Act ("applications"), shall provide for planned, well-ordered, efficient urban development patterns with appropriate consideration to preserving open space, agricultural and prime agricultural lands within those patterns. LAFCO's Agricultural and Open Space Preservation Policy provides for a mitigation hierarchy which 1) encourages avoidance of impacts to prime agricultural, agricultural and open space lands, 2) minimizes impacts to these lands, and 3) mitigates impacts that cannot be avoided while pursuing orderly growth and development.

The following policies support the goals stated above and will be used by Contra Costa LAFCO when considering an application that involves prime agricultural, agricultural and/or open space lands:

**Policy 1**. The Commission encourages local agencies to adopt policies that result in efficient, coterminous and logical growth patterns within their General Plan, Specific Plans and SOI areas, and that encourage preservation of prime agricultural, agricultural and open space lands in a manner that is consistent with LAFCO's policy.

**Policy 2.** Vacant land within urban areas should be developed before prime agricultural, agricultural and/or open space land is annexed for non-agricultural and non-open space purposes.<sup>6</sup>

**Policy 3**. Land substantially surrounded by existing jurisdictional boundaries (e.g., islands) should be annexed before other lands.

<sup>&</sup>lt;sup>5</sup> In minimizing the conversion of open space land, the Commission may give lower priority to rangeland per 65560.b.2. <sup>6</sup> The Commission recognizes there may be instances in which vacant land is planned to be used in a manner that is important to the orderly and efficient long-term development of the county and land-use agency and <u>that differs from the proposed use of</u> the area in an application to LAFCO. LAFCO will consider such situations on a case-by-case basis.

**Policy 4**. Where feasible, and consistent with LAFCO policies, non-prime agricultural land should be annexed before prime agricultural land.

**Policy 5.** While annexation of prime agricultural lands, agricultural lands and open space lands is not prohibited, <u>Hin</u> general, urban development should be discouraged in <u>these areasagricultural areas</u>. For example, agricultural land should not be annexed for non-agricultural <u>or non-open space</u> purposes when feasible alternatives exist <u>that allow for orderly and efficient growth</u>. Large lot rural development that places pressure on a jurisdiction to provide services, and causes agricultural areas to be infeasible for farming <u>or agricultural business</u>, is discouraged.

**Policy 6.** The continued productivity and sustainability of agricultural land surrounding existing communities should be promoted by preventing the premature conversion of agricultural land to other uses and, to the extent feasible, minimizing conflicts between agricultural and other land uses. Buffers and/or local right to farm ordinances should be established to promote this policy. <u>Contra Costa County has a Right to Farm ordinance which requires notification of purchases and users of property adjacent to or near agricultural operations of the inherent potential problems associates with such purchase or residential use.</u>

Policy 7. Development near agricultural land should minimize adverse impacts to agricultural operations.

Policy 8. Development near open space should minimize adverse impacts to open space uses.

**Policy 9**. The Commission will consider feasible mitigation (found in the following guidelines) if an application would result in the loss of prime agricultural, agricultural and/or open space lands.

**Policy 10**. Any mitigations that are conditions of LAFCO's approval of an application should occur close to the location of the impact and within Contra Costa County.

#### **GUIDELINES**

These Guidelines are intended to provide further direction regarding the application of LAFCO's Goals and Policies; to advise and assist the public, agencies, property owners, farmers, ranchers and other stakeholders with regard to LAFCO's expectations in reviewing an application that involves prime agricultural, agricultural and/or open space lands; and to provide sample mitigation measures to address such lands.

**Guideline 1.** Applications submitted to LAFCO involving prime agricultural, agricultural and/or open space lands shall include an Agricultural and Open Space Impact Assessment. At a minimum the following shall be addressed as part of the assessment:

- a. An application must discuss how it balances the State's interest in preserving prime agricultural, agricultural and/or open space lands against the need for orderly development (§56001).
- b. An application must discuss its effect on maintaining the physical and economic integrity of agricultural lands [§56668 (e)].
- c. An application must discuss whether it could reasonably be expected to induce, facilitate, or lead to the conversion of existing open space land to uses other than open space uses (§56377).
- d. An application must describe <u>whether</u>, and if so, how it guides development away from prime agricultural, agricultural and/or open space lands.

- e. An application must describe whether, and if so, how it facilitates development of existing vacant or non-agricultural and/or non-open space lands for urban uses within the existing boundary or SOI of a local agency.
  - f. An application must discuss what measures it contains that will preserve the physical and economic integrity of adjacent prime agricultural, agricultural and/or open space land uses.

**Guideline 2.** If an application involves a loss of prime agricultural, agricultural and/or open space lands, property owners, cities and towns, the county, special districts, and other agricultural and open space conservation agencies should work together as early in the process as possible to either modify the application to avoid impacts or to adequately mitigate the impacts.

**Guideline 3.** The following factors should be considered for an annexation of prime agricultural, agricultural and/or open space lands:

- a. The applicant should <u>provide reference and include</u> a land use inventory that indicates the amount of available land within the subject jurisdiction for the proposed land use. <u>The land use inventory may be one that has been prepared by the applicable land use agency.</u>
- b. The applicant should provide an evaluation of the effectiveness of measures proposed by the applicant to mitigate the loss of prime agricultural, agricultural and/or open space lands, and to preserve adjoining lands for prime agricultural, agricultural and/or open space use to prevent their premature conversion to other uses. Examples of such measures include, but are not limited to:
  - 1. Acquisition or dedication of prime agricultural and agricultural land (e.g., substitution ratio of at least 1:1 for the prime agricultural land annexed), development rights, bringing qualified land into an open space plan, open space and agricultural conservation easements to permanently protect adjacent or other prime agricultural, agricultural and/or open space lands within the county. Any land previously protected should not be used as the mitigation for any other project.
  - 2. Participation in other local development programs that direct development towards urban areas in the county (such as transfer or purchase of development credits).
  - 3. Payment to local government agencies and/or recognized non-profit organizations working in Contra Costa County for the purpose of preserving prime agricultural, agricultural and/or open space lands; payment should be sufficient to fully fund the acquisition, dedication, restoration and maintenance of land which is of equal or better quality.
  - 4. Establishment of buffers <u>of at least 300 feet</u> to protect adjacent prime agricultural, agricultural and/or open space lands from the effects of development. <u>Such buffers many be permanent</u>, <u>temporary, or rolling, and may take many forms (e.g., easements, dedications, appropriate zoning, streets, parks, etc.).</u>
  - 5. Where applicable, compliance with the provisions of the ECCCHCP/NCCP or a similar plan enacted by the County, cities or another regional, state or federal permitting agency.
  - 6. Other measures agreed to by the applicant and the land use jurisdiction that meet the intent of replacing prime agricultural and agricultural lands at a minimum 1:1 ratio.
  - 7. Participation in an advanced mitigation plan for prime agricultural, agricultural and/or open space lands.
  - 8. Participation in measures to promote and/or enhance the viability of prime agricultural and agricultural lands and the agricultural industry in Contra Costa County.

Formatted: Not Highlight

**Guideline 4.** Detachment of prime agricultural, agricultural and/or open space lands should be encouraged if consistent with the SOI for that agency.

**Guideline 5**. Annexation for land uses in conflict with an existing agricultural preserve contract shall be prohibited, unless the Commission finds that it meets all the following criteria:

- a. The area is within the annexing agency's SOI.
- b. The Commission makes findings required by Gov. Code Section 56856.5.
- c. The parcel is included in an approved city specific plan.
- d. The soil is not categorized as prime agricultural land.
- e. Mitigation for the loss of agricultural land has been secured in the form of agricultural easements to the satisfaction of the annexing agency and the county.
- f. There is a pending, or approved, cancelation for the property that has been reviewed by the local jurisdictions and the Department of Conservation.
- g. The Williamson Act contract on the property has been non-renewed and final approval of the non-renewal has been granted.

**Guideline 6**. Property owners of prime agricultural and agricultural lands adjacent to land that is the subject of a LAFCO application shall be notified when an application is submitted to LAFCO.

**Guideline 7.** Regarding the timing and fulfillment of mitigation, if the mitigation measure is not in place prior to LAFCO's approval, the responsible entity (e.g., government agency, recognized non-profit organization) should provide LAFCO with information as to how the entity will ensure that the mitigation is provided at the appropriate time. Following LAFCO's approval, the responsible entity should provide LAFCO with an annual update on the status of agricultural mitigation fulfillment until the mitigation commitment is fulfilled.

#### ADDITIONAL OBSERVATIONS

LAFCO identified other actions that are not within its purview but that if followed could reduce the impacts of new development on prime agricultural, agricultural, and open space lands. These are provided here so that applicants, other governmental agencies, advocacy organizations, and the public might consider them.

**Observation 1.** LAFCO will evaluate all applications that are submitted and complete. However, LAFCO notes that over a period the impact of new applications is likely to be reduced if applicants adopt a hierarchy that gives preference to those projects that have no impacts on prime agricultural, agricultural and/or open space lands, followed by those that minimize impacts, and lastly those that require mitigation of their impacts.

**Observation 2.** Undeveloped prime agricultural, agricultural and open space lands exist primarily in east Contra Costa County, as does much of the remaining open space; however, most of the historical conversion of this land occurred elsewhere in the county. In order to preserve the remaining land, a countywide effort involving funding may be appropriate.

**Observation 3.** Any jurisdiction that contains prime agricultural, agricultural and/or open space land can periodically review whether its land use and other regulations strike the proper balance between

Formatted: Font: (Default) Times New Roman, 12 pt, Bold

Formatted: Font: Bold
Formatted: Font: Not Bold
Formatted: Font: Not Bold
Formatted: Font: Not Bold
<b>Formatted:</b> Font: (Default) Times New Roman, 12 pt
Formatted: Font: (Default) Times New Roman, 12 pt
Formatted: Font: (Default) Times New Roman, 12 pt
Formatted: Font: (Default) Times New Roman, 12 pt
Formatted: Font: (Default) Times New Roman, 12 pt

discouraging development and conversion of prime agricultural, agricultural and open space lands with encouraging economically viable agriculture-based businesses that will keep agriculture production high.

Sept 7, August 10, July 6, 2016

#### 4.1 DRAFT AGRICULTURAL AND OPEN SPACE PRESERVATION POLICY – VERSION 2

#### **PREFACE**

LAFCO's enabling and guiding legislation, the Cortese Knox Hertzberg (CKH) Act, begins with the following statement.

"The Legislature finds and declares that it is the policy of the state to encourage orderly growth and development which are essential to the social, fiscal, and economic well-being of the state. The Legislature recognizes that the logical formation and determination of local agency boundaries is an important factor in promoting orderly development and in balancing that development with sometimes competing state interests of discouraging urban sprawl, preserving open-space and prime agricultural lands, and efficiently extending government services." (§56001)

Beginning in the late 1800s, farmers and ranchers made Contra Costa County an important source of agricultural products. Much of the County has good soils, a mild climate, and adequate water. Western and central Contra Costa were used for agriculture well into the twentieth century. John Muir farmed and ranched approximately 2,600 acres in what is now Martinez, Concord, and the Alhambra Valley. While the County's population was increasing, by current standards, the County's population was small. The 1910 census recorded 31,764 residents, less than the 2015 population of Pleasant Hill.

Development, which began in earnest after World War II, transformed Contra Costa County. As urban and suburban development occurred, Contra Costa County experienced significant reduction in the amount and economic importance of agricultural lands. Simultaneously, critical open space habitat for sensitive species declined. By 2010, the Census reported that Contra Costa had 1,049,025 people, representing 3,300% growth since 1910. Contra Costa County's 2040 population is forecast to be 1,338,400.

As a result of population and job growth, agricultural land was converted to houses, schools, commercial centers, job centers, and transportation corridors. In 2015, there were about 30,000 acres of active agricultural land in Contra Costa County, excluding rangeland and pastureland, most of it located in the eastern portion of the County. There are approximately 175,000 acres of rangeland and pastureland in the County.

Agriculture in Contra Costa County is worth approximately \$128.5 million (farm production) in 2015 and is an important economic sector. The value of agricultural production has risen in recent years.<sup>2</sup> However, some worry that Contra Costa's agricultural industry may approach a tipping point beyond which agriculture becomes less viable due to a lack of labor, suppliers, and processors located nearby.<sup>3</sup>

The pressure on agricultural land also extends to wildlife and riparian areas. In some cases, conversion of these lands through development disrupts an ecosystem that used to depend on the now developed land as a travel route, or a seasonal or permanent source of food and water.

The County and some cities are active in efforts to preserve agricultural and open space lands. For example, in the 1970s, the County created a County Agricultural Core to the east and south of Brentwood.

<sup>&</sup>lt;sup>1</sup> 2015 Crop and Livestock Report, Contra Costa County Agricultural Commissioner

<sup>&</sup>lt;sup>2</sup> 2008-2015 Crop and Livestock Reports, Contra Costa County Agricultural Commissioner

<sup>&</sup>lt;sup>3</sup> Sustaining our Agricultural Bounty: An Assessment of the Current State of Farming and Ranching in the San Francisco Bay Area – A white paper by the American Farmland Trust, Greenbelt Alliance and Sustainable Agriculture Education (SAGE), January 2011

The City of Brentwood has an agricultural mitigation program that collected more than \$12 million in mitigation fees and through conservation organizations, and acquired the development rights over approximately 1,000 acres of agricultural lands. In 2006, the voters adopted Urban Limit Lines (ULLs) for the County and each municipality, and these actions helped protect undeveloped land outside the ULLs. Furthermore, the County adopted the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCCHCP/NCCP) that protects sensitive habitat for plants and animals in East Contra Costa.

LAFCO embraces its objectives of encouraging orderly growth and development while discouraging urban sprawl, efficiently extending government services, and preserving open space and prime agricultural lands. Through the review and approval or denial process of boundary changes and other applications, LAFCO has considerable authority to provide for the preservation of open space and agricultural land, and impose terms and conditions. (§§56885 -56890).

While LAFCO has authority to achieve the objectives of the CKH Act, there are things that LAFCO cannot do, for example, directly regulate land use.<sup>4</sup> Therefore, successful preservation of prime agricultural, agricultural and open space lands and of agriculture as a business requires that both applicants and other agencies also lead. At the end of this policy are observations about other opportunities facing residents, advocacy organizations, and governmental agencies that could also strengthen and preserve agriculture and open space lands.

#### **AUTHORITY OF LAFCO**

LAFCO's authority derives from the CKH Act. Among the purposes of LAFCO are to encourage planned, orderly, and efficient urban development while at the same time giving appropriate consideration to the preservation of prime agricultural, agricultural and open space lands (§56300). The CKH Act includes provisions that grant LAFCO the authority to consider and provide for the preservation of open space and agricultural lands. Among these provisions is §56377 which describes the intent of the legislation with regard to agricultural lands:

"56377. In reviewing and approving or disapproving proposals which could reasonably be expected to induce, facilitate, or lead to the conversion of existing open space lands to uses other than open space uses, the commission shall consider all of the following policies and priorities:
(a) Development or use of land for other than open space uses shall be guided away from existing prime agricultural lands in open space use toward areas containing non-prime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.
(b) Development of existing vacant or non-prime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the SOI of a local agency should be encouraged before any proposal is approved that would allow for or lead to the development of existing open space lands for non-open space uses that are outside of the existing jurisdiction of the local agency."

LAFCO is specifically charged in some instances with protecting open space and agricultural land. For example, an island annexation may not be approved if the island consists of prime agricultural land [§56375.3(b)(5)]. LAFCO may not approve a change to an SOI where the affected territory is subject to a Williamson Act contract or farmland security zone unless certain conditions exist (§§56426 and 56426.5).

<sup>&</sup>lt;sup>4</sup> "A commission shall not impose any conditions that would directly regulate land use density or intensity, property development, or subdivision requirements" [§§56375(6), 56886].

When making a decision, LAFCO must consider whether an application and its effects conform to both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities in Sections 56377 and 56668(d). Finally, LAFCO must consider the effect of an application on maintaining the physical and economic integrity of agricultural lands [§56668 (e)].

An application for a change of organization, reorganization, the establishment of or change to a sphere of influence (SOI), the extension of extraterritorial services, and other LAFCO actions as contained in the CKH Act will be evaluated in accordance with LAFCO's adopted Agricultural and Open Space Preservation Policy.

#### PURPOSE OF THE POLICY

The purpose of this policy is threefold: 1) to provide guidance to the applicant on how to assess the impacts on prime agricultural, agricultural and open space lands of applications submitted to LAFCO, and enable the applicant to explain how the applicant intends to <u>meet or exceed the mitigateion provisions</u> <u>outlined in this policy-those impacts</u>; 2) to provide a framework for LAFCO to evaluate and process in a consistent manner, applications before LAFCO that involve or impact prime agricultural, agricultural and/or open space lands; and 3) to explain to the public how LAFCO will evaluate and assess applications that affect prime agricultural, agricultural and/or open space lands.

#### **DEFINITIONS**

Several terms are important in understanding LAFCO's responsibility and authority to preserve prime agricultural, agricultural and open space lands. These terms and definitions are found below and are applicable throughout these policies. The CKH Act contains the following definitions for agricultural land, prime agricultural land and open space:

**56016**. "**Agricultural lands**" means land currently used for the purpose of producing an agricultural commodity for commercial purposes, land left fallow under a crop rotational program, or land enrolled in an agricultural subsidy or set-aside program.

**56064.** "**Prime agricultural land**" means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:

(a) Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.

(b) Land that qualifies for rating 80 through 100 Storie Index Rating.

(c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Range and Pasture Handbook, Revision 1, December 2003.

(d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars (\$400) per acre.(e) Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars (\$400) per acre.

**56059**. **"Open space"** means any parcel or area of land or water which is substantially unimproved and devoted to an open-space use, as defined in Section 65560.

**65560**. (a) "Local open-space plan" is the open-space element of a county or city general plan adopted by the board or council, either as the local open-space plan or as the interim local open-space plan adopted pursuant to Section 65563.

(b) "Open-space land" is any parcel or area of land or water that is essentially unimproved and devoted to an open-space use as defined in this section, and that is designated on a local, regional, or state open-space plan as any of the following:

(1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays, and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, greenways, as defined in Section 816.52 of the Civil Code, and watershed lands.

(2) Open space used for the managed production of resources, including, but not limited to, forest lands, rangeland, agricultural lands, and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; bays, estuaries, marshes, rivers, and streams that are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

(3) Open space for outdoor recreation, including, but not limited to, areas of outstanding scenic, historic, and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas that serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, greenways, and scenic highway corridors.

(4) Open space for public health and safety, including, but not limited to, areas that require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs, and areas required for the protection and enhancement of air quality.

(5) Open space in support of the mission of military installations that comprises areas adjacent to military installations, military training routes, and underlying restricted airspace that can provide additional buffer zones to military activities and complement the resource values of the military lands.

(6) Open space for the protection of places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code (i.e., Native American Historical, Cultural and Sacred Sites).

#### **GOALS, POLICIES AND GUIDELINES**

The following Goals, Policies, and Guidelines are consistent with the legislative direction provided in the CKH Act. The Goals are intended to be the outcome LAFCO wants to achieve. The Policies provide direction with regard to how those Goals should be achieved by providing specific guidance for decision makers and proponents. Guidelines give stakeholders procedures and practical tips regarding what information LAFCO commissioners and staff need to evaluate an application that affects prime agricultural, agricultural and/or open space lands.

#### **GOALS**

Agriculture and open space are vital and essential to Contra Costa County's economy and environment. Accordingly, boundary changes for urban development should be proposed, evaluated, and approved in a manner that is consistent with the continuing growth and vitality of agriculture within the county. Open space lands provide the region with invaluable public benefits for all who visit, live and work in Contra Costa County. The following goals will help guide LAFCO's decisions regarding prime agricultural, agricultural and open space lands.

**Goal 1**. Minimize the conversion of prime agricultural land and open space land to other land uses while balancing the need to ensure orderly growth and development and the efficient provision of services. <sup>5</sup>

**Goal 2**. Encourage cities, the county, special districts, property owners and other stakeholders to work together to preserve prime agricultural, agricultural and open space lands.

**Goal 3**. Incorporate agricultural land <u>and open space</u> preservation into long range planning consistent with principles of smart growth at the state, county, and municipal levels.

Goal 4. Strengthen and support the agricultural sector of the economy.

**Goal 5**. Fully consider the impacts an application will have on existing prime agricultural, agricultural and open space lands.

Goal 6. Preserve areas that sustain agriculture in Contra Costa County.

**Goal 7**. Mitigate the impacts that will result from a LAFCO approval that will lead to the conversion of prime agricultural, agricultural, and open space lands to at least the degree specified in the Agricultural and Open Space Preservation Policy.

#### **POLICIES**

It is the policy of Contra Costa LAFCO that, consistent with the CKH Act, an application for a change in organization, reorganization, for the establishment of or change to an SOI, the extension of extraterritorial services, and other LAFCO actions as contained in the CKH Act ("applications"), shall provide for planned, well-ordered, efficient urban development patterns with appropriate consideration to preserving open space, agricultural and prime agricultural lands within those patterns. LAFCO's Agricultural and Open Space Preservation Policy provides for a mitigation hierarchy which 1) encourages avoidance of impacts to prime agricultural, agricultural and open space lands, 2) minimizes impacts to these lands, and 3) mitigates impacts that cannot be avoided while pursuing orderly growth and development.

The following policies support the goals stated above and will be used by Contra Costa LAFCO when considering an application that involves prime agricultural, agricultural and/or open space lands:

**Policy 1**. The Commission encourages local agencies to adopt policies that result in efficient, coterminous and logical growth patterns within their General Plan, Specific Plans and SOI areas, and that encourage preservation of prime agricultural, agricultural and open space lands in a manner that is consistent with LAFCO's policy.

**Policy 2.** Vacant land within urban areas should be developed before prime agricultural, agricultural and/or open space land is annexed for non-agricultural and non-open space purposes.<sup>6</sup>

**Policy 3**. Land substantially surrounded by existing jurisdictional boundaries (e.g., islands) should be annexed before other lands.

<sup>&</sup>lt;sup>5</sup> In minimizing the conversion of open space land, the Commission may give lower priority to rangeland per 65560.b.2.

<sup>&</sup>lt;sup>6</sup> The Commission recognizes there may be instances in which vacant land is planned to be used in a manner that is important to the orderly and efficient long-term development of the county and land use agency and that differs from the proposed use of the area in an application to LAFCO. LAFCO will consider such situations on a case-by-case basis.

**Policy 4**. Where feasible, and consistent with LAFCO policies, non-prime agricultural land should be annexed before prime agricultural land.

**Policy 5.** While annexation of prime agricultural lands, agricultural lands and open space lands is not prohibited, in general, urban development should be discouraged in these areas. For example, agricultural land should not be annexed for non-agricultural or non-open space purposes when feasible alternatives exist that allow for orderly and efficient growth. Large lot rural development that places pressure on a jurisdiction to provide services, and causes agricultural areas to be infeasible for farming or agricultural business, is discouraged.

**Policy 6**. The continued productivity and sustainability of agricultural land surrounding existing communities should be promoted by preventing the premature conversion of agricultural land to other uses and, to the extent feasible, minimizing conflicts between agricultural and other land uses. Buffers and/or local right to farm ordinances should be established to promote this policy. Contra Costa County has a Right to Farm ordinance which requires notification of purchases and users of property adjacent to or near agricultural operations of the inherent potential problems associates with such purchase or residential use.

Policy 7. Development near agricultural land should minimize adverse impacts to agricultural operations.

Policy 8. Development near open space should minimize adverse impacts to open space uses.

**Policy 9**. The Commission will <u>consider feasible require at least minimum</u> mitigations (found in the following guidelines) if an application would result in the loss of prime agricultural, agricultural and/or open space lands.

**Policy 10**. Any mitigations that are conditions of LAFCO's approval of an application should occur close to the location of the impact and within Contra Costa County.

#### **GUIDELINES**

These Guidelines are intended to provide further direction regarding the application of LAFCO's Goals and Policies; to advise and assist the public, agencies, property owners, farmers, ranchers and other stakeholders with regard to LAFCO's expectations in reviewing an application that involves prime agricultural, agricultural and/or open space lands; and to provide <u>sampleminimum</u> mitigation measures.

**Guideline 1.** Applications submitted to LAFCO involving prime agricultural, agricultural and/or open space lands shall include an Agricultural and Open Space Impact Assessment. At a minimum the following shall be addressed as part of the assessment:

- a. An application must discuss how it balances the State's interest in preserving prime agricultural and/or open space lands against the need for orderly development (§56001).
- b. An application must discuss its effect on maintaining the physical and economic integrity of agricultural lands [§56668 (e)].
- c. An application must discuss whether it could reasonably be expected to induce, facilitate, or lead to the conversion of existing open space land to uses other than open space uses (§56377).
- d. An application must describe whether, and if so, how it guides development away from prime agricultural, agricultural and/or open space lands.

- e. An application must describe whether, and if so, how it facilitates development of existing vacant or non-agricultural and/or non-open space lands for urban uses within the existing boundary or SOI of a local agency.
- f. An application must discuss what measures it contains that will preserve the physical and economic integrity of adjacent prime agricultural, agricultural and/or open space land uses.

**Guideline 2.** If an application involves a loss of prime agricultural, agricultural and/or open space lands, property owners, cities and towns, the county, special districts, and other agricultural and open space conservation agencies should work together as early in the process as possible to either modify the application to avoid impacts or to adequately mitigate the impacts.

**Guideline 3.** The following factors should be considered for an annexation of prime agricultural, agricultural and/or open space lands:

- a. The applicant should reference and include a land use inventory that indicates the amount of available land within the subject jurisdiction for the proposed land use. The land use inventory may be one that has been prepared by the applicable land use agency.
- b. The applicant should <u>explain how it will meet the minimum mitigation provisions of this policy.</u> <u>These provisions includeprovide an evaluation of the effectiveness of measures proposed by the</u> applicant to mitigate the loss of prime agricultural, agricultural and/or open space lands, and to preserve adjoining lands for prime agricultural, agricultural and/or open space use to prevent their premature conversion to other uses. Examples of such measures include, but are not limited to:
  - 1. For every acre of prime agricultural, agricultural, and open space land that will be converted to another use as a result of an application before LAFCO, comparable land within Contra Costa County should be protected in the following ratios.
    - (a) Prime agricultural land [2-3] acres protected for every acre converted
    - (b) Non-prime agricultural land [1-2] acres protected for every acre converted
    - (c) Open space land [1-3] acres protected for every acre converted, with rangeland that does not meet another definition of open space land requiring the least protection
    - (d) Land may be protected through acquisition for permanent use as agricultural or open space uses, acquiring development rights that permanently preclude other uses, bringing qualified land into an open space plan, open space and agricultural conservation easements to permanently protect adjacent or other prime agricultural, agricultural and/or open space lands within the county. Any land previously protected should not be used as the mitigation for any other project.
    - (e) Land may be protected directly by the applicant or a fee may be paid to local government agencies and/or recognized non-profit organizations working in Contra Costa County for the purpose of preserving prime agricultural, agricultural and/or open space lands; payment must be sufficient to fully fund the acquisition, dedication, restoration and maintenance of land which is of equal or better quality.
  - **1.2.** Applications that propose to convert prime agricultural and agricultural lands to other uses should include provisions to maintain at least a 300' buffer between the new uses and any adjacent prime agricultural and agricultural lands. Such buffers may be permanent, temporary, or rolling, and may take many forms (e.g., easements, dedications, appropriate zoning, streets, parks, etc.).
  - 2.3.Applications that propose to convert prime agricultural and agricultural lands to other uses and are adjacent to prime agricultural and agricultural lands shall adopt a "Right to Farm" agreement that

shall be included in the title of the land and in any subdivision thereof. Contra Costa County has a Right to Farm ordinance which requires notification of purchases and users of property adjacent to or near agricultural operations of the inherent potential problems associates with such purchase or residential use.

- 3.4. Applications may receive partial or full credit against these requirements for other mitigations included in the application that result in a similar or greater benefit. These credits may, for example, arise from meeting the requirements of local agricultural and open space mitigation policies, complying with the provisions of the ECCCHCP/NCCP or a similar plan enacted by the County, cities or another regional, state or federal permitting agency, or other comparable actions approved by LAFCO.
- 5. Applications may receive partial or full credit against the requirements listed above for other mitigations proposed by the applicant. To receive any credit, the applicant must provide an evaluation of the effectiveness of measures proposed by the applicant to mitigate the loss of prime agricultural, agricultural and/or open space lands, and to preserve adjoining lands for prime agricultural, agricultural and/or open space use to prevent their premature conversion to other uses. Examples of such measures include, but are not limited to:
- 4. Acquisition or dedication of prime agricultural and agricultural land (e.g., substitution ratio of at least 1:1 for the prime agricultural land annexed), development rights, bringing qualified land into an open space plan, open space and agricultural conservation easements to permanently protect adjacent or other prime agricultural, agricultural and/or open space lands within the county. Any land previously protected should not be used as the mitigation for any other project.
  - a. Participation in other local development programs that direct development towards urban areas in the county (such as transfer or purchase of development credits).
- 5. Payment to local government agencies and/or recognized non-profit organizations working in Contra Costa County for the purpose of preserving prime agricultural, agricultural and/or open space lands; payment should be sufficient to fully fund the acquisition, dedication, restoration and maintenance of land which is of equal or better quality.
- 6. Establishment of buffers of at least 300 feet to protect adjacent prime agricultural, agricultural and/or open space lands from the effects of development. Such buffers many be permanent, temporary, or rolling, and may take many forms (e.g., easements, dedications, appropriate zoning, streets, parks, etc.).
- 7. Where applicable, compliance with the provisions of the ECCCHCP/NCCP or a similar plan enacted by the County, cities or another regional, state or federal permitting agency.
- 8.6. b. Other measures agreed to by the applicant and the land use jurisdiction that meet the intent of replacing prime agricultural and agricultural lands at <u>athe</u> minimum <u>1:1</u> ratios listed above.
- 9.7. c. Participation in an advanced mitigation plan for prime agricultural, agricultural and/or open space lands.
- <u>10.8.</u> d. Participation in measures to promote and/or enhance the viability of prime agricultural and agricultural lands and the agricultural industry in Contra Costa County.

**Guideline 4.** Detachment of prime agricultural, agricultural and/or open space lands should be encouraged if consistent with the SOI for that agency.

**Guideline 5**. Annexation for land uses in conflict with an existing agricultural preserve contract shall be prohibited, unless the Commission finds that it meets all the following criteria:

- a. The area is within the annexing agency's SOI.
- b. The Commission makes findings required by Gov. Code Section 56856.5.
- c. The parcel is included in an approved city specific plan.
- d. The soil is not categorized as prime agricultural land.
- e. Mitigation for the loss of agricultural land has been secured in the form of agricultural easements to the satisfaction of the annexing agency and the county.
- f. There is a pending, or approved, cancelation for the property that has been reviewed by the local jurisdictions and the Department of Conservation.
- g. The Williamson Act contract on the property has been non-renewed and final approval of the non-renewal has been granted.

**Guideline 6**. Property owners of prime agricultural and agricultural lands adjacent to land that is the subject of a LAFCO application shall be notified when an application is submitted to LAFCO.

**Guideline 7**. Regarding the timing and fulfillment of mitigation, if the mitigation measure is not in place prior to LAFCO's approval, the responsible entity (e.g., government agency, recognized non-profit organization) should provide LAFCO with information as to how the entity will ensure that the mitigation is provided at the appropriate time. Following LAFCO's approval, the responsible entity should provide LAFCO with an annual update on the status of agricultural mitigation fulfillment until the mitigation commitment is fulfilled.

#### **OBSERVATIONS**

LAFCO identified other actions that are not within its purview but that if followed could reduce the impacts of new development on prime agricultural, agricultural, and open space lands. These are provided here so that applicants, other governmental agencies, advocacy organizations, and the public might consider them.

**Observation 1.** LAFCO will evaluate all applications that are submitted and complete. However, LAFCO notes that over a period the impact of new applications is likely to be reduced if applicants adopt a hierarchy that gives preference to those projects that have no impacts on prime agricultural, agricultural and/or open space lands, followed by those that minimize impacts, and lastly those that require mitigation of their impacts.

**Observation 2.** Undeveloped prime agricultural, agricultural and open space lands exist primarily in east Contra Costa County, as does much of the remaining open space; however, most of the historical conversion of this land occurred elsewhere in the county. In order to preserve the remaining land, a countywide effort involving funding may be appropriate.

**Observation 3.** Any jurisdiction that contains prime agricultural, agricultural and/or open space land can periodically review whether its land use and other regulations strike the proper balance between discouraging development and conversion of prime agricultural, agricultural and open space lands with encouraging economically viable agriculture-based businesses that will keep agriculture production high.

### Frequently Asked Questions Contra Costa Local Agency Formation Commission Agricultural & Open Space Preservation Policy

The questions and answers below pertain to the Contra Costa Local Agency Formation Commission (LAFCO) and the Commission's Agricultural & Open Space Preservation Policy (AOSPP).

#### What is a Local Agency Formation Commission (LAFCO)?

LAFCO is an independent regulatory agency that receives its powers directly from the California State Legislature. LAFCO regulates the boundaries of cities and most special districts under its jurisdiction, encourages orderly boundaries, ensures the efficient delivery of services, discourages urban sprawl, and preserves agricultural lands and open space.

#### What Does LAFCO Do?

LAFCO is responsible for reviewing proposed jurisdictional boundary changes including annexations and detachments to/from cities and special districts, incorporation of new cities, formation of new special districts, and the consolidation, merger, and dissolution of existing special districts. LAFCO is also responsible for reviewing extraterritorial service agreements between local governmental agencies and establishing and reviewing spheres of influence (SOIs) for cities and special districts. LAFCO has authority to approve a proposal, with or without conditions, or deny a proposal.

#### Who Runs LAFCO?

Contra Costa LAFCO is composed of seven regular commissioners: two members from the County Board of Supervisors; two members who represent cities in the county; two members who represent independent special districts in the county, and one public member. There are also four alternate commissioners, one from each of the above categories. LAFCO staff consists of an Executive Officer, LAFCO Clerk, legal counsel and various support services provided under contracts.

#### Why Does LAFCO Have an AOSPP?

One of LAFCO's responsibilities is to protect agricultural lands and open space. Agriculture and open space are vital to Contra Costa County and offer environmental, economic, quality of life and other benefits.

## Does LAFCO's AOSPP Prioritize the Preservation of Agricultural and Open Space Lands Over Orderly Growth and Development?

No. LAFCO is charged with balancing sometimes competing state interests of orderly development with discouraging urban sprawl, preserving open space and agricultural land, and efficiently extending government services. The AOSPP focuses primarily on the preservation of agricultural and open space lands. Contra Costa LAFCO has a multitude of other policies and procedures that deal with orderly growth and development, the extension of services, and numerous other issues.

#### What is the Purpose of LAFCO's AOSPP?

The purpose of LAFCO's AOSPP is to 1) provide guidance to an applicant on how to assess the impacts on agricultural and/or open space lands of applications submitted to LAFCO, and to explain

how the applicant intends to mitigate those impacts; 2) provide a framework for LAFCO to evaluate, and process in a consistent manner, applications before LAFCO that involve or impact and/or open space lands; and 3) explain to the public how LAFCO will evaluate and assess applications that affect agricultural and/or open space lands.

#### What Will I Find in LAFCO's AOSPP?

LAFCO's AOSPP contains Goals, Policies and Guidelines. The *Goals* support the importance of agriculture and open space lands in Contra Costa County, and help guide LAFCO's decisions regarding boundary changes and the preservation of agricultural and open space lands. The *Policies* provide for a mitigation hierarchy which 1) encourages avoidance of impacts to prime agricultural, agricultural and open space lands, 2) minimizes impacts to these lands, and 3) mitigates impacts that cannot be avoided while pursuing orderly growth and development. The *Guidelines* provide further direction regarding the application of LAFCO's Goals and Policies; advise and assist the public, agencies, property owners, farmers, ranchers and other stakeholders with regard to LAFCO's expectations in reviewing an application that involves agricultural and/or open space lands; and provides sample mitigation measures to address such lands. In addition, the AOSPP contains some general observations as "food for thought." Nothing in LAFCO's AOSPP is construed to automatically disqualify an application.

#### Can LAFCO stop me from selling my agricultural land to a developer?

No. LAFCO has no direct land use authority and has no role in who owns land. LAFCO's AOSPP encourages mitigation that will result from a LAFCO approval that will lead to the conversion of prime agricultural, agricultural, and open space lands to at least the degree specified in the AOSPP.

#### Can LAFCO's AOSPP force me to put a conservation easement on my property?

No. LAFCO's policy will require that a LAFCO application that will convert agricultural and/or open space land to an urban use mitigate for the loss of land (e.g., paying a fee, purchasing a conservation easement from a willing farmer or rancher, otherwise supporting agriculture business, etc.).

#### Do agricultural conservation easements allow public access on my land?

Public access may be allowed but is not a required component of an agricultural conservation easement. An agricultural conservation easement is an agreement between a willing farmer or rancher and a land trust. Farmers and ranchers can negotiate various easement terms, including whether to allow public access. Most agricultural conservation easements do <u>not</u> allow public access.

#### Do agricultural conservation easements restrict the way that farmers can farm?

The property owner and the land trust negotiate the terms of the easements. Current agricultural easements in East Contra Costa County provide farmers with broad discretion in how they farm their land.

#### LAFCO's AOSPP Requires a Land Use Inventory. Where Can I Find This Information?

LAFCO's AOSPP requests that the applicant reference and include a land use inventory that indicates the amount of available land within the subject jurisdiction *for the proposed land use*. The land use inventory may be one that has been prepared by the applicable land use agency. The County and cities are required to prepare a Housing Element, which includes a "Sites Inventory and Analysis." In addition, many counties and cities maintain GIS data layers which include an inventory of vacant parcels.

## LAFCO Requires an Agricultural and Open Space Impact Assessment as Part of an Application to LAFCO. What if the Applicant Fails to Complete, or Partially Completes the Assessment?

Depending on the nature of the proposal, the application may be deemed incomplete until the needed information is provided. LAFCO staff is available for pre-application meetings and to assist with applications. There is no fee for these services.

## What If My Application to LAFCO Will Convert Agricultural or Open Space Land to a Non-Agricultural or Non-Open Space use – Can LAFCO Impose Mitigation Measures?

LAFCO can impose terms and conditions on any proposal, including, but not limited to, those measures identified in the AOSPP.

What if the Application to LAFCO Will Convert Agricultural or Open Space Land to a Non-Agricultural or Non-Open Space use, and the Applicant Has Already Paid an Agricultural Mitigation Fee (e.g., City of Brentwood) and/or Paid into a Comparable Conservation Program (e.g., East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan? Will LAFCO Take This Into Consideration? Can LAFCO Impose Additional Measures?

Yes. These types of measures are recognized and included among LAFCO's list of sample mitigation measures and LAFCO can consider these as mitigation. Yes, LAFCO can impose additional mitigation measures if it believes that the proposed measures do not adequately mitigate the impacts to agricultural and/or open space lands.

#### What if Only a Portion of My Project Area Impacts Agricultural or Open Space Land?

LAFCO considers each application on its own merits. When reviewing an application, LAFCO must consider at least 16 different factors, one of which is "*the effect of the proposal on maintaining the physical and economic integrity of agricultural lands*..." No one factor is determinative. The AOSPP will apply only to the portion of the project area that consists of prime agricultural, agricultural, or open space land.

# What if the Project Area is Currently Designated for an Agricultural or Open Space Use (by the County), and the Annexing City has Pre-Zoned the Project Area for a Non-Agricultural or Open Space Use – Can LAFCO Deny the City's Request to Annex the Property?

Yes. LAFCO has broad discretion to approve, with or without conditions, or deny a proposal. The applicability of the AOSPP to a parcel is determined by several factors and zoning is only one of these factors.

# What if the Project Area is Currently Designated for an Agricultural or Open Space Use, and is Within a Voter Approved Urban Limit Line – Can LAFCO Deny the Request to Annex the Property?

Yes. LAFCO has broad discretion to approve, with or without conditions, or deny a proposal. LAFCO consider the location of a parcel vis-a-vis urban limit lines and urban growth boundaries as a factor in its deliberations.

#### Comments to Draft LAFCO Agricultural Open Space Preservation Policy Received On and Since July 13, 2016

Commenter	Format	Received
Cecchini & Cecchini	Letter	7/13/16
Chad Godoy, Contra Costa County Agricultural Commissioner	Letter	7/13/16
Jeff Wiedemann, Rancher	Email	7/13/16
Save Mt. Diablo Members	Emails	7/13/16
Donna Gerber, Greenbelt Alliance Board Member	Memo	8/17/16
Manatt, Phelps & Phillips, LLC	Letter	8/31/16
Walnut Creek Open Space Foundation	Letter	8/31/16
Jim Blickenstaff, Chair, Mt. Diablo Group/Sierra Club	Email	9/6/16
July and August Support Emails	Emails	7/13 - 8/22/16

Cecchini & Cecchini PO Box 1150 Discovery Bay, CA 94548 (925) 437-5003

Dear Contra Costa County LAFCO Members,

I am writing this letter in support for a farmland preservation policy only if it has a component to also preserve farmers and not just the land they work on. Land can only be considered "farmland" if there are farmers able to work it. According to the USDA the average age of a farmer in 2013 was 58 and only 5% of those farmers were under 35. Being a farmer is a difficult profession naturally and has become even more difficult with the anti-agtourism and anti-value-added policies that our federal, state & county governments have implemented.

Not all farmers are profitable and many barely make a living. Contra Costa County is highlighted by a minute group of successful farmers, however this part-to-whole analogy cannot and should not be used to show evidence of profitable farmers since this is not a true sample of farmers in the area. The more correct view is that the majority of the farmers in the area are barely making a living.

My farm has had personal hardships ever since our federal government adopted NAFTA, allowing Mexico to import asparagus into our market at below US growers' costs. According to the California Asparagus Commission, after implementation of NAFTA, the acreage in CA declined from 40,000 acres in 2000 to 7,000 acres as of 2016. Cecchini & Cecchini has deteriorated from a 1,200 acre asparagus farm in 2010 to a current all time low of 20 acres in which we are trying to direct market. This trend can be seen across the farming industry just spend 15 minutes on Google to find out.

US consumers will only pay so much for food. Cheaper imports become attractive as US farmers cost rise. These rising costs are due to availability & cost of water, a skilled reliable work force, regulations and fees and the high cost of equipment & land to farm are all issues a farmer faces and will face in the future. Most consumers are not knowledgeable enough to know if their cucumber came from a farm 50 miles away or 1000s of miles away. The modern consumer believes all fruits and all vegetables grow everywhere all year. Educating the consumer is part of the solution and should be considered in the efforts of a "farmer" or farmland preservation plan.

Farmland preservation people please ask yourself this question: Why are you preserving farmland? Is it because you do not want houses built on it or because you hope to have public access to the land? Maybe it is because you feel like you are doing us farmers a favor? Your answer must be parallel to a farmers need otherwise it should no longer be referred to as "farmland preservation plan" and instead possibly "land imprisonment plan."

Cecchini & Cecchini PO Box 1150 Discovery Bay, CA 94548 (925) 437-5003

How will the farmers continue to be successful? The rigid constraints of current land easements leave much room for future farmers to have the freedom to be able to adapt to new market or crop shifts. For example if a farmer sells an easement in perpetuity then 20 years later a shift occurs in the ag industry and because of the restrictive policies of the past easement the next generation of farmers are now unable to restructure their farm. How will that farmer be supported to keep her farmland? The one time financial gain from a farmland trust has already been used up. The one time financial gain is part of the solution but again it is only part of the solution.

A little history of farming in Contra Costa County: In the late 1800's most of the land was used to grow wheat. In the early part of the 1900's East County became a large fruit growing area with many large packing facilities. In the 1930's Contra Costa island land farmers started growing asparagus. There was about 5,000 acres of asparagus in the county. In the 1940's the Brentwood area began growing celery, lettuce, and then later in the 1970's cabbage. Where did all of these crops go?? In West County near Richmond there used to be many flower and plant growers/business. Today only one currently stands. The point of showing this history is to show how the agriculture industry changes drastically every 10 to 20 years. Will your policies address the need for flexibility and creativity for agriculture enterprise?

The final part of the problem/solution id like to address is meetings and farmer input, not to be confused with participation. There are many groups such as Sustainable Contra Costa County and Contra Costa County Food System Alliances that state a mission to "save agriculture". How many farmers helped to develop their policies? Their members or employees work for organizations that pay them to go to meetings and join groups to get their organization's views heard. Farmer's do not have the ability to go to a meeting in Pleasant Hill in the middle of the day and are most certainly not paid to do so. In the middle of the day, if the sun is shining, most farmers are indeed farming... Furthermore said organizations then send these employees to LAFCO initiatives to explain their highly biased plan how a policy on agriculture should be adopted. None or very few farmers have been involved in this process.

Contra Costa Co, California & the USA needs to have programs that are not mired in red tape, high fees and regulation to help farmers to be quick to change as the markets change. We need programs to introduce young people into jobs in agriculture. Contra Costa County farmers need many different opportunities such as Ag Tourism, value added products, small wineries, farm bakeries, and many things I haven't even thought of at this time.

#### Cecchini & Cecchini PO Box 1150 Discovery Bay, CA 94548 (925) 437-5003

Before LAFCO adopts a farm policy:

- 1. The farmland policy should be county wide not only in East County
- 2. LAFCO should meet with farmers in their respective areas of the county.
- 3. LAFCO members should ask farmers what policies are needed to help farmland and businesses.
- 4. Remember that farmland is not open space. It is privately owned land that a family is trying to make a living on and should not be trespassed on unless invited.
- 5. It is important that LAFCO and people who live in farming areas of the county understand that farmers & farm labor are working everyday. Farmers don't take off weekends during the growing & harvesting season.

Sincerely, Barbara Cecchini, Owner/Operator Cecchini & Cecchini Campus Director First Generation Farmers (925) 437-5003 www.firstgenerationfarmers.org

Alli Cecchini First Generation Farmers Founder & Executive Director 925-331-7607 **Department of Agriculture** 2366 A Stanwell Circle Concord, CA 94520-4807 (925) 646-5250 FAX (925) 646-5732 Contra Costa County

Chad Godoy Agricultural Commissioner Director of Weights and Measures



Dear LAFCO,

July 13, 2016

As the Agricultural Commissioner for Contra Costa County, LAFCO is making one of the most important policies for the future of agriculture. I continue to have concern for the far reaching and future implications of this policy on our agriculture community. While I understand the need for the county to continue to grow, add housing and jobs those should not come at the expense of threatening our agricultural economy. The current Agriculture-Open Space Policy (AOSP) doesn't go far enough to protect prime agricultural lands in Contra Costa County.

As I read through the comments on AOSP there is concern that a 1:1 ratio for mitigating the loss of prime agricultural land doesn't go far enough and it was suggested 3:1 ratio would be better. I agree but still caution LAFCO to adopt any ratio for mitigating the loss prime agricultural land. The reason is that simple any adopted mitigation would obligate the loss of that amount of prime agricultural land in the county. So if a 3:1 ratio is adopt then AOSP will allow up to 33% of the available agricultural land to potentially be developed. A future loss of 33% of prime agricultural lands would devastate our agricultural economy. For our agricultural operations to remain viable and continue to prosper LAFCO needs to develop some other metric to protect prime agriculture lands.

As stated from our Farm Bureau there also needs to be further protections for prime agricultural lands surrounded by urban sprawl to continue their farming operations. These farming operation face considerable pressure from their urban neighbors who may not understand some of the farming practices.

I still am concerned that the AOSP allows the possibility to mitigate the loss of prime agricultural land outside our county, or may allow for the loss of prime agricultural land to become the mitigation factor for open space as stated in Policy 10. Policy 10 needs to be strengthened or further clarified that the mitigations shall be in Contra Costa County.

Thank you Contra Costa LAFCO for addressing the loss of agricultural and open space lands and your endeavor to create a policy to give future LAFCO members and the public guidance on this issue.

Chad Godoy Contra Costa Agricultural Commissioner From: Jeff Wiedemann <<u>jeffrey.wiedemann@gmail.com</u>>
Date: July 13, 2016 at 3:24:03 PM PDT
To: Mary Piepho <<u>Mary.Piepho@bos.cccounty.us</u>>, Kopchik John <<u>jkopc@cd.cccounty.us</u>>
Cc: Wiedemann Nancy <<u>nancy@wiedemannranch.com</u>>, Wiedemann Jeff
<<u>jeff@wiedemannranch.com</u>>, Clayton Wiedemann <<u>clayton.wiedemann@gmail.com</u>>, Wiedemann
Christian <<u>christian.wiedemann@gmail.com</u>>
Subject: Fwd: July 2016 Contra Costa LAFCO Meeting 07-13-2016

Hi Mary

Thanks for sending this our way. The LAFCO Policy doesn't look too ominous. I'm a little disappointed that the Cattlemen's Assn and Farm Bureau were not more involved (contacted?).

Out of the whole Policy, I like ADDITIONAL OBSERVATIONS 2 & 3.

**Observation 2 ...a countywide effort involving funding may be appropriate.** That the County and cities should go out of their way to assess fees for Ag Land preservation seems unlikely. Yes, this has been done for the protection of habitat (open space) but there is a totally different propaganda machine at work there. It makes sense but hard to implement (realistic?)

**Observation 3 ...encouraging economically viable agriculture-based businesses that will keep agriculture production high.** Again, (and again and again,...) the protection of ag lands MUST INCLUDE the protection of ag producers. Again, the City, County, Regional, State and Federal regulations that are heaped upon rural property owners are smothering us. Look at CoCoCounty's forthcoming "runoff mitigation' regulations, look at forthcoming regulation of groundwater and constant restrictions on our land use (lowered equity values), and on and on.

Either get this stuff off our backs or call it what it really is: The preservation of OPEN SPACE. Look at your own definitions:

**Open Space** - Undeveloped land where nothing happens. **Agricultural Lands** - Undeveloped land where something is happening.

We can pretend it's the same thing, but It's not even close to the same thing. So good luck. I know you are trying to find a balance. Again, thanks for keeping us in the loop.

Jeff

------ Forwarded message ------From: Mary Piepho <<u>Mary.Piepho@bos.cccounty.us</u>> Date: Tue, Jul 12, 2016 at 2:57 PM Subject: FW: July 2016 Contra Costa LAFCO Meeting 07-13-2016 To: Christian Wiedemann <<u>christian.wiedemann@gmail.com</u>> Cc: John Kopchik <<u>John.Kopchik@dcd.cccounty.us</u>>, Tomi Riley <<u>Tomi.Riley@bos.cccounty.us</u>>

Christian, I wanted to make sure you were aware of the proposed Ag and Open Space policy being considered for adoption tomorrow by Lafco. There remain some concerns from the Building Association representatives, some environmental organizations are in support, not sure about your interests. Please let me know if you have any thoughts or concerns. Or, feel free to attend tomorrow's meeting. M

Linda Young Dirk Sikkema 100 Saint Germain Ln Pleasant Hill, CA 94523

Received into the record at the 71316\_LAFCO Meeting

July 8, 2016

LAFCO 651 Pine Street 6<sup>th</sup> Floor Martinez, CA 94553

RE: draft LAFCO Agricultural and Open Space Preservation Policy

Dear LAFCO Commissioners and Staff:

We are writing in support of the draft LAFCO Agricultural and Open Space Preservation Policy (Policy). We appreciate the work all of you have put into the Policy but think that it should be strengthened by requiring a mitigation ratio of at least 1:1 for annexations affecting open space and agricultural land.

This modest change is in agreement with what many other LAFCOs across the state have done, and would help to mitigate the effects of development that has already greatly reduced the amount of agricultural land in Contra Costa and across the Bay Area. I ask you to support the draft Policy and incorporate the modest change of a 1:1 mitigation requirement.

Thank you.

Linda Young

From: countyourblessingsjason@aol.com [mailto:countyourblessingsjason@aol.com] Sent: Thursday, July 07, 2016 7:45 AM To: smdinfo Subject: LAFCO

Dear,

Received into the record at the

City/Town Managers and City/Town Planning Directors Special District General Managers County Administrator and Director, Department of Conservation & Development

My name is Jason Leffingwell and I am writing you in support of the draft LAFCO Agricultural and Open Space Preservation Policy (Policy). We appreciate the work that LAFCO commissioners and staff have put into the Policy, and think that it should be strengthened by requiring a mitigation ratio of at least 1:1 for annexations affecting open space and agricultural land. This modest change is in agreement with what many other LAFCOs across the state have done, and would help to mitigate the effects of development that has already greatly reduced the amount of agricultural land in Contra Costa and across the Bay Area. I ask you to support the draft Policy and incorporate the modest change of a 1:1 mitigation requirement. Thank you. Regards,

Jason Leffingwell,

Let your smile change the world, Don't let the world change your smile :)

From: john kiefer [mailto:jhkiefer@comcast.net] Sent: Thursday, July 07, 2016 8:24 AM To: Juan Pablo Galvan Subject: I want to tell CC LAFCO to preserve open space!



Dear LAFCO Commission,

I am writing you in support of the draft LAFCO Agricultural and Open Space Preservation Policy. We appreciate the work that LAFCO commissioners and staff have put into the Policy, and think that it should be strengthened by requiring a mitigation ratio of at least 1:1 for annexations affecting open space and agricultural land. This modest change is in agreement with what many other LAFCOs across the state have done, and would help to mitigate the effects of development that has already greatly reduced the amount of agricultural land in Contra Costa and across the Bay Area. I ask you to support the draft Policy and incorporate the modest change of a 1:1 mitigation requirement. Thank you.

Regards, john kiefer 3441 Blackhawk Rd. Lafayette August 17, 2016

TO: LAFCO Sub Committee Commissioners Don Tatzin and Sharon Burke FROM: Donna Gerber, Former Contra Costa County Supervisor District 3 (including San Ramon Valley and Far East County, Brentwood etc.)

First, I very much appreciate your work to meet LAFCO's mission of preventing sprawl development and protecting agricultural and open space land. I hope you will take all the time you need; it's important to get it right, and the California Legislature has given LAFCO the authority to do so.

For the 6 years I served on the Board of Supervisors, I experienced first hand what an uphill battle this is due to powerful vested interests. I also observed that city and county leaders often do not have the best information to inform their decisions. I commend your tenacity and careful consideration of these matters.

This memo reiterates my July 13, 3 minute, comments to the LAFCO Commission, provides additional detail and also electronic copies of documents presented in hard copy. I hope this will assist your sub-committee as you produce a new draft policy.

As historical context, in 2000 I partnered with then County Supervisor Joe Canciamilla, to lead the Board of Supervisors to tighten the County ULL protecting @ 14,000 agricultural acres from unjustifiable, sprawl development. (Coincidentally AB 2838 Cortese, Knox, Hertzberg passed in 2000 and provided LAFCOs additional power and responsibility to prevent sprawl development and loss of agriculture and open space lands). Also in 2000, I led the effort to empower my constituents near Pleasant Hill BART station to shape and support a compact, transit oriented, mixed use transit village that was approved in 2002. So I know both sides of the equation, prevention of sprawl through protection of agricultural land and approval of more sustainable, infill development that allows the public to benefit from a full range of housing and lifestyles.

It is no secret that Contra Costa County is historically the Bay area poster child for rampant suburban sprawl with loss of agricultural and open space land and changing highways and freeways into sewers of traffic congestion. The tightening of the ULL in 2000 coupled with the great recession of 2007 significantly slowed that legacy; but the floodgates are about to open again. For example: the County is processing Tassajara Parks, an urban development on agricultural land outside the ULL in San Ramon (and I note on your agenda under "pending applications" that LAFCO has an application for the expansion of water and sewer boundaries to enable this development); and

Brentwood is actively planning to develop over 2,000 acres outside the ULL and SOI with primarily low density housing.

In contrast, voters have demonstrated overwhelming support for limiting sprawl and protecting agriculture and open space land and this is demonstrated by their pressure for and continuous votes for ULL's since 1990 through 2010.

Also in contrast, unlike City Council members or County Supervisors; as LAFCO Commissioners; you are specifically charged under AB 2838 section 56325.1 to represent the County in a regional manner; **"all commission members shall exercise their independent judgment on behalf of the interests of residents, property owners and the public as a whole in furthering the purposes of this division".** AB 2838 also strengthened LAFCO's to consider ULL's, densities, infill opportunities and regional growth goals.

So what are regional consequences of sprawl and loss of agriculture? Suburban sprawl is not only bad for farming and open space and the quality of life issues such as traffic gridlock and poor air quality; sprawl development requires expensive infrastructure and despite developer fees, sprawl development does not pay for itself. Very few Contra Costa city councils nor the Board of Supervisors have had good information on the economic implications of their land use decisions. Suburban infrastructure costs more and takes longer to pay back than compact infrastructure and does not generate the tax base to fully support municipal and county services. This has led to often out of balance fees on some development while encouraging the building industry to "buy" their approvals with one time community amenities.

At the hearing I provided 2 articles that offer a smart financial analysis that would inform the County, cities and the public regarding the financial implications of sprawling into agricultural lands. One is an analysis and specific data for a suburban county in Florida and the second is the same analysis method applied to a Northern California city (Santa Rosa). The documents are attached electronically here.

In suburban, Sarasota County, FL; this tax revenue analysis shows that mixed use, main street development produces \$1.2 million per acre in annual property tax compared to a single family suburban house of \$3600 per acre or a Walmart with \$8400 per acre. The comparison is also true on the public investment side. Residential, suburban units on 30 acres requires 42 years to pay back cost of infrastructure vs. 3 years for downtown, compact development. And this data comparison also holds true when comparing sales tax generation if done on a "per acre" basis. Importantly, LAFCO's role in preventing sprawl and loss of agricultural land not only protects the quality of our food, our quality of life and farming economics....it can also inform and incentivize economic development toward compact, more sustainable development inside the suburban cities AND toward the more compact, more transit oriented and sustainable cities in the County. Development will occur inside cities if it can't go out on agricultural land. It doesn't get much more "orderly" than that. The fact that suburban sprawl is the most expensive development model for municipalities coupled with the fact that it does not pay for itself; should be of concern for LAFCO's required focus on regional planning.

Therefore, I urge you to modify the proposed policy in two very concrete ways. LAFCO can achieve its' mission through abiding by the voter approved ULL and by requiring the data that compares the economic consequences of converting agricultural land to urban uses vs. the alternative, compact model of development. These two changes will also make the policy specific and concrete for applicants.

- 1. As you are permitted under CKH and as many organizations have proposed to you in their documented comments, your policy must require that all jurisdictions abide by all voter approved ULLs and LAFCO must reject applications that lead to urban development outside the voter approved ULLs.
- 2. Also as permitted under CKH; and under Guideline 1 or 3 of your draft policy; LAFCO requires applicants proposing annexations beyond city or county boundaries to provide a Tax Revenue Analysis showing a revenue profile of the jurisdiction with property tax and sales tax profiles on a "per acre" basis (consistent with the examples I've provided). Consistent with your draft policy, this analysis could be part of an applicant assessment of non agricultural options for urban development. All city or county applications must include this analysis.

Finally, (and this is in addition to my public comments) regarding any mitigation for conversion of agricultural and open space land; I would respectfully suggest, a 2:1 or 3:1 ratio of mitigation should there be an annexation application approved that annexes agricultural land inside the ULL. Annexation applications outside voter approved ULL's should be rejected as a matter of policy.

Again, thank you for your efforts on this very important and very timely matter. I am available regarding any questions you may have.

# Study: Santa Rosa land-use policy overlooks tax potential

#### GARY QUACKENBUSH

BUSINESS JOURNAL STAFF REPORTER | January 21, 2016

Received into the record at the 7 13 16 LAFCO Meeting

Order Article Reprint

SANTA ROSA — Sonoma County's largest city has several square miles of parking lots that provide little in the way of critically needed municipal revenue, one example of how the city's land-use policies are leaving a lot of money in the ground by not maximizing property and sales taxes per acre, according to an urban designer who unveiled details of a city-backed pilot study.

"What our study shows is the inherently higher per-acre value of inner-city, mixed-use buildings that can produce more revenue in the form of property and retail sales taxes per acre than those located away from city center," said Joseph Minicozzi, president of Asheville, N.C.-based Urban3. He was speaking to a standing-room-only audience on the second night of three public workshops held in the Bike Monkey store, 121 Fifth St., on Jan. 20.

The total assessed value of property downtown is \$18.3 billion, almost one-fourth of the \$72.8 billion value of all Sonoma County property, the study found. The city and newly formed local smart-growth advocacy group Urban Community Partnership (urbancommunitypartnership.org) brought in Urban3 and Minnesota-based Strong Towns to analyze ways to encourage higher-density development and redevelopment in Sonoma County's urban areas.

"We also found that 16 percent of the land (6 square miles) within the city is devoted to parking lots, with a much lower taxable base, that could become higher tax revenue sources if developed," Minicozzi said.

At the same time, Santa Rosa represents only 2 percent of the Sonoma County footprint, while making up 32 percent of the county's tax production. Some 38 percent of County

land is taxable, while 15 percent is nontaxable.

"Downtown, 36 percent of the land is taxable, but with mixed-use development and current C-10 (ten story) zoning, new and repurposed property would represent an even greater assessed tax base, and supply much-needed revenue for the city and county for ongoing and unfunded liabilities, without an increase in taxes or fees," Minicozzi said.

Urban 3 is a private consulting firm specializing in land value economics, property and retail tax analysis and community design.

"We seek to empower our clients with the ability to promote development patterns that secure a community's fiscal condition while reinforcing a stronger sense of place," Minicozzi said. "As our company name acknowledges, cities and towns are a 'cubed' threedimensional representation of space. This space, created by the built environment, is the basis of urban design. We strive to provide a deeper understanding of this environment by measuring data, visualizing results; and digging deeper into the effect of policies on the built environment."

The true value of existing inner city property exceeds that of new developments just blocks away, Minicozzi said. In real estate as with development, valuation is all about location. The results of this study were revealed to city officials and staff members at a three-hour meeting earlier in the week. Dollar figures and economic data referenced in this analysis were provided by the city and county and reflect current property assessments.

"As an urban planning consultant, I always look at the opportunities associated with a property based on options and a cost-benefit analysis," Minicozzi added. "If a more valuable urban core area is under built, based on its potential, property and sales taxes will not be adequate, leading to lower revenue for the city. Impact and permit fees don't cover the long-term costs associated with upkeep and maintenance of streets as well as fire/police services, costs associated with fire hydrants along with other ongoing expenses."

Those interested in encouraging economic growth should build on a foundation of understanding the tax implications of differing choices, Minicozzi said. One effective tool he uses for determining comparative economic worth is assessed value per acre. He compared valuations for several Santa Rosa-area big-box stores, shopping malls and corporate campuses:

- Wal-Mart, Rohnert Park, \$803,805/acre
- Wal-Mart, Windsor, \$1,393,000/acre
- Keysight Technologies, Santa Rosa, \$1,448,893/acre
- Medtronic, Santa Rosa, \$1,613,920/acre
- Costco Wholesale, Santa Rosa, \$1,619,631/acre
- Target, Santa Rosa, \$1,757,294/acre
- · Coddingtown Mall, Santa Rosa, \$2,237,000/acre
- Santa Rosa Plaza Mall, \$4,268,000/acre

"Note: the higher the value, the closer a property is to the city center," Minicozzi said. "Now compare the values per acre of these large retailers on dozens of acres each with the assessed value of single-lot properties in or near downtown Santa Rosa that occupy only a fraction of an acre."

- 442 Eighth St., two stories, \$4,689,640/acre
- 526 B St., three stories, \$8,522,750/acre
- 553 Fifth St., three stories, \$10,973,000/acre
- 520 Mendocino Ave., three stories, \$12,683,300/acre
- B Street townhouses, two stories, \$7,407,090/acre
- Empire Building (built in 1910, now for sale), four stories, \$3,900,000/acre
- Rosenberg Building (subsidized housing), six stories, \$26,316,095/acre

In the Urban3 analysis, the Railroad Square Historic District west of Highway 101, indicates that this area has the second-highest valuation following downtown Santa Rosa. In the

case of the Hotel La Rose, the building was originally constructed in 1907 and later refurbished. Here are a few notable valuation examples:

- Terraces, three stories, \$17,349,200/acre
- Charles Schwab, four stories, \$17,683,300/acre
- Hotel LaRose, three stories, \$14,000,000/acre

Another way at looking at growth potential is examining retail sales taxes paid and tax totals per acre. Minicozzi gave some local examples:

- Plaza Mall, \$1.72 million total retail tax, \$54,000 retail tax/acre
- Santa Rosa Marketplace, \$3.05 million, \$51,000
- Coddingtown Mall, \$1.36 million, \$22,000
- Railroad District, \$234,000, \$45,000
- Downtown historic core, \$630,000, \$52,000

"The Railroad Square results show the potential of developing property close to a passenger train right of way to provide housing and local services for those commuting by rail ...," Minicozzi said.

The third and final public workshop was Jan. 21 at Bike Monkey. It will feature Charles Marohn, president of Strong Towns, talking about the value-added implications of development close to transportation corridors.

#### PLANNING PRACTICI

# Sarasota's SMART Growth Dividend

SARASOTA COUNTY, like many other Florida counties, saw a huge wave of suburban development in the boom years from 1995 to 2007. During that time, more than 31,000 acres of land within the county and its incorporated municipalities came under development. Responding to state growth management policies and seeking to discourage future sprawl, county officials enacted an urban services boundary in 1997. Its purpose was to channel future growth into areas where the county was planning to provide urban services and infrastructure. A citizen-led initiative in 2008 strengthened the growth limit, requiring a unanimous vote of the county commission to enlarge the land area within it.

While the boundary now constrains the county's supply of developable land, the three home-rule cities in the county—Venice, North Port, and Sarasota—can still annex into unincorporated county lands inside the urban services boundary. Given such limits on its supply of developable land, and possible losses due to annexation, Sarasota County is concerned that *fitture* property tax revenues could be squeezed. The county's *current* revenue has already taken a major hit in the post-boom economy.

The shortfall results mostly from lower property assessments tied to falling real estate prices, coupled with and exacervbated by a slowdown of population growth. A further impact on local revenue collections is the loss of fee income due to a downturn in new construction: Residential permitting activity in Sarasota County has gone from more than 2,300 newly platted lots in 2005 to under 90 in 2009. Commercial development has followed a similar pattern: There were 110 projects in 2005 and fewer than 30 in 2009.

With such threats to its future revenue base, county staffers have started to rethink their approach to community building. "We Doing the numbers proves that compact, centrally located, mixed use development yields the most property

> taxes. By Peter Katz

need a better understanding of where our revenues are coming from," said Sarasota County Administrator Jim Ley last year. With regard to creating new sources of revenue, he added, "we need to start thinking more like a city."

Responding to Ley's directive, county planners came up with an idea. When researching new approaches for a comprehensive plan update, they found a unique tax revenue analysis of the Asheville, North Carolina, area. The analysis, prepared by Joe Minicozzi of Public Interest Projects, included a "revenue profile" that compared tax revenues generated by a range of building types in different locations around the city. What made that analysis different from more conventional studies was that the figures were calculated on a *per are* basis rather

than the more typical *per lot, per unit, or per bousebold* basis. Although unusual, this approach clearly showed a much greater return from some types of development—mostly close-in, mixed use properties, both old and new—over more conventional, single-use suburban offerings.

Seeing the dramatic results for Asheville, Sarasota County staff asked Public Interest Projects to compile a similar profile for the Sarasota region. That work is the primary focus of this article.

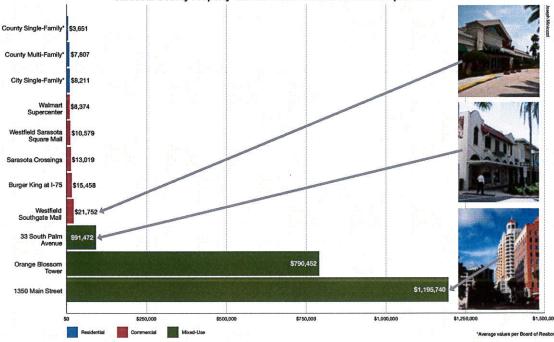
The data highlighted in the profile is straightforward—it's the amount of county property tax paid by the owners of each of the profiled properties (information that is readily obtainable from the local tax assessor). The taxes are then divided into the land area occupied by each property to obtain a *tax per are* figure. The complete revenue profile thus provides an apples-to-apples comparison of the property tax yield for each development type.

While the revenue analysis may be straightforward, the cost analysis is not. That is because municipal services are provided, charged for, and accessed in ways that differ greatly from place to place.

Still, common sense suggests that some of the biggest public costs will be lower in downtown areas. Funding public schools is generally cheaper there because, in most U.S. regions, families with children tend to live in more suburban areas. Among families who do live downtown, many will opt to place their children in private schools. Water use, too, is likely to be lower in more urban areas because yards are relatively small if they exist at all.

#### The county's revenue profile

Looking at the top bar of Sarasota's revenue profile (in the graphic above), one sees that owners of single-family homes in the unin-



corporated county pay, on average, almost \$3,700 per acre a year in property taxes. Multifamily developments (such as apartments or condominiums) are typically assessed at more than double that amount, yielding about \$7,800 in property taxes on a per acre basis. Within the city of Sarasota, single-family home owners annually pay \$8,211 per acre, on average, in county taxes alone.

Looking at commercial development (the red bars in the graphic), one sees that the county's new 21-acre Walmart Supercenter annually pays only \$163 more in property taxes per year, on a per acre basis, than the average single-family home in the city of Sarasota. Walmart's tax bill of \$8,374 per acre seems low, especially given the controversy that such big-box projects generate when they come before reviewime bodies.

Southgate, an established shopping mall anchored by Macy's, Dillards, and Saks Fifth Avenue, suggests a different story. The 32-acre property, which is located within the city of Sarasota, brings in

more than two and one-half times the tax revenue of the big box center, or \$21,752 per acre. The difference can be attributed to a more central location, a better standard of construction, and the higher merchandise price point set by upscale anchor merchants (the latter translating into higher rents per square foot, and thus higher property valuations).

A first-tier regional shopping center like Southgate may be the best revenue generator that many counties can ever hope to attain. That is why local governments try so hard to woo prestigious national merchants like Macy's or Nordstrom (the ultimate prize). But it's an achievable goal only if the locality has the demographic makeup to attract such merchants.

#### Mixed use: changing the game

Mixed use properties (shown in the green bars at the bottom of the profile) perform dramatically better even than Southgate, the strongest mall in the county, when it comes to generating property tax revenue.

Take these examples, all of them located at or near one intersection in downtown Sarasota, just a few blocks in from the bay:

 33 South Palm Avenue, a two-story building dating from the 1920s, was originally part of a larger hotel complex. Its first floor is a retail store; the second floor is zoned for offices. The structure currently generates more than \$90,000 in county property taxes per year, calculated on a per acre basis.

• The 10-story Orange Blossom Tower was built in 1926 as the American National Bank Building. In the 1930s, it was converted to a hotel and later became a retirement residence. Today, the structure houses condominiums, second-floor offices, and ground floor retail. It brings in nearly \$800,000 in county property taxes per acre.

 1350 Main Street generates more taxes than any other building in the profile.
 Its arcaded ground floor houses a bank and other retail uses; condominiums occupy the upper floors. Although some units have water views, the building's principal attraction

Sarasota County Property Tax Revenue Profile: 2008 Tax Yield per Acre

#### <u>(elated topic</u>

#### What the Numbers Show

Our firm has created a computer model that shows that capital invested in high-density projects can produce a higher rate of return than lower density projects, including the big box stores that so many communities may mistakenly covet. The key is to look at municipal revenues generated per acre by a variety of land uses, including single-family housing, a typical suburban mall, and a more complex mixed use property.

Our 2008 study of Buncombe County, North Carolina, broke down the county property tax yield of Asheville-area properties on a per acre basis. We found that the average acre of single-family housing in the county contributed about \$1,236 in property tax while the average acre of housing within the Asheville city limits contributed \$1,716. The findings for downtown Asheville were far more dramatic: An average six-story mixed use project yielded \$250,125 per acre. That's about 31 times the property tax yield of the Asheville Mall, which is also within the city limits but produced just \$7,995 in county taxes per acre. Even after big box retail taxes were added to the study, the combined big box property and retail tax yields a total of about \$51,000 per acre.

Results were similar in Sarasota, where we found that 3.4 acres of mixed use downtown development yielded 8.3 times more annual county property taxes than a suburban 30.6-acre, 357-unit garden-style apartment project. Further, the multifamily residential public infrastructure costs downtown were only 57 percent of the suburban project, while the revenues were 830 percent greater. A difference of \$1.9 million a year versus \$239,000 a year. And it took the urban project just three years to pay for the infrastructure versus the 42 years for the suburban project.

In sum, the urban form consumed less land, cost less to provide public infrastructure, and had a higher tax return.

#### Joe Minicozzi, AICP

 Minicozzi is the New Projects Director at Public Interest Projects in Asheville, North Carolina.

#### 2007 Annual County Tax Yield Per Acre: Asheville, North Carolina

County residential — \$1,236\* City residential — \$1,716\* City commercial — \$2,406\* 1-2 story office buildings — \$7,059 Asheville Mall — \$7,995 4-story apartments — \$18,109 4-story mixed-use condos — \$44,887 6-story mixed-use condos — \$250,125 \*Average values as per Board of Realtors



Houses in the city of Sarasota generate, on average, \$8,211 per acre per year in county property taxes. The new Walmart Supercenter in the unincorporated county (above, right) generates just \$163 more. This specific house, in a close-in Sarasota neighborhood, pays \$35,067. That amount is more than four times what the Supercenter pays annually per acre in property taxes.

y is the vibrant nearby street life that emerged w after streetscape improvements were made in the early 1990s.

Although the building occupies just over two-thirds of an acre, it generated nearly \$1.01 million in combined city and county taxes in 2008. Extrapolating this earning power to a full-acre site, the same kind of building would generate \$1.2 million in county taxes alone. On a per acre basis, 1350 Main brings in 142 times more revenue than the new Walmart Supercenter. It would take both that development and Southgate, together occupying 55 acres, to match the property tax contribution of 1350 Main, which sits on just 0.68 of an acre.

#### Takeaway

#### The most obvious lesson from Sarasota's revenue profile is that compact mixed use developments in urbanized areas generate property tax revenue at a much higher rate than do single-use developments in more suburban locations.

Skeptics are sure to ask: What about sales taxes? It's true that a large, high-volume retailer can make a significant financial contribution to a town or city. That's why so much effort is made to lure a productive retailer across municipal boundaries and why local governments focus so much on fiscal zoning. But at the regional scale, this becomes a zero-sum game. Consider: Sarasota County's total retail sales bring in \$60 million to \$70 million a year in sales tax revenue. Barring a huge influx of wealthy residents who decide to make most or all of their purchases locally, that number is unlikely to change.

If enhancing revenue is the goal, municipalities are far better off with compact development that generates higher property taxes. A grouping of 70 buildings like 1350 Main Street (a gridded cluster measuring seven rows wide by 10 deep) would bring in as much revenue as all of the sales tax currently collected in the entire county.

A quick calculation suggests that such a cluster could easily fit in an area of about 100 acres, including the land needed for streets, alleys, and a small public square or two. (By comparison, Sarasota's existing downtown is about 700 acres.) 'Irue, a large volume of new construction in a confined area is unlikely to happen in Sarasota County, or even the city of Sarasota. Nor is it being recommended here. But the notion provides a useful point of comparison between two important revenue sources—sales tax and property tax—that are available to local government.

With a new generation of smart growth development showing that greater density can be packaged in a physical form that is compelling to a wide range of citizens, and the fiscal information that can be gleaned from a community's revenue profile, longtime opponents of infill development may

now be persuaded to consider a different, and potentially more cost-effective, approach to community building. With enough citizen buy-in, compact, walkable "smart growth districts" could be infinitely replicable, even in a suburban county such as Sarasota. Enabling them would be a far more viable strategy for increasing the county's revenue base than trying to squeeze more sales tax dollars from existing local residents, many of whom

now live on fixed incomes. Such compact development would also mean a more rapid payback on public investment. Comparing the return from a twoand three-story garden apartment complex near Interstate 75 (357 housing units on just over 30 acres) with 1350 Main Street and two other adjacent downtown buildings (a total of 197 units on 1.9 acres), one sees that residential units in the suburban development will take 42 years to pay back the county's infrastructure outlay, versus just three years for units in the downtown building. (Revenue from the commercial portions of the downtown properties was excluded to keep this an apples-to-apples comparison.)

The rapid payback is due to the fact that taller, more compact buildings require less of the horizontal infrastructure (roads, water, and sewer lines) that government typically pays for. Vertical infrastructure (elevators, stair towers, conduit, and structural steel), by contrast, are paid for by the builder or developer. Thus, the more that government can induce the private sector to spend on a given parcel of land, the more it stands to gain long-term, when the development is complete and higher property taxes begin to flow in.

Indeed, governments have always encouraged such private sector investment with expenditures and actions of their own, ranging from the subdivision of public improvements such as streets, parks, and utilities. Citing earlier development models that may have been more economically viable, County Administrator Jim Ley remarked: "Observation points out just how far we've traveled from the basic understanding about what it takes to build a financially sustainable community—that denser urban centers produce the community wealth that sustains the less dense areas."

As municipalities become more proactive in evaluating competing development models and driving toward the models that best meet their objectives in multiple realms—quality of life, quality of place, and economic sustainability—one can expect that tools such as the revenue profile will become an increasingly important part of the community decision-making process.

Peter Katz is Sarasota County's director of Smart Growth/Urban Planning. He is the author of The New Urbanism: Toward an Architecture of Community (McGraw-Hill, 1993).



August 31, 2016

#### BY E-MAIL DIST3@BOS.CCCOUNTY.US

Chair Mary Piepho and Members of the Contra Costa County Local Agency Formation Commission 651 Pine Street, 6th Floor Martinez, CA 94553

#### Re: <u>Additional Comments Regarding Proposed Agricultural and Open Space</u> <u>Preservation Policy</u>

Dear Chair Piepho and Members of Contra Costa County LAFCO:

As you know, this office has previously provided written comments to LAFCO regarding the draft Agricultural and Open Space Policy ("Draft Policy") via letters dated April 7, 2016, June 20, 2016, and July 12, 2016, and previously appeared before you at your meeting on July 13, 2016. As we have previously stated, while revisions have been made to the draft policy since it was first introduced, the Draft Policy remains inconsistent with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Gov. Code, §§ 56000 *et seq.*) and the California Environmental Quality Act ("CEQA"; Pub. Resources Code, §§ 21000 *et seq.*). The issues we previously have described are summarized as follows:

- The Draft Policy exceeds the scope of LAFCO's granted authority under the Cortese-Knox-Hertzberg Act in its broad focus on all agricultural lands and direct regulation of land use;
- The Draft Policy establishes requirements such as the requirement for an Agricultural and Open Space Impact Assessment, that conflict with CEQA's mandatory environmental review requirements;
- Draft Policy 5 improperly prioritizes the preservation of agricultural and open space lands over all other land uses;
- Draft Guideline 3(a)'s mandate that an applicant must provide a land use inventory of a jurisdiction that indicates the amount of available land within a jurisdiction for the proposed land use is impractical, unreasonable and lacks any lawful connection or nexus to an individual project;

One Embarcadero Center, 30th Floor, San Francisco, California 94111 Telephone: 415.291.7400 Fax: 415.291.7474 Albany | Los Angeles | New York | Orange County | Palo Alto | Sacramento | San Francisco | Washington, D.C.



• Draft Guideline 5 is inconsistent with and preempted by Government Code Section 56856.5 of the Cortese-Knox-Hertzberg Act; and

• The "Additional Observations" serve no apparent purpose, create confusion, and should be deleted in their entirety.

In addition to the foregoing issues, which are detailed in our prior correspondence, unless the Draft Policy is revised in a manner that ensures that it does not create new substantive mandates that conflict with the Cortese-Knox-Hertzberg Act or existing policies, it will effectively determine whether growth will occur in unincorporated areas that are agricultural and as a result, may have a foreseeable impact on the environment. Consequently, pursuant to CEQA, LAFCO must undertake and complete environmental review of the Draft Policy itself, prior to its adoption.

1. <u>The Draft Policy Constitutes a Project for Purposes of CEQA</u>. In its current form, the Draft Policy constitutes a project subject to environmental review under CEQA. In pertinent part, CEQA Guidelines Section 15378(a)(1) defines "project" to mean, "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is...[a]n activity directly undertaken by any public agency including but not limited to public works construction and related activities clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100-65700."

2. <u>The Draft Policy Does Not Fall Within CEQA's Exclusion for Ministerial Policy</u> <u>Making</u>. Section 15378(b) goes on to expressly exclude from the meaning of "project" five types of activities, including ministerial policymaking: "[c]ontinuing administrative or maintenance activities, such as purchases for supplies, personnel-related actions, general policy and procedure making (except as they are applied to specific instances covered above)" and "[o]rganizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment.

Under existing case law, the Draft Policy, in its current form, does not fall within CEQA's exclusion for ministerial policymaking because it goes beyond implementing existing legislation or policies and has a potential impact on the environment. (*See City of Livermore v. Local Agency Formation Commission* (1986) 184 Cal.App.3d 531 [interpreting the definition of "project" under CEQA and holding that sphere of influence guidelines adopted by Alameda County LAFCO constituted a project requiring an EIR] distinguished by *Northwood Homes v. Town of Moraga* (1989) 216 Cal. App. 3d 1197, 1207, "in marked contrast to the LAFCO

# manatt | phelps | phillips

Chair Mary Piepho and Members of the Contra Costa Local Agency Formation Commission August 31, 2016 Page 3

guidelines considered in *City of Livermore*, the MOSO guidelines were designed to implement the land use policy decisions already reflected in MOSO".])

The facts in *City of Livermore* involved revisions to the LAFCO's 1973 guidelines entitled: "Spheres of Influence: Policies, Guidelines, Criteria & Procedures of Alameda County," which contained information to help guide LAFCO in its later determinations of particular spheres of influence for local governmental agencies. (*Id.* at 536.) In 1983, LAFCO attempted to adopt revisions that deleted the statement, "Existing and future urban development areas belong in cities" and added language that future incorporation of urban development outside an existing sphere of influence would be based on a county plan rather than a city plan. LAFCO characterized the revisions as an incorporation of the actual policies and procedures that had evolved since 1973. It adopted a negative declaration for purposes of CEQA and adopted the revised guidelines. (*Id.* at 535-536.)

The City subsequently filed suit and the court held that LAFCO had to prepare an EIR to analyze the environmental impact of the revisions and to show that the revisions complied with the Knox-Nisbet Act. In holding that the guidelines were not excluded from CEQA's definition of a "project" pursuant to Guidelines Section 15378(b)(2), the court reasoned, "[t]he policymaking performed by LAFCO when it revises guidelines is far different than and distinguishable from the ministerial policymaking referred to in this CEQA guideline." (*Id.* at 539.) The court further explained that the guidelines revisions at issue were analogous to the amendment of a general plan. (*Id.*) Although the guidelines did not themselves directly affect any specific development, they would influence LAFCO decisions about development plans and future growth of cities and service areas:

The guidelines play a part in determining whether growth will occur in unincorporated areas and whether agricultural land will be preserved or developed. They may change the focus of urban development by promoting county plans over city plans. These potential effects will certainly impact the environment. It is true that the precise effects are difficult to assess at this stage, but it is because impact is so easily foreseen that the revisions must be considered a project under CEQA.

(*Id.* at 538.) The court pointed out that just as general plans "embody fundamental land use decisions that guide the future growth and development of cities and counties" and the adoption or amendment of general plans have a potential for resulting in ultimate physical changes in the environment, the revised guidelines at issue would also influence the future growth and development of cities by potentially promoting urbanization outside existing cities, "perhaps having an even greater impact than the amendment of one general plan." (*Id.*) The court further



determined that preparation of an EIR was required, finding that substantial evidence did not support LAFCO's conclusion that a fair argument could not be made that the project may have a significant environmental impact. (*Id.* at 541.)

Similarly, here the Draft Policy will go beyond implementing or providing guidance to implement existing policies or provisions of the Cortese-Knox-Hertzberg Act by essentially determining whether growth will occur in unincorporated areas and whether agricultural land will be preserved or developed. The stated purposes of the Draft Policy are to: (1) provide guidance to the applicant on how to assess the impacts on prime agricultural, agricultural and open space lands of applications submitted to LAFCO, and to explain how the applicant intends to mitigate those impacts; (2) provide a framework for LAFCO to evaluate and process in a consistent manner, applications before LAFCO that involve or impact prime agricultural, agricultural, agricultural and/or open space lands; and (3) explain to the public how LAFCO will evaluate and assess applications that affect prime agricultural, agricultural and/or open space lands.

Although the stated purposes and many of the proposed goals, policies and guidelines arguably constitute ministerial policymaking, there are a number of provisions that create new county-wide mandates that will determine where urbanization will occur. More specifically, the Draft Policy has the effect of prioritizing land uses, elevating agricultural and open space preservation above other land uses, and to the extent that it would prevent urban development in agricultural areas, it would have long term impacts on land use and future growth and population distribution in the region. Based on the reasoning in *City of Livermore*, the proposed policy does not fall within the exclusion from the definition of "project" for general policy and procedure-making.

We understand that to date LAFCO has taken the position that no CEQA compliance whatsoever is necessary or required. This position is contrary not only to the caselaw described in detail above, but also to the positions of other LAFCOs throughout the state. In adopting policies similar to the Draft Policy, other LAFCOs have properly conducted CEQA review. For reference, you may wish to review the staff report and supporting documentation prepared in connection with Santa Clara County LAFCO's consideration of an Agricultural Mitigation Policy on April 4, 2007. In that matter, Santa Clara County LAFCO properly determined the adoption of the proposed policy to be subject to CEQA and prepared a comprehensive initial study to evaluate the potentially significant impacts of the proposed action.

In light of the above, at a minimum LAFCO must conduct an initial study to determine whether adoption of the Draft Policy will have any potentially significant impacts on the environment. Only after such time as a proper environmental review under CEQA has been completed may the Draft Policy be scheduled for adoption by LAFCO.

#### 3. Revisions to the Draft Policy Are Required to Avoid CEQA Review and Preparation

of an EIR. Under the Cortese-Knox-Hertzberg Act, LAFCO is to consider the conformity of a proposal and its anticipated effects with adopted commission policies on providing planned, orderly, efficient patters or urban development, and the policies and priorities set forth in Section 56377 of the act. (Gov. Code Sec. 56668(d).) Given that a proposal must conform to adopted commission policies, to the extent that any such policies conflict with or substantively supplement existing local land use planning, their adoption is not merely ministerial or procedural policymaking.

As currently drafted, the Draft Policy contains numerous provisions that purport to mandate new standards and requirements that are akin to a general plan amendment. They would effectively shift land use planning from reliance on city plans to reliance on LAFCO's new policy in determining urbanization. In order to avoid CEQA review (and avoid running afoul of the Act's prohibition against directly regulating land use), these provisions, and the Draft Policy as whole, must be revised to clarify that it is an advisory policy, which may serve as the basis to make recommendations and provide guidance, and does not establish new mandates that require LAFCO's denial of proposals that cannot fully conform.

As an example of the Draft Policy extending beyond implementation of existing legislation or policy, Guideline 1 requires an applicant to submit an "Agricultural and Open Space Impact Assessment" that "at a minimum" addresses as one of six topics, "how it guides development away from prime agricultural, agricultural and/or open space lands." This requirement modifies the factors prescribed in Section 56377 of the Act, which states that in reviewing and approving or disapproving proposals, the commission shall consider specified policies and priorities including the following factor: "Development or use of land for other than open-space uses shall be guided away from existing prime agricultural lands in open-space use toward areas containing nonprime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area." (Emphasis added.) By broadening the focus of the requirement to include non-prime agricultural land and narrowing or eliminating any consideration of how the proposal may nonetheless promote the planned, orderly, efficient development agricultural land and narrowing or eliminating any consideration of an area, the Draft Policy drastically alters the existing requirements.

\* \* \*



We appreciate your continued consideration of our comments and look forward to discussing this matter with you further at LAFCO's next meeting.

Very truly yours,

right yours, sisting a Kristina Lawson

KXL:KXL

Lou Ann Texeira, Contra Costa County LAFCO (via email LouAnn.Texeira@lafco.cccounty.us) cc: Louis Parsons Jeanne Pavao

317520498.4



PO Box 309, Walnut Creek, CA 94597 www.wcosf.org

August 25, 2016

Hon. Mary Piepho, Chair Contra Costa LAFCO 651 Pine Street, 6th Floor Martinez, CA 94553

Dear Commissioners:

Our Walnut Creek Open Space Foundation supports Walnut Creek's Open Space through land acquisition, through habitat restoration projects and through education to help residents understand and enjoy our Open Space areas. We are concerned that loss of agricultural lands will make it more difficult to preserve and maintain public open space like Walnut Creek's Open Space, East Bay Regional Parks, Mount Diablo State Park and land owned and managed by land trusts such as Save Mount Diablo and John Muir Land Trust. We believe that requiring mitigation for the loss of ranch or farm land will be an effective tool to minimize loss of agricultural land and to keep farming and ranching in Contra Costa County.

Our County is home to a million people but it retains a large amount of undeveloped land in public and private ownership. Most residents can visit publicly owned open space areas within a few miles of where they live. Residents can also visit farmers' markets to buy locally grown produce and visit farms themselves to collect pick-it-yourselves produce. Life in Contra Costa County is richer for the mix of urban and suburban living with easy access to nature and to the sources of their food.

While residents do not have access to privately owned farms and ranches, those lands contribute directly to the health of public open space. They extend and connect public lands to make larger and more viable units that can support more diversity of plant and animal life.

Grazing is an important tool for managing public open space to manage the risk of wildfires and to control weeds. Using grazing as a management tool requires that we have ranchers living and working in the area. The viability of ranching depends on the existence of privately owned ranch land. It also depends on retaining an adequate pool of skilled labor such as cowboys and support services. Losses of ranch land and of ranchers living in the county will make managing publicly owned open space more difficult.

Farm lands also contribute to the diversity of life in the area. Insects, birds and mammals all make use of farm land and that helps ranch land and public open space retain diverse animal life.

Our Walnut Creek Open Space Foundation feels that action is needed to combat further loss of farm and ranch lands in our county. We believe that a requirement for mitigation for the loss of farm and

ranch lands will help preserve a viable level of farming and ranching activity. We urge LAFCO to enact a requirement for mitigation at the ratio of 3 to 1.

Sincerely,

1 \_ // T

Katrina Nagle President, Walnut Creek Open Space Foundation

#### Jim Blickenstaff Chair, Mt. Diablo Group/Sierra Club (The Greenbelt Alliance letter referenced here was part of the July agenda packet.)

From: Jim Blickenstaff [mailto:jpblick@comcast.net]
Sent: Monday, September 05, 2016 6:16 PM
To: Lou Ann Texeira
Cc: sharon.anderson@cc.county.us; 'Joel Devalcourt'; 'Ellison Folk'; District5; 'Jim Blickenstaff'
Subject: LAFCO Hearing, Sept., 14th: Updating and Strengthening Ag and Open Space Policy.

Sept. 5, 2016

Re: Enacting Policies to prevent sprawl, and preserve agriculture and open space.

Dear Lou Ann –

Please be so kind as to see all LAFCO members, and alternates, receive this message, prior to the Sept., 14<sup>th</sup> hearing on the matter. As well as, make it part of the Sept. 14<sup>th</sup> public record.

I wanted to re-affirm the Mt. Diablo Sierra Club's support for Greenbelt Alliance's position on strong agricultural and open space protections – as expressed in their comprehensive June 20, 2016 letter to LAFCO.

Weaker, past, LAFCO policies on preservation have had the effect of encouraging a destructive sprawl dynamic. That threat is still there. It is past time to change the direction of the County; and take real steps to block sprawl, and give long term protections for agriculture and open space.

Clear, unambiguous, legally enforceable, rules and constraints on further destruction of ag and open space; will demonstrate the critical next step, needed to turn away from policies that have actually facilitated sprawl.

The criteria set forth by the Greenbelt Alliance give an excellent foundation toward accomplishing a preservation/anti-sprawl future in Contra Costa County.

Let's break forever from past policies that have led to sprawl; "dumb-growth;" and the loss of 1,000's of acres of prime ag land, vital habitat, and open space. The Road-Map is there, thanks in large part to Greenbelt Alliance, I implore LAFCO to follow it to a smarter, brighter, greener future.

Thanks to all members for consideration of this most serious matter.

Jim Blickenstaff Chair, Mt. Diablo Group / Sierra Club. July 13, 2016

I am writing to urge the Contra Costa LAFCo to adopt strong policies in support of local agriculture.

Farming and ranching contributes so much to the Bay Area food culture, economy, and environment. But Contra Costa County is losing agricultural land at alarming rates, partly due to the incentive for farmers and ranchers to sell their land to sprawl developers.

Please consider adopting a policy that does the following:

1. Prohibits the annexation of actively farmed land 2. Mitigates every acre of farmland and rangeland lost to development 3. Uses mitigation funds to permanently preserve agricultural land

These policies are critical for the success of agriculture in Contra Costa. Adopting them will protect our agricultural land and help local farmers and ranchers thrive.

Sincerely,

#### **Received from:**

First Name	Last Name	Residence	Received
Teresa	Castle	Concord	7/13/16
Lynda	Deschambault	Moraga	7/13/16
Lael	Gerhart	Berkeley	7/13/16
Lukasz	Lysakowski	Berkeley	7/13/16
Cathy	Mack	Cupertino	7/13/16

August (various dates), 2016

I am writing to urge the Contra Costa LAFCo to adopt strong policies in support of local agriculture.

Farming and ranching contributes so much to the Bay Area food culture, economy, and environment. But Contra Costa County is losing agricultural land at alarming rates, partly due to the incentive for farmers and ranchers to sell their land to sprawl developers.

Please consider adopting a policy that does the following:

1. Mitigates at a three-to-one ratio each acre of farmland lost to development 2. Uses mitigation funds to permanently preserve agricultural land

These policies are critical to the success of agriculture in Contra Costa County. Adopting them will protect our agricultural land and help local farmers and ranchers thrive.

Sincerely,

#### Received from:

First Name	Last Name	Residence	Received
Nancy	Воусе	San Rafael	8/12/16
Jeannie	Clements	Fremont	8/12/16
Kermit	Cuff	Mountain View	8/12/16
Richard	Fairfield	Santa Rosa	8/12/16
Jean	King	Livermore	8/12/16
Robert	Oxenburgh	Alamo	8/12/16
Carl	Stein	San Francisco	8/12/16
Stephen	Weitz	Oakland	8/12/16
Paula	Zerzan	Sonoma	8/12/16
Thomas	Carlino	San Jose	8/13/16
Gita	Dev	Woodside	8/13/16
Lukasz	Martinelli	Santa Cruz	8/13/16
Tess	Oliver	Point Richmond	8/13/16
Stefanie	Heinz	Cupertino	8/15/16
Judith	Smith	Oakland	8/16/16
Kerstin	Goldsmith	San Pablo	8/22/16



#### MEMBERS

#### EMBERS Mary N. Piepho

#### ALTERNATE MEMBERS Candace Andersen County Member

County Member Sharon Burke Public Member

> Tom Butt City Member

Stanley Caldwell Special District Member

September 14, 2016 Agenda Item 9

Lou Ann Texeira Executive Officer Public Member Federal Glover County Member Michael R. McGill Special District Member

Donald A. Blubaugh

County Member Rob Schroder City Member Igor Skaredoff Special District Member

Don Tatzin City Member

September 14, 2016 (Agenda)

Contra Costa Local Agency Formation Commission (LAFCO) 651 Pine Street, Sixth Floor Martinez, CA 94553

## West Contra Costa Health Care District – Special Study Overview

Dear Commissioners:

**BACKGROUND**: The West Contra Costa Healthcare District (WCCHD) has struggled financially since the mid-1990s, experiencing increasing costs, declining reimbursements, and growing service demand from low-income, uninsured and underinsured populations. The WCCHD emerged from bankruptcy filed in 2006; however, the District was unable to regain financial solvency and fell further into debt. Eventually, WCCHD shut its hospital – Doctors Medical Center (DMC) - a full-service acute care facility, in 2015.

The WCCHD continues to function today with limited staff as it sells its building, equipment, and other property. Over the next 10-12 years, WCCHD will focus on paying off its outstanding debts and obligations, leaving essentially no funds available for health-related programs or services.

The closure of DMC resulted in a significant loss of hospital beds and emergency department facilities, as well as the elimination of other specialized services, in an underserved community with significant healthcare needs. After WCCHD extinguishes its debts, as much as \$9 million annually could be available for healthcare-related services and facilities.

**DISCUSSION**: In April 2016, LAFCO initiated a special study of the WCCHD. As provided for in the scope of work, the consultant collected and reviewed information and interviewed affected and interesting parties, including WCCHD, Contra Costa County Health Services Department, Los Medanos Community Healthcare District, and the City of Richmond.

The study evaluates a range of governance options for the District including consolidation, reorganization and dissolution. Some options would enable the continuation of property and possibly other taxes to fund healthcare purposes in the community; while other options provide

for dissolving WCCHD and naming a successor agency to wind-up the affairs of the District. The consultant will provide details regarding the governance options at the September 14<sup>th</sup> LAFCO meeting. It should be noted that AB 2910, the annual CALAFCO omnibus bill, was recently signed by the Governor. The bill includes a number of important clean-ups and also authorizes LAFCO to approve the dissolution of a healthcare district without an election under specific conditions.

The *Public Review Draft Special Study* was released on August 26, 2016. The Draft study was posted on the LAFCO website and notices were sent to affected agencies and interested parties informing them of the availability of the Draft study. The 30-day public comment period will end on September 23, 2016.

At the September 14, 2016 LAFCO meeting, the Commission will receive an overview of the special study and be asked to provide input and direction. Based on comments received at the September 14<sup>th</sup> LAFCO meeting, the consultant will make necessary updates and edits to the report. In October 2016, LAFCO will release the Final Draft report and solicit further public input. On November 9<sup>th</sup>, the Commission will be asked to accept the Final report and consider taking action to reorganize or dissolve the WCCHD.

#### RECOMMENDATION

Receive study overview, discuss and provide input and direction as appropriate.

Sincerely,

LOU ANN TEXEIRA EXECUTIVE OFFICER

c: Distribution



# NOTICE AND AGENDA FOR REGULAR MEETING

DATE/TIME: Wednesday, September 14, 2016, 1:30 PM

PLACE: Board of Supervisors Chambers 651 Pine Street, Martinez, CA 94553

**NOTICE IS HEREBY GIVEN** that the Commission will hear and consider oral or written testimony presented by any affected agency or any interested person who wishes to appear. Proponents and opponents, or their representatives, are expected to attend the hearings. From time to time, the Chair may announce time limits and direct the focus of public comment for any given proposal.

Any disclosable public records related to an open session item on a regular meeting agenda and distributed by LAFCO to a majority of the members of the Commission less than 72 hours prior to that meeting will be available for public inspection in the office at 651 Pine Street, Six Floor, Martinez, CA, during normal business hours as well as at the LAFCO meeting.

All matters listed under CONSENT ITEMS are considered by the Commission to be routine and will be enacted by one motion. There will be no separate discussion of these items unless requested by a member of the Commission or a member of the public prior to the time the Commission votes on the motion to adopt.

For agenda items not requiring a formal public hearing, the Chair will ask for public comments. For formal public hearings the Chair will announce the opening and closing of the public hearing.

If you wish to speak, please complete a speaker's card and approach the podium; speak clearly into the microphone, start by stating your name and address for the record.

#### Campaign Contribution Disclosure

If you are an applicant or an agent of an applicant on a matter to be heard by the Commission, and if you have made campaign contributions totaling \$250 or more to any Commissioner in the past 12 months, Government Code Section 84308 requires that you disclose the fact, either orally or in writing, for the official record of the proceedings.

#### Notice of Intent to Waive Protest Proceedings

In the case of a change of organization consisting of an annexation or detachment, or a reorganization consisting solely of annexations or detachments, or both, or the formation of a county service area, it is the intent of the Commission to waive subsequent protest and election proceedings provided that appropriate mailed notice has been given to landowners and registered voters within the affected territory pursuant to Gov. Code sections 56157 and 56663, and no written opposition from affected landowner or voters to the proposal is received before the conclusion of the commission proceedings on the proposal.

#### American Disabilities Act Compliance

LAFCO will provide reasonable accommodations for persons with disabilities planning to attend meetings who contact the LAFCO office at least 24 hours before the meeting, at 925-335-1094. An assistive listening device is available upon advance request.

## As a courtesy, please silence your cell phones during the meeting.

## SEPTEMBER 14, 2016 CONTRA COSTA LAFCO AGENDA

- 1. Call to Order and Pledge of Allegiance
- 2. Roll Call
- 3. Adoption of Agenda
- 4. Public Comment Period (please observe a three-minute time limit):

Members of the public are invited to address the Commission regarding any item that is not scheduled for discussion as part of this Agenda. No action will be taken by the Commission at this meeting as a result of items presented at this time.

5. Approval of Minutes for the August 10, 2016 regular LAFCO meeting

## SPHERE OF INFLUENCE (SOI)/BOUNDARY CHANGES

- <u>LAFCO 13-08</u> Northeast Antioch Reorganization (Area 2A): Annexations to the City of Antioch and Delta Diablo and Detachment from County Service Area P-6 – receive update from City staff; consider reorganization proposal of 116± acres (19 parcels) located immediately west of State Route 160 and the Antioch Bridge; and consider related actions under CEQA Public Hearing – Continued from June 8, 2016 Meeting
- 7. <u>LAFCO 16-05</u> Montreux Residential Subdivision Boundary Reorganization: Annexations to the City of Pittsburg, Contra Costa Water District (CCWD), and Delta Diablo Zone 2 (DD) and Detachment from County Service Area P-6 consider reorganization proposal of 161± acres (four parcels) located on the west and east sides of Kirker Pass Road in conjunction with the proposed development of 351 single-family homes; and consider related actions under CEQA Public Hearing

## **BUSINESS ITEMS**

- 8. *Agricultural & Open Space Preservation Policy* receive a report from the Policies & Procedures Committee and consider adopting an Agricultural & Open Space Preservation Policy
- 9. West Contra Costa Healthcare District Special Study (WCCHD) receive an overview of the Public Review Draft WCCHCD governance options study and provide input
- 10. Compliance with Enterprise System Catalog (SB 272) informational item
- 11. CALAFCO Legislative Update informational item

## **CORRESPONDENCE**

12. Correspondence from Contra Costa County Employees' Retirement Association (CCCERA)

## **INFORMATIONAL ITEMS**

- 13. Commissioner Comments and Announcements
- 14. Staff Announcements
  - CALAFCO Updates
  - Pending Projects
  - Newspaper Articles

## **ADJOURNMENT**

*Next regular LAFCO meeting – October 12, 2016 at 1:30 p.m.* LAFCO STAFF REPORTS AVAILABLE AT <u>http://www.contracostalafco.org/meeting\_archive.htm</u>

#### CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION MINUTES OF MEETING

August 10, 2016

### Board of Supervisors Chambers Martinez, CA

September 14, 2016 Agenda Item 5

- 1. Chair Mary Piepho called the meeting to order at 1:30 p.m.
- 2. The Pledge of Allegiance was recited.
- 3. Roll was called. A quorum was present of the following Commissioners:

County Members Mary Piepho and Alternate Candace Andersen. Special District Members Mike McGill and Igor Skaredoff and Alternate Stanley Caldwell. City Member Don Tatzin. Member Rob Schroder arrived at 1:33 p.m. Public Members Don Blubaugh and Alternate Sharon Burke.

Present were Executive Officer Lou Ann Texeira, Legal Counsel Sharon Anderson, and Clerk Kate Sibley.

4. <u>Approval of the Agenda</u>

Upon motion of Blubaugh, second by Tatzin, Commissioners, by a vote of 6-0, adopted the agenda.

AYES:Andersen (A), Blubaugh, McGill, Piepho, Skaredoff, TatzinNOES:noneABSENT:Glover (M), Schroder (M)ABSTAIN:none

5. <u>Public Comments</u>

There were no public comments.

6. <u>Approval of July 13, 2016 Meeting Minutes</u>

Upon motion of Andersen, second by Tatzin, the minutes were unanimously approved by a vote of 6-0.

AYES:	Andersen (A), Blubaugh, McGill, Piepho, Skaredoff, Tatzin
NOES:	none
ABSENT:	Glover (M), Schroder (M)
ABSTAIN:	none

7. LAFCO 16-02 - Detachment from the Byron Bethany Irrigation District (BBID)

The Executive Officer provided background on this proposal submitted by Contra Costa County to detach 480<u>+</u> acres from BBID located in two separate areas in Discovery Bay west. The subject areas comprise territory where BBID and the Town of Discovery Bay Community Services District (TODBCSD) boundaries overlap.

The areas proposed for detachment are within the SOIs of both BBID and the TODBCSD. Removal of these areas from BBID's SOI is not required, and presently there is no proposal to remove the subject areas from BBID's SOI in conjunction with the proposed detachment. If desired, a proposal to amend BBID's SOI can be submitted at a later time.



The County Board of Supervisors (BOS) adopted a tax transfer agreement providing that BBID's share of the annual property tax associated with the proposed detachment, which currently totals approximately \$685,000, would be allocated to the County. Further, the BOS directed its staff to prepare a second tax exchange agreement to allow the County to transfer, annually, the reallocated BBID tax revenue from the County to East Contra Costa Fire Protection District (ECCFPD), unless an application to initiate dissolution of ECCFPD is filed with LAFCO, at which point the property tax transfer from the County to ECCFPD would automatically terminate.

Prior to the July LAFCO meeting, Rick Gilmore, BBID General Manager, requested two amendments to the proposal. The first was to exclude from the proposed detachment the two BBID owned parcels that contain a BBID-owned pipeline. The two parcels are located at the western edge of the TODBCSD, and exclusion of the two parcels from the proposed detachment will not create an island or gap. The second request was that LAFCO detach these same two parcels from the TODBCSD, as the parcels do not require the TODBCSD's services.

Commissioners continued the public hearing from the July 13 meeting in order for the BBID proposed revisions to the original proposal to be publicly noticed. The revised proposal would exclude APNs 011-190-044 and -045 from the detachment of territory from BBID, and it would detach the same parcels from TODBCSD.

The Chair opened the public hearing. No one spoke, and the hearing was closed.

Upon motion of Blubaugh, second by Schroder, Commissioners unanimously, by a 7-0 vote, found the project exempt pursuant to CEQA Guidelines, Sections 15061(b)(3); approved the proposal to be known as Detachment from the Byron Bethany Irrigation District and Detachment from the Town of Discovery Bay Community Services District; determined that the territory being detached has no effect on BBID's or TODBCSD's authority to collect taxes for bonded indebtedness; found that the subject territory is inhabited, has less than 100% consent of the affected landowners, is subject to a protest hearing; and authorized LAFCO staff to conduct the protest proceedings.

AYES:	Andersen (A), Blubaugh, McGill, Piepho, Schroder, Skaredoff, Tatzin
NOES:	none
ABSENT:	Glover (M)
ABSTAIN:	none

8. <u>Fire and Emergency Medical Services MSR/SOI Updates (2<sup>nd</sup> Round)</u>

The Executive Officer provided brief background on this MSR, which encompasses an updated study of fire and emergency medical services provided by three cities and eight special districts. As of this time, the MSR report has gone through broad review, by the affected local agencies, the public and the Commission. In May, the Commission held its first public hearing where LAFCO staff and the consultants presented an overview of the MSR process, the report and significant findings as presented in the staff report. At that meeting, in addition to receiving comments from several members of the Fire/EMS community, Commissioners received a letter from the Executive Fire Chiefs' Association requesting that LAFCO delay final consideration of the MSR until the consultants could include in the report the impacts of CCCERA's recent decision to lower the rate of return on investments. The Commissioners agreed to a 90-day pause and directed that the Final Draft MSR be presented at this August 10<sup>th</sup>meeting.

As directed by the Commission, staff also, in that 90-day period, prepared an information piece summarizing the major MSR findings, and distributed it to cities, districts, the media, and other interested parties, encouraging the recipients to share this information in their communities.



The staff report provides a summary of the major findings contained in the MSR, dealing with growth and service demand, service levels, infrastructure needs, accountability and governance options. Included with the staff report is a draft resolution containing the determinations as required by the CKH.

The Chair thanked staff and the consultants for the comment log; Richard Berkson of the consulting team noted that the comments received were helpful.

Mr. Berkson pointed out that an independent board for ECCFPD will not generate more money for the district, but it will mean enhanced interface with the community. He also commented on the consultants' research into updated CCCERA information, and noted that the recently published 2015 report sets the base for FY 2017-18.

Commissioner Andersen, who also sits on the CCCERA Board, confirmed that letters to agencies will be sent out in October, and that they will not see an increase in rates in FY 2017-18.

Mike Oliver, of the consulting team, reported that ECCFPD reopened a station on July 2<sup>nd</sup> with the funds provided by the County and the cities of Brentwood and Oakley. There will be a measure on the November ballot asking voters if they want the board to be composed of elected members. Additionally, both Brentwood and Oakley are considering utility user tax measures for the November ballot. These measures could be approved by a simple majority, and could help fund fire protection services.

Mr. Oliver reported that a fiscal stability analysis of RHFPD projecting revenues through 2020 revealed that the district's majority of fund reserves will be depleted by the end of FY 2016-17. Even with only one station, RHFPD will run about \$1 million short. The district is also considering a special (2/3-majority) tax measure for the November ballot. While RHFPD can work on a number of efforts that could help its fiscal situation (i.e., extension of FEMA SAFER grant, more development fees from the City of Hercules), they have a substantial year-to-year revenue shortfall that will continue unless they receive a new, reliable, ongoing source of revenue. The City of Hercules has numerous redevelopment obligations in addition to RHFPD, and unfortunately RHFPD comes far behind other agencies in amounts and priorities.

Mr. Oliver stressed his and the consulting team's belief that local government entities have responsibility to do what they can do to provide fire protection services to their residents. The adoption of appropriate fees that can be applied should be applied, and funding sources should be secured on an independent basis so that the State or some other agency cannot interfere, and the district's relationship with the community can be sustained.

In response to a question from the Chair regarding a residents' group (East County Voters, or ECV) advocating for a reallocation of Prop 13 rather than a new tax, Mr. Oliver stated that he knows of no legislation like this that has been successfully carried, and no reallocation of property tax that has occurred. In any case, the property tax is 1%, so it's a "zero-sum game"; an increase in one local agency's pro-rata share of the1% will mean a decrease in another's allocation.

The Chair opened the public hearing.

Brian Kelly, of the consulting team, spoke on the wildland firefighting capability of the County: With the closure of 10 stations since the 2009 MSR, has there been any impact on this? Yes, but this actually reflects an overall lack of capacity to respond to emergencies of all sorts at peak times.

The Executive Officer read comments from Joseph J. Whitener, Bethel Island Fire Chief 1974-1995, who called the office. He has read both MSRs (2009 and 2016); he is concerned with a lack of service on Bethel Island (BI) – no fire station, no equipment, and no boats. They need a fire



station on either BI or Hotchkiss Tract. He's not opposed to a special tax as long as it results in increased fire protection services to BI, which now has an ISO rating of 10 (it was five when he was BI Fire Chief). He is concerned with the way the ECCFPD Board is weighted toward the cities of Oakley and Brentwood, and suggested that BI should consider returning to a volunteer fire department model.

The Chair closed the public hearing.

There was a brief discussion among Commissioners regarding fire service to Shell and other refineries.

The Executive Officer drew Commissioners' attention to the chart showing SOI and governance options, as well as the SOI updates made as a result of the 2009 MSR (CSA EM-1, ECCFPD, MOFD, and SRVFPD; and a partial update to CCCFPD's SOI, excluding the west county portion). At that same time LAFCO deferred SOI updates for Crockett-Carquinez FPD, KFPD and RHPRD in anticipation of the formation of a West County Ad Hoc committee to develop a work plan to address west county EMS/fire issues, which never occurred. The three city SOIs were updated in conjunction with the West County sub-regional MSR. Staff is seeking direction from the Commissioners on 2016 SOI and governance options, particularly with regard to ECCFPD, RHFPD, CCCFPD, and the other west county agencies.

Following discussion on the options presented, staff was directed to consult with the fire chiefs for their input on the SOI and governance options and return with a report to the October 12, 2016 meeting.

The Chair thanked the public safety community and Municipal Resource Group for their work on this report.

Upon motion by Tatzin, second by Blubaugh, Commissioners, by a 7-0 vote, accepted the Final MSR Report; determined that the MSR project is categorically exempt pursuant to CEQA Guidelines §15306, Class 6; adopted the MSR determinations; and directed staff to notice a public hearing for October 12, 2016, at which time the Commission will consider the SOI updates.

AYES:Andersen (A), Blubaugh, McGill, Piepho, Schroder, Skaredoff, TatzinNOES:noneABSENT:Glover (M)ABSTAIN:none

9. Rollingwood-Wilart Park Recreation and Park District (RWPRPD) Special Study

The Executive Officer reported that the Commission's approved work plan includes preparing two special governance options studies - one relating to the West Contra Costa Healthcare District (WCCHD), and one relating to the RWPRPD. Both districts face ongoing financial and service challenges. Earlier this year, LAFCO entered into a contract with Berkson Associates to prepare the WCCHD study, which is currently underway. A Public Review Draft report will be released this month, and the Commission will receive an overview of the WCCHD study in September. Staff is proposing an amendment to the contract with Mr. Berkson , who has over 30 years of experience working with public agencies including this LAFCO, to prepare the RWPRPD study as well.

The final scope and timeline will be completed following the Commission's approval. The special study will take approximately four to five months to complete, and the cost is approximately \$18,000. Adequate funds are included in the FY 2016-17 budget.



Commissioner Tatzin suggested that the study be structured so that the Commission can have an early look at the options in order to direct Mr. Berkson to focus more of the study's resources on resolution of the issues.

Upon motion by McGill, second by Blubaugh, Commissioners, by a 7-0 vote, authorized the LAFCO Executive Officer to execute a contract amendment with Berkson Associates to prepare a governance options study for the Rollingwood-Wilart Park Recreation and Park District, which will extend the contract term from September 30, 2016 to February 28, 2017; and increase the total contract amount from \$25,000 to \$43,000.

AYES:Andersen (A), Blubaugh, McGill, Piepho, Schroder, Skaredoff, TatzinNOES:noneABSENT:Glover (M)ABSTAIN:none

#### 10. <u>Correspondence from CCCERA</u>

There were no comments on this item.

11. Commissioner Comments and Announcements

Commissioner McGill reported that the CALAFCO Legislative Committee meeting scheduled for August 5 was cancelled. He also pointed out that the Little Hoover Committee (LHC) will be convening to study special districts, and that CALAFCO had sent an excellent response to the LHC's request for input.

Commissioner McGill also reported that he may miss the September meeting.

12. <u>Staff Announcements</u>

The Executive Officer drew Commissioners' attention to the disc containing the EIR for the Montreux project, which will be heard in September; provided updates on LAFCO-related legislation, which is awaiting the Governor's signature; and reminded Commissioners to submit their CALAFCO Annual Conference registrations and payments to staff.

The meeting adjourned at 2:29 p.m.

Final Minutes Approved by the Commission September 14, 2016.

AYES: NOES: ABSTAIN: ABSENT:

By\_

Executive Officer



## CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION EXECUTIVE OFFICER'S REPORT September 14, 2016

September 14, 2016 (Agenda)

Agenda Item 6

LAFCO 13-08Northeast Antioch Reorganization Area 2A - Annexations to the City of<br/>Antioch and Delta Diablo Zone 3 (DD) and detachment from County Service<br/>Area (CSA) P-6 This item was continued from the February 12, 2014, March<br/>12, 2014, April 9, 2014, June 11, 2014, June 10, 2015, and June 8, 2016<br/>LAFCO meetingsPROPONENTCity of Antioch (by Resolution)ACREAGE &<br/>LOCATIONArea 2A comprises 116± acres (19 parcels) and is located immediately west<br/>of State Route 160 (Attachment 1).PURPOSEProvide municipal services to the area, which is largely built out with marina,<br/>commercial, storage and incidental uses, along with several dwelling units.

#### <u>SYNOPSIS</u>

The Area 2A reorganization is the third and final in a series of three reorganizations encompassing Northeast Antioch. In 2014, the Commission approved the annexations of Area 1, comprising  $470\pm$  acres located both north and south of Wilbur Ave, which is largely industrial; and Area 2B, comprising  $103\pm$  acres located south of Wilbur Ave and roughly centered on Viera Ave, which is primarily residential.

Given that Areas 1 and 2B were previously annexed to the City, Area 2A now constitutes an island, which is surrounded by the City of Antioch to the west and south, the City of Oakley to the east, and the San Joaquin River to the north. LAFCO is precluded from creating islands, as discussed in section #13 below.

Although the applications to annex Northeast Antioch were submitted to LAFCO in three separate proposals, it is assumed by all parties that all three areas would ultimately be annexed to the City and the two districts. The property tax transfer agreement approved by the City and County covers all three areas and assumes that all areas would be annexed to the City.

A number of options are presented for the Commission's consideration at the end of this report. Should the Commission decide to take action today to approve or deny the proposal, we have included the full staff analysis as presented below.

#### <u>UPDATE</u>

The Commission last discussed this proposal on June 8, 2016. At that time, the Commission received public comment, and discussed the ongoing unresolved issues, including the faulty storm drain infrastructure, the City's land use designations in the area, and outreach to the property owners in the area. The Commission also had questions regarding management of the Antioch Dunes wildlife area following annexation, the availability of funding to finance the needed improvements in Area 2A, and LAFCO protest proceedings. These issues are summarized below.

• Storm water infrastructure – The pipeline is located in a private road partially owned by Marterm Holdings, LLC, and partially owned by Sportsmen, Inc. It was constructed over 20 years ago by the developer, in conjunction with the Antioch Kmart project. The purpose of the pipeline is to

drain the Kmart Basin, located fully in the City of Antioch. The pipeline is sized to support future development in this area of the City, and does not serve Area 2A. The Contra Costa County Flood Control District assumed the responsibility for maintaining the pipeline under a drainage easement, until 2004, when the easement was transferred to the County.

The pipeline appears to have been faulty since initial construction, possibly due to the materials used, soil conditions and tidal impacts. Since the beginning of 2016, the County has performed two repairs totaling \$150,000. County staff reports that the full cost to repair the existing line would be approximately \$1 million; and the cost for a full removal and replacement of the line would be over \$3 million. County staff reports that no funds are available to undertake further pipeline repairs and, as such, additional repairs are not planned at this time. County staff reports that this is the only location in the County where the County owns and maintains a storm drain facility that benefits only a city and not the unincorporated area.

Concerns regarding the pipeline were raised late in the annexation process, following the City's submittal of the annexation application to LAFCO. As reiterated in the City's letter dated August 31, 2016, (Attachment 2), the City will not accept the pipeline until repairs deemed satisfactory to the City are made and the pipeline is accepted by the Antioch City Council.

Since the June 8<sup>th</sup> LAFCO meeting, there have been various meetings among City, County and LAFCO staff to discuss the pipeline and a repair strategy. To date, this issue has not been resolved. At the City's request, a LAFCO condition is recommended to acknowledge that this annexation will not impact the County's existing rights and obligations with regard to the drainage easement and pipeline. However, inasmuch as the City will continue to need this pipeline to drain existing City properties, as well as potential future City development, LAFCO urges the City and County to continue to work together to share the repair obligations with an eye towards the eventual transfer of the maintenance responsibilities to the City.

• City's General Plan update – Several of the commercial landowners (i.e., Kiewit Construction, Vortex Marine Construction, Wilbur Avenue Storage) are currently opposed to the annexation due to concerns regarding the City's land use designations of their properties and potential costs associated with future sewer service. At least one of these properties has indicated that they would not oppose the annexation if the City would provide the appropriate land use designation for their property.

For over two years, LAFCO has continued to delay its action to allow the City time to process the necessary General Plan and zoning amendments to address the land use designations for some of the heavy industrial uses, and to explore options to fund a sewer system in the area. City staff indicates that it will complete the General Plan update by the end of the year. The City has heard the concerns expressed by the landowners and has indicated its commitment to address these concerns through the General Plan process. Regarding sewer service to Area 2A, the City indicates in its Plan for Service, that sewer service in this area will be funded by future development in the area, and/or through assessment districts. Thus, completion of the General Plan update and the extension of sewer service to the area are within the City's purview, do not warrant further delay by LAFCO.

- Outreach to Area 2A landowners and residents Several landowners and a number of marina patrons have expressed opposition to the proposed annexation. The landowners are mostly concerned about their land use and zoning designations under the City's current General Plan; LAFCO is still unclear as to the concerns of the marina patrons. It is important that the City reach out to the landowners and others in the area and respond to their concerns. As with the annexation of Area 2B (Viera Avenue), it was useful to meet with the residents and landowners. City staff should consider updating and making available the previously prepared *Frequently Asked Questions* (FAQ) handout to address common questions and concerns.
- Antioch Dunes wildlife area LAFCO staff has confirmed that the Antioch Dunes National Wildlife Refuge is a federally owned and maintained facility; the City of Antioch has no responsibility for this area.
- Funding In conjunction with the annexation of Areas 1 (large industrial area) and 2B (Viera Avenue) see map (Attachment 3), both the City and County received supplemental funding.

In 2011, the City entered into an agreement with GenOn Marsh Landing, LLC which provides \$6.5 - \$7.5 million over a 12 year period. The funding supports the following: Community Centers Foundation; representative tax, post annexation, and water payments; payments prior to the Mirant Landing Generating Station (MLGS) coming online; \$1 million bonus payment to complete the annexation on or before December 31, 2012; and City assurances.

In 2011, the County also entered into an agreement with GenOn which provides \$6.5 million over 10 years and is available for disbursement, in whole or in part, at the County's direction to qualified community organizations.

In addition, the City and County, through the terms of the tax sharing agreement, agreed to contribute \$6 million (\$3 million each) to install the backbone water and sewer infrastructure in Area 2B (Viera Avenue). The County's \$3 million contribution is conditioned on the City matching the County's funding. The City estimates that the cost of sewer system to serve Area 2B will exceed \$10 million. There were no specific funds set aside for Area 2A.

• LAFCO protest proceedings – Commissioners have asked for clarification regarding the protest proceedings for Area 2A, as the proceedings are different depending on whether the area is inhabited or uninhabited, as summarized below and on the attached flowchart (Attachment 4).

	INHABITED			UNINHABITED		
	erminate nnexation	Order Annexation without an election	Order Annexation subject to an election		Terminate Annexation	Order Annexation without an election
0	majority f voters protest	Less than 25% of voters or landowners owning less than 25% of the assessed value of land protest	At least 25%, but less than 50% of voters, or at least 25% of landowners owning 25% or more of the assessed value of land protest		Landowners owning 50% or more of the assessed value of land protest	Landowners owning less than 50% of the assessed value of land protest

Initially, Area 2A was deemed to be "uninhabited" (i.e., less than 12 registered voters). However, since 2014, the number of registered voters has grown, and at last count, was 20. This is perplexing given that there are no residential land use designations in Area 2A. Further, some of the voters have registered to vote listing the marina and their slip number as their address. According to County Code Enforcement and the Sheriff's Office, the County prohibits "liveaboards." Other voters are registered to vote listing the Sportsmen Yacht Club as their place of residence. Since 1934, the 111-year old Ferryboat Sausalito has been the clubhouse of the Sportsmen Yacht Club (the ferry's engines and paddle wheels have been removed). Club members can stay aboard the ferryboat in tiny cabins built on the main deck. According to the County Sheriff's Office, the maximum time one can rent a room on the ferryboat is two weeks.

County Elections has asked that LAFCO notify them of any returned registered voter mail in Area 2A, and they will remove these individuals from the registered voter list.

#### DISCUSSION

The Cortese Knox Hertzberg Act (CKH) sets forth factors that the Commission must consider in evaluating any proposed change of organization or reorganization as discussed below (Gov. Code §56668). In the Commission's review of these factors, no single factor is determinative. In reaching a decision, each factor is to be evaluated within the context of the overall proposal.

#### 1. Consistency with the Sphere of Influence of Any Local Agency:

LAFCO is charged with both regulatory and planning functions. Annexations are basically a regulatory act, while establishing spheres of influence (SOIs) is a planning function. The SOI is an important benchmark as it defines the primary area within which urban development is to be encouraged. In order for the Commission to approve an annexation, it must be

consistent with the jurisdiction's adopted SOI. The annexation area is within both the City of Antioch and the DD SOIs, and within both the City of Antioch and County voter-approved Urban Limit Lines (ULLs).

#### 2. Land Use, Planning and Zoning - Present and Future:

Area 2A is part of the City's Eastern Waterfront Employment Focus Area as identified in the City's General Plan. In 2011, the City and County formed a committee to develop and implement a joint economic development strategy for the Northeast Antioch area. This committee was instrumental in addressing some of the concerns relating to the reorganization proposals, including fiscal and infrastructure issues.

The land in Area 2A is largely built out and includes some underdeveloped properties. Existing uses are predominately marina, commercial, storage and incidental uses, along with several residential dwelling units. The City's General Plan designations for Area 2A include "Marina/Support Uses" and "Commercial." The City has prezoned Area 2A as "Urban Waterfront" and "Regional Commercial."

Surrounding land uses include the San Joaquin River to the north; Highway 160 and heavy industrial to the east; heavy and light industrial to the south; and heavy industrial to the west.

The current and proposed uses are consistent with the City's plan and prezoning designations. No changes in land uses are proposed in conjunction with the proposal.

3. The Effect on Maintaining the Physical and Economic Integrity of Agricultural Lands:

The State Department of Conservation produces a map every two years that identifies California's agricultural lands (e.g., Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, Grazing Land, etc.) based on ratings that take into account soil quality and irrigation status.

Both LAFCO law and the California Environmental Quality Act (CEQA) provide their respective definitions of "agricultural land" and "prime agricultural land."

Under CEQA, the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is considered a significant impact. There is no farmland in Area 2A, and no portion of the area is under a Williamson Act Land Conservation Agreement.

4. Topography, Natural Features and Drainage Basins:

Area 2A is located just south of the San Joaquin River. A portion of Area 2A immediately adjacent to the San Joaquin River is located within a 100-year flood hazard zone. As discussed in the City environmental review, the City's project does not propose any new buildings or structures within an identified area of heightened flood risk.

The area has a relatively level topography. There are no other significant natural features affecting the proposal.

5. *Population*:

The area is designated primarily for marina, commercial, storage and incidental uses. Although there are no residential land use designations in Area 2A, there are an estimated four existing residential units in Area 2A, which appear to be caretaker quarters for existing storage facilities. In accordance with the City's General Plan and zoning designations, no residential development is proposed for this area. Thus, no increase in population is anticipated.

#### 6. Fair Share of Regional Housing:

Pursuant to §56668 of the CKH, LAFCO must consider, in its review of a proposal, the extent to which the proposal will assist the receiving entity in achieving its fair share of the regional housing needs as determined by the regional council of governments. Regional housing needs are determined by the State Department of Housing and Community Development; the councils of government throughout the State allocate to each jurisdiction a "fair share" of the regional housing needs. Given the current and proposed land uses in Area 2A, there is no effect to regional housing needs associated with the proposed reorganization.

#### 7. *Governmental Services and Controls - Need, Cost, Adequacy and Availability:*

In accordance with Government Code §56653, whenever a local agency submits an annexation application, the local agency must also submit a plan for providing services to the annexation area. The plan shall include all of the following information and any additional information required by LAFCO:

- (1) An enumeration and description of the services to be extended to the affected territory.
- (2) The level and range of those services.
- (3) An indication of when those services can feasibly be extended to the affected territory.
- (4) An indication of any improvement or upgrading of structures, roads, sewer or water facilities, or other conditions the local agency would impose or require within the affected territory if the change of organization or reorganization is completed.
- (5) Information with respect to how those services will be financed.

The City has provided a "Plan for Services" as required by statute. The level and range of services will be comparable to those services currently provided within the City. City services will be needed to support future development in the area. As part of the reorganization proposal, the City and County have entered into a tax sharing agreement.

Following annexation, the City will provide a range of municipal services to Area 2A, including police, streets and roads, street lighting, drainage, parks & recreation, library, and other services. Fire services will continue to be provided by the Contra Costa County Fire Protection District (CCCFPD).

Following annexation, the City will provide sewer collection, and DD will provide sewer treatment and disposal. The City will provide retail water, and Contra Costa Water District (CCWD) will provide wholesale water as summarized below. The City has existing sewer and water lines located within Area 2A that can serve the area following annexation.

*Police Services* – Law enforcement services are currently provided to Area 2A by the Contra Costa County Sheriff's Department. Upon annexation, police services will be provided by the City, and the area will be detached from the County's police services district (CSA P-6).

The City's standard for providing police services is 1.2 sworn officers per 1,000 residents. By including Community Service Officers in the sworn officer category, Antioch has maintained this ratio. Police response times are dependent on the agency's staffing level and size of the jurisdiction served. The Antioch General Plan establishes a response time goal of 7-8 minutes for Priority 1 (emergency) calls. The Antioch Police Department reports that the average response time is 11 minutes due to a lack of staffing. The City's CEQA document concludes that annexation of the three Northeast Antioch areas would not significantly impact or worsen the ratio of police staff to population or adversely affect the response times.

*Streets and Roads* – The City indicated that the road network is already in place in Area 2A. The City anticipates that as development occurs in Northeast Antioch, appropriate frontage improvements will be made to existing public streets in this area. The City currently maintains 314 total centerline miles; 669 total lane miles. There is one mile of public streets within Area 2A that would be added to the City's road inventory following annexation.

*Street Lighting* – The City reports that there are several existing street lights in Area 2A in close proximity to Highway 160, which are installed and maintained by Caltrans. Any new street lights installed in Area 2A would be in conjunction with new development.

*Drainage* – The City indicates that there are currently no drainage facilities that serve the annexation area; however, there are two large storm drain trunk lines that cross Wilbur Avenue and drain into the San Joaquin River. The extent and location of any storm drainage improvements in Area 2A will depend on future development in the area. Capacity in the existing storm drain lines is limited, and significant new development within the Northeast Antioch reorganization area will require construction of a new outfall to the San Joaquin River. All new development in the annexation area must comply with provisions of various municipal, regional, State and federal requirements, including measures to remove pollutants from stormwater for compliance with the federal Clean Water Act and the National Pollution Discharge Elimination System.

*Parks & Recreation* – The City of Antioch has 33 parks. The City's General Plan Performance Standards for parks propose five acres of improved public and/or private neighborhood parks and public community parkland per 1,000 residents, including appropriate recreational facilities. The City exceeds this standard when the trail system, the Costa Loma Regional Park, and the Lone Tree Golf Course are factored in. There are currently no public parks in the Northeast Antioch reorganization area.

The City operates a comprehensive recreation program including aquatics, sports, leisure time activities, community and cultural events, Prewett Family Water Park, Senior Center, youth activities, excursions, and 300 instructional programs for pre-school, youth, adult, seniors, and on-line.

The annexation is not expected to create any significant demand on the City's existing parks & recreation facilities and programs due to the limited number of residents in the area.

*Other Services* – The City provides a multitude of other services, including arts & cultural, capital improvements, code enforcement, landscape maintenance, library and special services which will be extended to Area 2A following annexation.

*Fire Protection* – Fire and emergency medical services are, and will continue to be, provided by CCCFPD following annexation. There are four fire stations located in Antioch: Station 81 - located downtown at 315 W. 10<sup>th</sup> St; Station 82 - located at 196 Bluerock Dr., just west of Lone Tree Way in the south central portion of the City; Station 83 - located at 2717 Gentrytown Dr., south of Buchanan Road in the western portion of the City; and Station 88 - located at 4288 Folsom Dr., just east of Hillcrest Avenue in the eastern portion of the City.

The City's CEQA document concludes that the annexation will result in no change to fire services and no impacts.

*Sewer Services* – The City provides wastewater collection services, while DD provides conveyance, treatment and disposal services to the City.

Currently, Area 2A is served by onsite septic systems. Many of these septic systems have been in operation for decades (in some cases 50 years). The age of the septic systems, as well as the proximity of Area 2A to the San Joaquin River and the high water table in the area, are cause for concern. Following annexation, property owners will have the opportunity to hook up to the City's sewer system, which is one of the benefits of annexation. The existing sewer line in Wilbur Avenue, which runs along Area 2A's Wilbur frontage, was installed by PG&E in conjunction with LAFCO's previous Out of Agency service approval; the line was later extended by NRG. Given that the existing Wilbur sewer line is at the "doorstep" of the Area 2A properties, connecting to this sewer line will be straightforward. However, there are a number of deep parcels in the area that will require lengthy connections, some as long as 1,000 lineal feet.

The City's existing ordinance stipulates that any property in the City with a septic system that is located within 200 feet of a City sewer line is required within 30 days to hook up to the sewer line. The distance is measured from the location of the sewer connection in the building to the sewer line. Given the distance of most developed properties from the Wilbur sewer line, most properties in Area 2A would not be impacted by the City's requirement. The City indicates in its Plan for Service, that sewer service in this area will be funded by future development in the area, and/or through assessment districts.

The City's population is 108,298 in a  $28\pm$  square mile service area. The City's wastewater collection system consists of 319 miles of gravity pipeline with three pump stations.

DD serves the cities of Antioch and Pittsburg and the unincorporated Bay Point community. DD serves 190,567 residents in a service area of  $49\pm$  square miles. DD has over 49 miles of sewer main and five pump stations. The District's treatment plant capacity is 16.5 million gallons per day (mgd); in 2012, the average dry weather flow (ADWF) was 14.2 mgd.

Regarding capacity, the City's existing ADWF is 7.4 mgd; the future ADWF is 10.7 mgd. The City estimates that the future peak dry weather flow (PDWF) is 16.8 mgd. DD allows an ADWF of 16.5 mgd. As noted above, during 2012, the ADWF influent to the treatment plant was12.7 mgd; in 2005 and 2010, the ADWF influent to the treatment plant was 14.2 mgd and 13.2 mgd, respectively. It is estimated that all three reorganization areas (Areas 1, 2A, 2B) have an existing estimated ADWF of 2.42 mgd which will increase to 3.71 mgd at buildout. The subject area is located in Zone 3 of DD's service area.

Both the City and DD indicate that they have the capacity to serve the Northeast Antioch reorganization area.

8. *Timely Availability of Water and Related Issues:* 

LAFCO must consider the timely and available supply of water in conjunction with a boundary change proposal. Contra Costa LAFCO policies state that any proposal for a change of organization that includes the provision of water service shall include information relating to water supply, storage, treatment, distribution, and waste recovery; as well as

adequacy of services, facilities, and improvements to be provided and financed by the agency responsible for the provision of such services, facilities and improvements.

The City provides water treatment and distribution services, with 328 miles of main, seven pump stations and 11 reservoirs. The City obtains a majority of its water supply from CCWD, along with diversions from the San Joaquin River.

CCWD's boundary encompasses 220<u>+</u> square miles in central and eastern Contra Costa County. CCWD's untreated water service area includes Antioch, Bay Point, Oakley, Pittsburg, and portions of Brentwood and Martinez. The District's treated water service area includes Clayton, Clyde, Concord, Pacheco, Port Costa, and parts of Martinez, Pleasant Hill, and Walnut Creek. CCWD also treats and delivers water to the City of Brentwood, Golden State Water Company (Bay Point), Diablo Water District (Oakley), and the City of Antioch. CCWD serves approximately 500,000 (61,085 water connections). The primary sources of water are the U.S. Bureau of Reclamation Central Valley Water Project and delta diversions.

Regarding the water distribution system, the City currently has existing "looped" water mains located in the Northeast Antioch annexation area, consisting of a 16-inch main that runs north/south along the length of Viera Avenue, a 12-inch water line that runs east/west along the length of Wilbur Avenue through Area 1, and 12-inch and 16-inch water lines that run along East 18<sup>th</sup> Street. Also, there is an existing 8-inch water line in Bridgehead Road that can serve properties in that area. These existing water lines provide the backbone of a future water delivery system that will ultimately be developed to serve properties and businesses located in the Northeast Antioch reorganization area.

In its Water Master Plan, the City examined its ability to serve all three subareas. The analysis confirms that, given the City's allocation of raw water and the City's rights to future water supplies of raw water, and based on the City's current and planned treatment capacity, the City has the ability to provide potable water to all three subareas based on the level of existing and future development.

The City reports that most of the existing uses in Area 2A currently have City water; and that these water service connections pre-date LAFCO.

9. Assessed Value, Tax Rate Areas and Indebtedness:

The annexation area is within tax rate area 53004. The total assessed value (secured and unsecured) is \$18,840,624 (2014-15 roll). The territory being annexed shall be liable for all authorized or existing taxes comparable to properties presently within the annexing agencies, if applicable.

10. *Property Tax Exchange:* 

Revenue and Taxation Code §99(b)(6) requires adoption of a property tax exchange agreement by affected local agencies before the Commission can consider a proposed boundary change. Both the City and County have adopted resolutions approving a tax revenue allocation agreement covering all three annexation areas. A tax allocation agreement covering Areas 1, 2A and 2B was previously approved by both the City and County. This agreement provides for various future revenues for both the City and County in conjunction with the annexation of Area 1, which was completed in 2014. These revenues include property tax (base and increment), sales and use tax, surcharge and franchise fees, and a special economic development initiative fund which provides both the City and County

\$100,000 per year for five years, with an option to extend the economic development initiative funding for an additional five years. The special funding can be used on economic development initiatives in any of the reorganization areas. This special fund provides that the City and County shall consult with the other party on how the economic funds are expended. As noted above, there are some underdeveloped properties in Area 2A. The City and County could dedicate some of these funds to make the needed pipeline improvements in Area 2A.

#### 11. Environmental Impact of the Proposal:

The City of Antioch, as Lead Agency, prepared and adopted the Northeast Antioch Area Reorganization Initial Study/Mitigated Negative Declaration (IS/MND). The City's IS/MND identified potentially significant impacts resulting from Air Quality, Biological Resources, Cultural Resources, Hazards & Hazardous Materials and Noise. Mitigation measures have been provided for each potentially significant impact, reducing all to a less than significant level. Copies of the City's document were previously provided to Commissioners and are available for review in the LAFCO office. The LAFCO Environmental Coordinator finds the City's CEQA document sufficient for LAFCO purposes.

#### 12. Landowner Consent and Consent by Annexing Agency:

At the various LAFCO hearings, the Commission has heard from members of the Sportsmen Yacht Club and a number of property owners of their opposition to the annexation. Per the Commission's direction, City, County and LAFCO staff previously met with members of the yacht club and property owners and residents of Area 2A to hear their concerns. A community meeting was held in February 2014 at the New Bridge Marina Yacht Club, located in Area 2A. There were over 50 attendees at the meeting. City staff prepared a FAQ relating to annexation, which was distributed at the meeting. City, County and LAFCO staff addressed a range of issues and questions. City staff responded to questions relating to water and sewer services, utility connection fees/rates and potential funding/grant options, zoning and land use, police and marine patrol services, the City's ability to serve the area, curbs and sidewalks, access roads and easements, code enforcement and eminent domain. County staff provided information regarding environmental health and septic system requirements. LAFCO staff provided information regarding LAFCO's role, mission and authority, LAFCO proceedings, protest thresholds, islands and Disadvantaged Unincorporated Communities (DUCs). The majority of attendees indicated opposition to the annexation.

Some of the common concerns relate to potential fiscal impacts to the landowners and residents of Area 2A following annexation, and requirements to connect to the City's water and sewer systems.

As explained in the FAQ and by City staff, there are no additional taxes or assessments associated with annexation. In November 2013, the Antioch voters passed a <sup>1</sup>/<sub>2</sub> cent temporary sales tax. The impact of this sales tax is insignificant given the lack of retail uses in Area 2A. As a sales tax, it would be paid by a customer buying a product or merchandise sold within Area 2A.

Regarding connection to the City's water and sewer utilities, City staff notes that all of the properties in Area 2A have City water service, and that all developed properties within Area 2A currently rely on onsite septic systems to handle wastewater flow. Many of these septic systems have been in operation for decades (in some cases 50 years). The age of the septic systems, as well as the proximity of Area 2A to the San Joaquin River and the high water

table in the area, are cause for concern. Following annexation, property owners will have the opportunity to hook up to the City's sewer system, which is one of the benefits of annexation.

City staff explains that most properties in Area 2A will not be required to hook up to City sewer system, given the distance of these facilities from the Wilbur sewer line. The City's existing ordinance stipulates that any property in the City with a septic system that is located within 200 feet of a City sewer line is required within 30 days to hook up to the sewer line. The distance is measured from the location of the sewer connection in the building to the sewer line. Most properties in Area 2A would not be impacted by this requirement.

In August 2016, LAFCO received updated information from the County Assessor (assessed values) and County Elections (registered voters). LAFCO staff has confirmed that Area 2A is "inhabited" (i.e., 12 or more registered voters); thus, the Commission's action is subject to notice, hearing, as well as protest proceedings. If the Commission approves the annexation as proposed, a subsequent notice and protest hearing will follow. Authority to conduct the protest hearing has been delegated to the LAFCO Executive Officer.

#### 13. Boundaries and Lines of Assessment:

Area 2A is contiguous to the existing City of Antioch boundary. A map and legal description to implement the proposed boundary change have been received and are subject to approval by the County Surveyor.

On January 8, 2014, the Commission approved the annexation of Areas 1 and 2B. All three areas are contiguous and could have been included in one proposal; however, the City chose to divide the area into three separate LAFCO proposals due to differences in land use designations and other factors. The approved property tax transfer agreement between the City and County covers all three areas and assumes that all areas will be annexed to the City. Furthermore, LAFCO assumes that all three areas will be annexed.

Given that Areas 1 and 2B were annexed to the City, Area 2A now constitutes an island, which is surrounded by the City of Antioch to the west and south, the City of Oakley to the east, and the San Joaquin River to the north. LAFCO law (Gov. Code §56744) precludes LAFCO from creating an island; however, Gov. Code section 56375(m) allows LAFCO to waive the restrictions of Section 56744 if LAFCO finds both "that the application of the restrictions would be detrimental to the orderly development of the community, and that the area that would be enclosed by the annexation or incorporated as a new city."

It is not feasible for LAFCO to make these findings, given that annexation of the Area 2A would enhance the orderly development of the area, that the City of Antioch can provide sewer collection and retail water service to the area, and that Area 2A is contiguous to the City of Oakley, and could potentially be annexed Oakley.

#### 14. Environmental Justice:

One of the factors LAFCO must consider in its review of an application is the extent to which the proposal will promote environmental justice. As defined by statute, "environmental justice" means the fair treatment of people of all races, cultures, and incomes with respect to the location of public facilities and the provision of public services. The proposed annexation is not expected to promote or discourage the fair treatment of minority or economically disadvantaged groups.

#### 15. Disadvantaged Communities:

In accordance with recent legislation (SB 244), local agencies and LAFCOs are required to plan for disadvantaged unincorporated communities (DUCs). Many of these communities lack basic infrastructure, including streets, sidewalks, storm drainage, clean drinking water, and adequate sewer service. LAFCO actions relating to Municipal Service Reviews, SOI reviews/amendments, and annexations must take into consideration DUCs, and specifically the adequacy of public services, including sewer, water, and fire protection needs or deficiencies, to these communities. According to the County and City Planning Departments, the annexation area does not meet the criteria of a DUC.

#### 16. *Comments from Affected Agencies/Other Interested Parties:*

Throughout the LAFCO hearing process, members of the Sportsman Yacht Club and several landowners in the area have expressed their opposition to the annexation.

Previously, LAFCO received a testimony and a letter from Steve Klee, Chairman and General Manager of the New Bridge Marina, Inc., expressing support for the annexation.

#### 17. Regional Transportation and Regional Growth Plans:

In its review of a proposal, LAFCO shall consider a regional transportation plan adopted pursuant to Section 65080 [Gov. Code section 56668(g)]. Further, the commission may consider the regional growth goals and policies established by a collaboration of elected officials only, formally representing their local jurisdictions in an official capacity on a regional or subregional basis (Gov. Code section 56668.5).

Regarding these sections, LAFCO looks at consistency of the proposal with the regional transportation and other regional plans affecting the Bay Area.

SB 375, a landmark state law, requires California's regions to adopt plans and policies to reduce the generation of greenhouse gases (GHG), primarily from transportation. To implement SB 375, in July 2013, ABAG and the Metropolitan Transportation Commission (MTC) adopted Plan Bay Area as the "Regional Transportation Plan and Sustainable Communities Strategy" for the San Francisco Bay Area through 2040. Plan Bay Area focuses on where the region is expected to grow and how development patterns and the transportation network can work together to reduce GHG emissions. The Plan's key goals are to reduce GHG emissions by specified amounts; and to plan sufficient housing for the region's projected population over the next 25 years.

The Plan Bay Area directs future development to infill areas within the existing urban footprint and focuses the majority of growth in self-identified Priority Development Areas (PDAs). PDAs include infill areas that are served by transit and are located close to other amenities, allowing for improved transit, bicycle and pedestrian access thereby reducing the amount of transportation related GHG generated. Plan Bay Area supports infill development in established communities and protects agricultural and open space lands. The Plan assumes that all urban growth boundaries are held fixed through the year 2040 and no sprawl-style development is expected to occur on the regions' open space or agricultural lands.

Plan Bay Area includes projections for the region's population, housing and job growth and indicates that the region has the capacity to accommodate expected growth over the next 25 years without sprawling further into undeveloped land on the urban fringe.

ABAG and MTC are in the process of updating the Plan Bay Area. "Plan Bay Area 2040" is currently a work in progress that will be updated every four years to reflect new priorities. Recently, a series of public open houses were held to present "Alternative Scenarios" which show different options for how the Bay Area can grow based on local land use development patterns and transportation investment strategies. These scenarios take into consideration jobs, housing, population, travel needs and funding for Transportation Improvements. Three scenarios were presented (i.e., Main Street, Connected Neighborhood, Big Cities), each showing a different combination of housing development, commercial growth and transportation investments. Based on public input and feedback from local jurisdictions, a "preferred scenario" will be constructed from these three alternatives.

The draft preferred scenario will go through a series of committee reviews and refinement. In September 2016, ABAG and MTC will be asked to adopt the final preferred scenario at a joint meeting. All of this work, in turn, will form the foundation for Plan Bay Area 2040, to be adopted in summer 2017.

The 2013 Plan Bay Area "aims to protect open space and agricultural land by directing 100 percent of the region's growth inside the year 2010 urban footprint, which means that all growth occurs as infill development or within established urban growth boundaries or urban limit lines. As the plan assumes that all urban growth boundaries/urban limit lines are held fixed through the year 2040, no sprawl-style development is expected to occur on the region's scenic or agricultural lands."

The proposed reorganization is within the City's ULL and surrounded by the City of Antioch to the west and south, the City of Oakley to the east, and the San Joaquin River to the north. The land use designations in the area include "Marina/Support Uses" and "Commercial", and the area has access to the local transit network. The area is not designated as a "Priority Conservation Area" or a "Priority Development Area", and does not appear to conflict with the regional transportation or growth plans.

#### ALTERNATIVES FOR COMMISSION ACTION

After consideration of this report and any testimony or additional materials that are submitted, the Commission should consider taking one of the following options:

- <u>Option 1</u> Reopen the public hearing to accept public comment, if any; close the public hearing and *approve the reorganization as submitted by the City*.
  - A. Find that, as a Responsible Agency under CEQA, the Commission has reviewed and considered the information contained in the Northeast Antioch Area Reorganization Initial Study/Mitigated Negative Declaration as prepared and adopted by the City of Antioch.

- B. Adopt this report and the attached resolution (Attachment 5) approving the proposal to be known as Northeast Antioch Reorganization (Area 2A) Annexations to the City of Antioch and Delta Diablo Zone 3 and detachment from County Service Area P-6 subject to the following:
  - 1. This annexation will not change the County's existing rights and responsibilities with regard to the drainage easement and pipeline in the private road partially owned by Marterm Holdings, LLC, and partially owned by Sportsmen, Inc. However, LAFCO urges the City and County to continue to work together to share the repair obligations with the goal of the eventual transfer of the storm drain line in the area (DA 29G Line A) to the City.
  - 2. The territory being annexed shall be liable for the continuation of any authorized or existing special taxes, assessments and charges comparable to properties presently within the annexing agency.
- C. Find that the subject territory is inhabited, and the reorganization is subject to a subsequent conducting authority (protest) hearing.
- <u>Option 2</u> Reopen public hearing to accept public comment, if any; close the public hearing and take the following actions:
  - A. Certify that LAFCO, as a Responsible Agency under CEQA, has reviewed and considered the information contained in the City's Mitigated Negative Declaration.
  - B. Adopt this report and DENY the proposal.
- <u>Option 3</u> If the Commission needs more information, CONTINUE this matter to a future meeting.

#### **<u>RECOMMENDED ACTION</u>**: Option 1

## LOU ANN TEXEIRA, EXECUTIVE OFFICER CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION

#### c: Distribution

#### Attachments

- 1. Map of Area 2A Reorganization
- 2. Letter from the City of Antioch dated May 23, 2016
- 3. Map of Northeast Antioch (Areas 1, 2A and 2B)
- 4. LAFCO Protest Proceeding Flowchart
- 5. Draft LAFCO Resolution

Attachment 1

# LAFCO No. 13-08 Northeast Antioch Area 2A Reoganization Annexations to City of Antioch and Delta Diablo Detachment from CSA P-6



Map created 05/16/2016 by Contra Costa County Department of Conservation and Development, GIS Group 30 Muir Road, Martinez, CA 94553 37:59:41.791N 122:07:03.756W This map or dataset was created by the Contra Costa County Conservation and Developmen Department with data from the Contra Costa County CIS Program. Some base data, primarly City Lumits, is derived from the CA State Board of Equalization's tax rate areas. While oblgated to use this data the County assumes no responsibility for its accuracy. This map contains copyrighted information and may not be altered. It may be reproduced in its current state if the source is cited. Users of this map agree to read and accept the County of Contra Costa disclamer of liability for geographic information.

250 500

Feet

1,000



August 31, 2016

Lou Ann Texeira, Executive Officer Contra Costa LAFCO 651 Pine Street, 6th Floor Martinez, CA 94553

RE: NE Annexation Area 2A - City of Antioch

Ms. Texeira,

The purpose of this letter is to advise you and Contra Costa LAFCO Board about the status of the annexation of Northeast Annexation Area 2A into the City of Antioch.

As the LAFCO Board may be aware, the annexation of this area has been delayed for a number of reasons over the prior few years. Most recently, the City of Antioch was informed about the conditions of a significant storm drain line that was installed by the Contra Costa County Flood Control District in the early 1990s. Apparently, the materials and/or installation were deficient and, as a result, the storm drain line has experienced multiple failures and has necessitated extensive and costly repairs over time. Even with these past efforts, the storm drain line currently needs significant attention at a very high estimated cost.

The City of Antioch generally assumes complete responsibility for the infrastructure, including storm drains, within areas that it annexes, particularly when such infrastructure is located within a public right-of-way. Such was assumed for this storm drain line and the City of Antioch was greatly concerned about its ability to adequately repair or replace the deficient storm drain line. It is important to note that the condition of this storm drain line was not known by the City of Antioch when the annexation efforts were initiated.

However, the City of Antioch has recently been informed that the entire line, including the problematic sections are contained wholly on private property within an easement granted to the Contra Costa County Flood Control District/Contra Costa County. It is our understanding and contention that the annexation of Northeast Annexation Area 2A into the City of Antioch would not change this relationship. The ownership and responsibility to maintain the storm drain line would remain with the Flood Control District/Contra Costa County following the annexation because the easement would not be conveyed.

Ms. Texeira August 31, 2016 Page 2

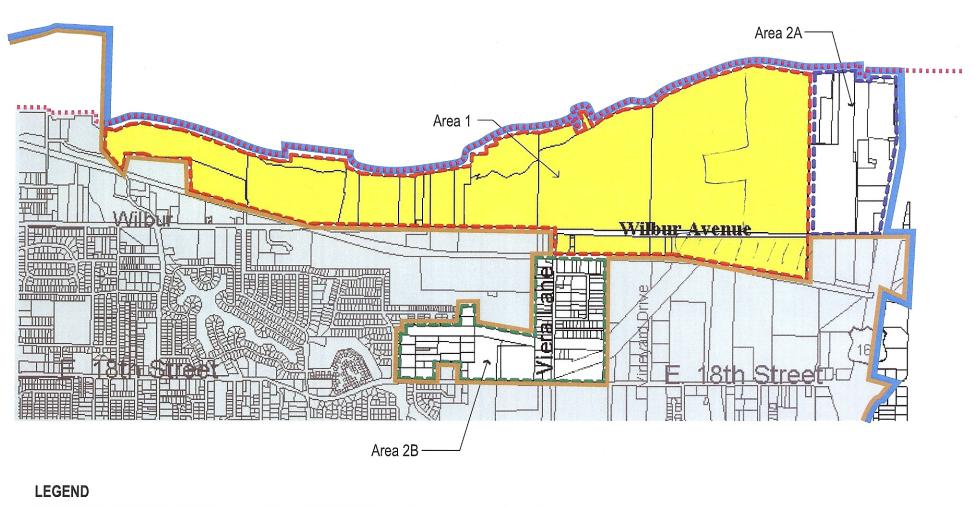
Even with this understanding, the City of Antioch needs written documentation from LAFCO that the storm drain line will remain in Contra Costa County ownership and maintenance until repairs deemed acceptable to the City of Antioch are made and the line is accepted by the Antioch City Council. The City of Antioch will continue to work with the Flood Control District to explore solutions to replace the failing sections of this storm drain line.

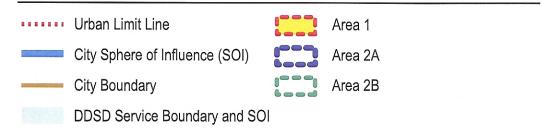
In closing, the City of Antioch appreciates the patience and understanding of Contra Costa County LAFCO. The City of Antioch is committed to providing a high level of service to its residents and takes the very important step of annexation very seriously. At this point, we would request that the LAFCO Board act favorably on the application for annexation of Annexation Area 2A provided the Flood Control District/Contra Costa County continue to own and maintain the storm drain line and written concurrence of same is provided by LAFCO.

We look forward to working with you all in the future.

Sincerely,

Forrest Ebbs, AICP Community Development Director City of Antioch





**EXHIBIT 2** Current Administrative Boundaries Industrial Areas Along Wilbur Avenue – Administrative Reorganization

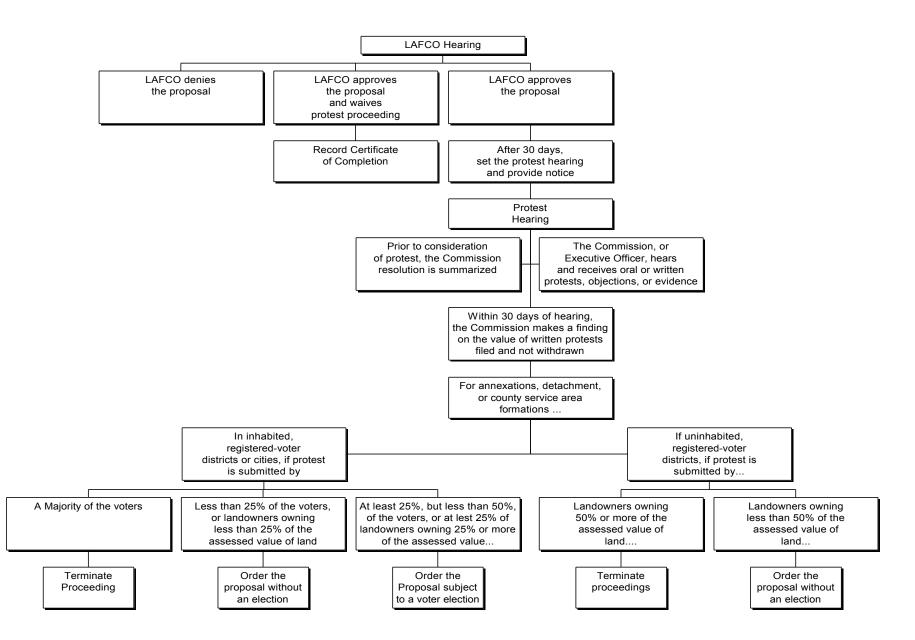
Attachment 3

ES082007009BAO\_Ex2\_CurrentAdminBoundary\_090607\_lho

CH2MHILL

## LAFCO PROTEST PROCEEDINGS -- §57075

(FOR ANNEXATIONS, DETACHMENTS, OR COUNTY SERVICE FORMATIONS IN REGISTERED-VOTER DISTRICTS OR CITIES)



### **RESOLUTION NO. 13-08**

### RESOLUTION OF THE CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION MAKING DETERMINATIONS AND APPROVING NORTHEAST ANTIOCH REORGANIZATION AREA 2A: ANNEXATIONS TO THE CITY OF ANTIOCH AND DELTA DIABLO SANITATION DISTRICT ZONE 3 AND DETACHMENT FROM COUNTY SERVICE AREA P-6

WHEREAS, the Area 2A reorganization (marina area) proposal has been filed with the Executive Officer of the Contra Costa Local Agency Formation Commission pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act (Section 56000 et seq. of the Government Code); and

WHEREAS, at the time and in the manner required by law the Executive Officer has given notice of the Commission's consideration of the Area 2A proposal; and

WHEREAS, the Commission held public hearings on February 12, 2014, March 12, 2014, April 9, 2014, June 11, 2014, June 10, 2015, June 8, 2016 and September 14, 2016 on the Area 2A proposal; and

WHEREAS, the Commission heard, discussed and considered all oral and written testimony related to the Area 2A proposal including, but not limited to, the Executive Officer's report and recommendation, the environmental document or determination, Spheres of Influence and applicable General and Specific Plans; and

WHEREAS, the Local Agency Formation Commission determines the Area 2A proposal to be in the best interests of the affected area and the total organization of local governmental agencies within Contra Costa County;

NOW, THEREFORE, the Contra Costa Local Agency Formation Commission DOES HEREBY RESOLVE, DETERMINE AND ORDER as follows:

- 1. The Commission finds that as a Responsible Agency under the California Environmental Quality Act (CEQA), it has reviewed and considered the information contained in the Northeast Antioch Area Reorganization Initial Study/Mitigated Negative Declaration as prepared and adopted by the City of Antioch.
- 2. Said reorganization is hereby approved.
- 3. The subject proposal is assigned the distinctive short-form designation:

NORTHEAST ANTIOCH REORGANIZATION AREA 2A: ANNEXATIONS TO THE CITY OF ANTIOCH AND DELTA DIABLO SANITATION DISTRICT ZONE 3 AND DETACHMENT FROM COUNTY SERVICE AREA P-6

- 4. The boundaries of the affected territory are found to be definite and certain as approved and set forth in Exhibit A, attached hereto and made a part hereof.
- 5. Approval of the Northeast Antioch Reorganization (Area 2A) Annexations to the City of Antioch and Delta Diablo Zone 3 and detachment from County Service Area P-6 is subject to the following:

Contra Costa LAFCO Resolution No. 13-08

- a. Ownership and maintenance of storm drain line in the area (DA 29G Line A) is the responsibility of Contra Costa County. LAFCO encourages the City and County to continue to work together to resolve future repair/replacement of this pipeline.
- b. The territory being annexed shall be liable for the continuation of any authorized or existing special taxes, assessments and charges comparable to properties presently within the annexing agency.
- c. The City of Antioch has delivered an executed indemnification agreement between the City and Contra Costa LAFCO providing for the City to indemnify LAFCO against any expenses arising from any legal actions challenging the Area 2A reorganization.
- 6. The territory proposed for reorganization is inhabited and is subject to conducting authority (protest) proceedings.
- 7. All subsequent proceedings in connection with the Area 2A reorganization shall be conducted only in compliance with the approved boundaries set forth in the attachments and any terms and conditions specified in this resolution.

PASSED AND ADOPTED THIS 12<sup>th</sup> day of September 2016, by the following vote:

AYES: NOES:

ABSTENTIONS:

ABSENT:

## MARY N. PIEPHO, CHAIR, CONTRA COSTA LAFCO

I hereby certify that this is a correct copy of a resolution passed and adopted by this Commission on the date stated.

Dated: September 14, 2016

Lou Ann Texeira, Executive Officer

## CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION EXECUTIVE OFFICER'S REPORT

September 14, 2016 (Agenda)

September 14, 2016 Agenda Item 7

LAFCO 16-05Montreux Residential Subdivision Boundary Reorganization: Annexations to the<br/>City of Pittsburg ("City"), Contra Costa Water District (CCWD) and Delta<br/>Diablo Zone 2 (DD) and Detachment from County Service Area (CSA) P-6PROPONENTCity of Pittsburg by Resolution No. 15-13128 adopted November 2, 2015SYNOPSISThe applicant proposes to annex 161± acres including four parcels (APNs 089-<br/>020-009/011/014/015) located on the east and west sides of Kirker Pass Road,<br/>south of the Pittsburg city limits (Attachment 1). Annexation would bring the<br/>properties within the city limits of the City of Pittsburg and within the service<br/>boundaries of CCWD and DD. A corresponding detachment of the same area<br/>from CSA P-6 is also proposed.

### **DISCUSSION**

The reorganization proposal encompasses a  $161\pm$  acre site, including a  $148.3\pm$  acre main project site, a  $5.45\pm$  acre portion of Kirker Pass Road, and a  $7.19\pm$  acre parcel located east of Kirker Pass Road. (outside the City limits). In addition, the project includes a  $16.8\pm$  acre off-site area which is already within the boundaries of the City, CCWD and DD.

The site is currently vacant and utilized as grazing land. There are no buildings on the site, only hightension overhead power lines and associated towers. The proposed changes in land use include development of 351 single-family homes on  $77\pm$  acres with lots averaging 7,668 sq. ft.; the remaining  $71\pm$  acres and the  $7.19\pm$  acre parcel on the east side of Kirker Pass Road will be set aside for open space. The proposed project would also include a partially buried water tank at the top of the hill (northern boundary), along with a greenwall (southern boundary), two storm water retention basins (eastern boundary), and a small open space area (northeastern corner). In addition, an offsite storm water retention basin will be constructed to serve the project (northwest of the project site). This area is already within the City.

Government Code §56668 sets forth factors that the Commission must consider in evaluating a proposed boundary change as discussed below. In the Commission's review, no single factor is determinative. In reaching a decision, each is to be evaluated within the context of the overall proposal.

## 1. Consistency with the Sphere of Influence (SOI) of Any Local Agency:

The area proposed for annexation is within the SOIs of the City of Pittsburg, CCWD and DD, as approved by LAFCO in 2009. The subject area is within the City of Pittsburg's 2005 voter approved Urban Limit Line (ULL) - Measure P, and inside the County's ULL.

## 2. Land Use, Planning and Zoning - Present and Future:

Contra Costa County's General Plan and zoning designations for the main project site are AL (Agricultural Land), and A-4 (Agricultural Preserve), respectively. The City of Pittsburg's General Plan designations for the area include Low Density Residential and Open Space. The Land Use element of the City's General Plan includes the proposal site in the Woodlands Subarea. In November 2015, the Pittsburg City Council amended the prezoning of the main site from HPD (Hillside Planned Development) to RS-6 (Single Family Residential, 6,000 sq. ft. minimum lot size). The  $71\pm$  acres and the  $7.19\pm$  acre parcel are zoned OS (Open Space). Measure P prezoned the main project site for HPD and OS. Measure P provided that the prezoning could be changed by either a subsequent vote of the voters or by a majority vote of the

Pittsburg City Council. The proposed uses conform to existing City of Pittsburg land use designations, as amended.

No subsequent change may be made to the general plan or zoning for the annexed territory that is not in conformance to the prezoning designations for a period of two years after the completion of the annexation, unless the legislative body for the city makes a finding at a public hearing that a substantial change has occurred in circumstances that necessitate a departure from the prezoning in the application to the Commission [Government Code §56375(e)];

The City's application includes a consistency analysis relating to ridgelines, wetlands, creek channels, valley oaks, rock outcrop, view shed, storm water detention basins, and street grades. Consistent with the Woodland Subarea policies, the project includes  $43.4\pm$  acres along the southern portion of the site that will remain undeveloped and provide the required greenbelt. This feature also eliminates the potential for development on any designated "Minor" or "Major" ridgelands and preserves a seasonal wetland swale in this portion of the main project site. The City's analysis concludes that the project is consistent with the City's General Plan Goals and Policies.

The project site is within the bounds of the City's ULL; and the proposed southern greenwall is also within the bounds of the City's ULL and includes open space as a buffer between the proposed residential development and the undeveloped open space lands to the south of the ULL, further ensuing that no service would be extended beyond the ULL.

The project site is bounded on the west by undeveloped hillside grazing that includes a PG&E transmission line and natural gas pipeline corridor; bounded on the east by Kirker Pass Road, with undeveloped hillside grazing land; bounded on the south by hillside grazing land; and to the north is a grassy ridgeline with older residential subdivisions beyond.

## 3. The Effect on Maintaining the Physical and Economic Integrity of Agricultural Lands and Open Space Lands:

The project site is currently used for grazing. A Land Conservation Agreement (Williamson Act Contract) previously existed on the site, and expired in January 2016.

The City concludes in its Final EIR that due to the grazing activity, the project site meets the definition of "Prime Agricultural Land" as defined in the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH) - Government Code §56064. Consequently, the project will result in the conversion of prime agricultural land to an urban use. *There are no measures contained in the City's Mitigation Monitoring and Reporting Program (MMRP) to address the impacts to Prime Agricultural Land*.

Regarding open space, there were numerous comments and concerns submitted by agencies (i.e., Contra Costa Water District, San Francisco Bay Regional Water Quality Control Board, East Bay Regional Park District), organizations (Save Mount Diablo) and individuals in response to the City's EIR. Many of these concerns focus on impacts to wetlands, hillsides, view shed, wildlife, and open space. Additional concerns were raised relating to hydrology, traffic, bike and pedestrian access, cumulative impacts, and consistency with the City's General Plan.

In response to some of these comment and concerns, the City recirculated its Draft EIR to respond to new information relating to biological resources on the project site. The EIR found that there were significant and unavoidable impacts relating to aesthetics, air quality, and public services (fire), as well as significant and unavoidable cumulative impacts relating to air quality.

Ultimately, the City adopted a Statement of Overriding Considerations, and an MMRP for the project.

Included in the MMRP are measures to address scenic views, visual character, biological resources, wildlife, historic resources, cultural resources, and other impacts.

In conjunction with adoption of a new ULL for the City of Pittsburg (November 2005), the City and Altec Homes, Inc., Albert D. Seeno III and Albert D. Seeno Jr. entered into an MOU that includes the following provisions:

- The parties desired a permanent new City ULL, beyond which no development can occur in the future and to provide maximum public benefit for the residents of the City of Pittsburg for its housing, transportation, open space and park needs.
- Following passage of the City's ULL in 2005, the City will commence a General Plan study which, among other things, will 1) prevent the ability of urban utilities and services to extend beyond the ULL, and 2) establish guidelines for the development of permanent green belt areas between new development and areas outside the ULL, including a green belt area generally encompassing the southerly 1/5 (approximately) of the Montreux area.
- Developer and Albert D. Seeno III agree to a mitigation plan of their own providing at no cost to the parties hereto three acres of mitigation land replacement for one acre of land of development that is affected by resource agency required mitigations such mitigations can be provided on the development site if possible, and if not, off site.
- Developer and Albert D. Seeno III agree to pay \$2,000 per dwelling unit to the East Bay Regional Park District (EBRPD) for additional public open space acquisition or for the maintenance of public open space. Payment of these fees will in no way affect any legal obligation to fund park improvement or to pay park-related fees to the City.
- The City shall study and enact, if supportable, a fee ordinance for EBRPD to acquire and maintain public open space in conjunction with the \$2,000 fee described above. The City will require that EBRPD, in spending the fees, give priority to spending such fees in and around the City of Pittsburg open space south of the City and within the City's planning area.
- Albert Dr. Seeno Jr. agrees to protect the 800<u>+</u> acre property commonly known as Southport in accordance with specified terms and conditions.
- Developer, Albert D. Seeno Jr., and Albert D. Seeno III shall dedicate a green wall within their properties being brought inside the City's new ULL on the same properties as the development, including the Montreux property. Green wall is defined as a buffer or greenbelt through which no urban services (water, sewer) may penetrate.

Regarding the project, the City has zoned  $71\pm$  acres and the  $7.19\pm$  acre parcel on the east side of Kirker Pass Road as Open Space, and will require that these areas be set aside for open space. In accordance with the City's project EIR and MMRP, and pursuant to the 2006 MOU, the City will require the developer to permanently preserve  $43.4\pm$  acres in the southern portion of the site, as a greenbelt buffer through a recordation of deed restriction or some other appropriate mechanism, prior to acceptance of the Final Map. Although the City has designated  $71\pm$  acres plus the  $7.19\pm$  acres parcel as "open space," City staff indicates that the permanent preservation of the  $43.4\pm$  acres is

consistent with the City's General Plan and with a Memorandum of Understanding (MOU) between the City and the developer. In addition to land dedication, the project applicant will pay a development fee and wetland fee in accordance with the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCCHCP/NCCP). The City's conditional approval of the Vesting Tentative Map and MMRP provide for the following:

- In order to receive coverage under the ECCCHCP/NCCP, the project applicant shall pay a Development Fee and a Wetland Mitigation Fee, as described below:
- Development Fee: This fee will cover the development of approximately 123 acres of upland habitat that primarily includes annual grassland. Included within this area is approximately 2.8-acre of exposed rock area, approximately 0.5-acre stand of valley oaks, and approximately 1.3acre of coastal scrub.
- Wetland Mitigation Fee: This fee shall be paid for the filling of the Waters of the US and any Waters of the State. This fee will cover the filling of 0.003 acres of the Waters of the US, as delineated on the Approved Jurisdictional Determination. If any waters on the project site are determined by the RWQCB to be Waters of the State (currently estimated at approximately 0.119 acres), then the project applicant shall also pay this fee as may be required by the HCP/NCCP, for the filling of the Waters of the State.
- Payment of the Development Fee would address the loss of potential habitat of special-status plant species (e.g., big tarplant, round-leaved filaree) associated with grasslands, while payment of the Wetland Mitigation Fee would specifically address the loss of up to 0.016 acre of potentially suitable seasonal wetland habitat for adobe navarettia. The fees would be used in part to protect these affected special status plant species by bringing existing populations of the species under protection.
- Alternately, the project applicant may, in accordance with the terms of PMC Chapter 15.108, offer to dedicate land or create and restore wetlands in lieu of some or all of the mitigation fees.
- All applicable mitigation fees shall be paid, or an "in-lieu-of fee" agreement executed, prior to the issuance of a grading permit for the project.

Given that the proposed project impacts prime agricultural land as defined in the CKH, and that there are no measures contained in the City's MMRP to address these impacts, the LAFCO staff recommendation includes a condition to address the impact of the proposed development on prime agricultural land and open space.

## 4. Topography, Natural Features and Drainage Basins:

Both the main project site and the offsite parcel are characterized as undeveloped hilly terrain. The main project site includes several natural hills and ridges that frame a broad Y-shaped valley in the center that is open to the eastern project frontage along Kirker Pass Road. The lowest existing valley elevation is  $250\pm$  feet above mean sea level (MSL). The existing ridgeline on the southern portion of the site reaches an elevation of 780+ feet above MSL, and the ridgeline along the northern boundary reaches an elevation of 655 feet above MSL.

The proposed project will involve extensive grading and excavation and reconfiguration of the northern ridgeline, which is not designated as a Major or Minor ridgeline. The City indicates that although the northern ridgeline will be excavated and reduced in its elevation by  $75\pm$  feet to accommodate the water tank, the grading will mimic the existing character of the ridge and will

maintain the natural appearance of the hillside. Even with the proposed grading, there will be significant and unavoidable impacts to the view shed.

The project proposes a greenbelt along the southern ridgeline; however, the project also calls for grading the eastern portion of this ridgeline, which is designated a Major Ridgeline.

Surrounding the site, there is undeveloped hillside grazing land (which includes a PG&E transmission line and natural gas corridor) to the west, and the Keller Canyon open space beyond; Kirker Pass Road with undeveloped hillside grazing land beyond to the east; and undeveloped hillside grazing land along with protected open space areas to the south. North of the site, there is undeveloped grassy ridgeland with older residential development beyond.

## 5. Population:

Development of 351 single family homes is planned for the annexation area. The estimated population increase for the annexation area is approximately 1,225 based on the 2014 American Community Survey data which estimates an average of 3.49 persons per household for the City of Pittsburg.

## 6. Fair Share of Regional Housing:

In its review of a proposal, LAFCO must consider the extent to which the proposal will assist the receiving entity in achieving its fair share of the regional housing needs as determined by the regional council of governments. Regional housing needs are determined by the State Department of Housing and Community Development; the councils of government throughout the State allocate to each jurisdiction a "fair share" of the regional housing needs (Gov. Code §65584).

In Contra Costa County, the Association of Bay Area Governments (ABAG) determines each city's fair share of regional housing needs. Each jurisdiction is required, in turn, to incorporate its fair share of the regional housing needs into the housing element of its General Plan. In July 2013, ABAG adopted the 2014-2022 Regional Housing Needs Allocation (RHNA) Plan for the San Francisco Bay Area. The RHNA Plan includes the following allocations for the City of Pittsburg: total RHNA is calculated at 2,025 units, including 1,063 above moderate, 316 moderate, 254 low and 392 very low income units. The proposed annexation includes a total of 351 residential units which would help the City meets its current regional housing obligation for moderate or above moderate units.

To satisfy the City's Inclusionary Housing requirements, the developer will construct secondary dwelling units on 35 residential lots in the project, and will require purchasers to enter into regulatory agreements restricting rental charges for the secondary dwelling units to ensure affordability. The City reports that the income restricted accessory dwelling units will allow extended families to live near each other, increase the City's affordable housing stock, and provide opportunities for homeowners to generate additional income.

## 7. Governmental Services and Controls - Need, Cost, Adequacy and Availability:

Whenever a local agency submits a resolution of application for a change of organization or reorganization, the local agency shall also submit a plan for providing services within the affected territory (Gov. Code §56653). The plan shall include all of the following information and any additional information required by the Commission or the Executive Officer:

(1) An enumeration and description of the services to be extended to the affected territory.

- (2) The level and range of those services.
- (3) An indication of when those services can feasibly be extended to the affected territory.
- (4) An indication of any improvement or upgrading of structures, roads, sewer or water facilities, or other conditions the local agency would impose or require within the affected territory if the change of organization or reorganization is completed.
- (5) Information with respect to how those services will be financed.

The proposal before the Commission is to annex the property to the City of Pittsburg, CCWD and DD for the provision of municipal services, including water and sanitary sewer services. The level and range of services will be comparable to those services currently provided within the City. City services will be needed to support future development in the area. As part of the reorganization proposal, the City and County will rely on the master tax sharing agreement. The annexation area is currently served by various local agencies including, but not limited to, Contra Costa County and the Contra Costa County Fire Protection District (CCCFPD).

Following annexation, the City will provide a range of municipal services to subject territory, including drainage, streets and roads, police, parks & recreation, street lighting, sanitary sewer, water and other services. Fire services will continue to be provided by the CCCFPD.

Following annexation, the City will provide sewer collection, and DD will provide sewer treatment and disposal. The City will provide retail water, and Contra Costa Water District (CCWD) will provide wholesale water as summarized below.

**Drainage Services** – The City will provide drainage services to the subject area. Three storm drains are included in the preliminary grading plan for the project, with two large basins located on the east side of the main project site along Kirker Pass Road, and a third small basin located on the off-site parcel to the northwest of the main project site. The two large basins will serve 90 percent of the main project site, and the small basin will serve the western 10 percent of the project site. The cost associated with the drainage infrastructure will be borne by the developer; ongoing maintenance will be funded by the City, homeowners through a Community Facilities District (CFD) or other funding mechanism, and through local taxes.

*Streets and Roads* – The existing roadway network includes State Route 4, Kirker Pass Road, Railroad Avenue, Buchanan Road, Harbor Street, Loveridge Road, East Leland Road, Somersville Road, and James Donlon Boulevard. The most significant roadway improvements associated with the proposal include the proposed James Donlon Boulevard Extension, along with construction of interior roads and streets to serve the project and provide access to the local road network. The proposed project would add approximately 2.5 miles of public streets to the City's existing road inventory following annexation.

*Police Services* – Law enforcement services are currently provided to subject area by the Contra Costa County Sheriff's Department. Upon annexation, police services will be provided by the City, and the area will be detached from the County's police services district (CSA P-6).

The Pittsburg Police Department (PPD) operates from its headquarters located at 65 Civic Avenue, approximately 2.5 miles north of the project site. The PPD has an authorized staffing level of 81 sworn officers and 19 non-sworn employees. The City's General Plan policy establishes a goal of 1.8 sworn officers per 1,000 residents. Based on the City's current population, the current service ratio is 1.18 sworn officers per 1,000 residents. The City is

divided into six beats. The beat system is designed to assure rapid response to emergency calls within each beat. The City's goal is to maintain an 8-10 minute response time for Priority 1 calls, and under 30 minutes for priority non-emergency calls. Police response times are dependent on the agency's staffing level and size of the jurisdiction served. The PPD reports that the average response times in 2015 were 12 minutes (Priority 1 calls) and 25 minutes (non-emergency calls). The estimated population increase for the annexation area is approximately 1,225. The City's CEQA document indicates that while no new police facilities will be required to serve the annexation area, additional sworn police officers will be needed to serve the subject area. The City's standard conditions of approval require that the developer annex into the City's CFD for Public Safety Services. The CFD collected fees are intended to provide funding for police services in the annexation area.

*Parks & Recreation* – The City of Pittsburg has 24 City parks ranging from half-acre mini-parks to the 190-acre Stoneman Park. In addition, Pittsburg residents have access to trails and regional parks near the project site, including the Black Diamond Mines Regional Preserve. The City's General Plan Performance Standards provide a ratio of five acres of community and neighborhood parkland per 1,000 residents, and ensure that residential developers dedicate parkland in accordance with this standard.

The City operates a comprehensive recreation and leisure time program including aquatics, sports, leisure time activities, community events, Small World Park, Senior Center, youth activities, and excursions. The City also sponsors cultural events, festivals, concerts and art shows centered in Old Town.

The proposed development does not involve construction or expansion of neighborhood parks. The development agreement provides for partial fee credit for certain trails and trail improvements constructed by the developer, along with City park in lieu fees; payment to the EBRPD for the purpose of acquiring additional public open space and/or the maintenance of open space areas; and annexation into the City Park Maintenance CFD for ongoing landscape and related maintenance.

*Street Lighting* – The developer will use decorative street lighting within the subdivision, which will be designed to City standards. Ongoing maintenance will be the responsibility of the City and funded by homeowners through collection of local taxes and a Lighting and landscape District.

*Other Services* – The City provides a multitude of other services, including code enforcement, landscape maintenance, library, refuse collection and special services which will be extended to subject area following annexation.

*Fire Protection* – Fire and emergency medical services are, and will continue to be, provided by CCCFPD following annexation. Within the Pittsburg area, there are four fire stations: Station 84 located at 1903 Railroad Avenue and approximately 2.2 miles from the project site; Station 85 located at 2331 Loveridge Road and approximately 1.75 miles from the project site; and Station 86 located at 3000 Willow Pass Road and approximately 3.7 miles from the project site. Station 87 is currently closed.

The City's EIR finds that the proposed project would be located outside the 1.5-mile response radius of an existing or planned fire station, and would not meet the National Fire Protection Association response time guideline of 5 to 6 minutes 90 percent of the time. The City's EIR

includes a number of mitigation measures to address the concerns regarding fire service to the project site, including the following:

- required fire facility impact fee of \$591 per single-family unit (We understand that the CCCFPD receives nearly the full \$591, less a small City administrative fee; and that this is one-time and not ongoing funding)
- submittal of a fire protection plan that includes details for a fuel modification zone around the subdivision
- required use of fire resistant exterior building materials
- required fire-rated roof assembly of not less than a Class "A"
- minimum fire flow of 1,500 gallons per minute
- restrictions regarding flammable or combustible liquid storage tanks
- deed disclosures notifying all property owners/buyers of proximity of the subdivision to the closest fire station

Nonetheless, the EIR concludes that even with implementation of these mitigation measures, inadequate fire protection service is identified as a significant and unavoidable impact. The City adopted a Statement of Overriding Considerations, in which it concludes that specific economic, legal, social, technological, and other anticipated benefits of the project outweigh the unavoidable adverse impacts, and therefore justify the approval of the Montreux Residential Subdivision. Further, the City finds that the project will result in substantial benefits, which justify approval of the project, as summarized below:

- 1. The project would further Pittsburg General Plan goals and policies relating to Low Density Residential and new high-end single family residential neighborhoods in the southern hills;
- 2. The project would further Pittsburg Housing Element goals and policies;
- 3. The project would assist in meeting the City's current regional fair share housing obligations for the development of moderate and above moderate-income residents, including 35 income restricted accessory dwelling units;
- 4. The project would further orderly growth, in that the project site is adjacent to the existing City limits, within the City's SOI and ULL, and will result in a logical extension of urban development consistent with good zoning practice, while also limiting future development beyond the project's southern boundary; and
- 5. The project would provide short term and long term economic benefits. Short-term benefits include providing construction and other related interim jobs and services during the anticipated four-year construction period. Long-term economic benefits include providing executive level housing that may attract new employers to Pittsburg. The project will also generate new revenues for the city in the form of fees, exactions and other fiscal benefits.

*Fire service to the project site remains a concern for LAFCO*. In August 2016, Contra Costa LAFCO completed its 2<sup>nd</sup> round Municipal Service Review (MSR) covering Fire and Emergency Medical Services. The MSR report noted that fire service providers continue to face challenges, including the following:

Many fire service providers are unable to meet "best practices" for response times and staffing.

- In 2009, when LAFCO completed its 1<sup>st</sup> round MSR, and still today, fire agencies are unable to meet national and state guidelines for fire response times 90% of the time.
- Nearly half of the fire stations in the County are over 40 years old and a significant number are in poor condition, needing repair or replacement.
- Continued population growth, job creation, and changes in health care services affect the volume and location of service calls, creating the need for new facilities and staff resources in order to sustain services. While recovery in real estate and development has benefits, it also has costs in terms of increases in service demands.

Regarding financing, the 2016 MSR notes the following:

- Fire service providers rely primarily on property tax to fund services
- Fire districts face limited sources of revenue, including inability to charge for most services, low property tax shares as many agencies evolved from volunteer agencies, high insurance costs due to the risky nature of the profession, and significant pension liabilities from past underfunding
- The lack of requirements for special taxes from new development increases the burden on fire agencies to obtain a two-thirds special tax voter approval once an area is populated

Included in the Development Agreement (DA) between the City of Pittsburg and Altec Homes, Inc. (Montreux Property), there is a provision (Section 5.08) which provides that "In the event the City forms a City Community Facilities District (CFD) to provide for fire services in the City for the CCCFPD and acquisition or replacement of equipment primarily situated in the fire stations located in the City, Developer agrees to take all necessary steps necessary to include the Project Site into the district." The DA specifics that the levy to be assessed on each legal residential lot in the project area shall be no greater than \$75, and increased annually by the CPI for the San Francisco-Oakland area.

We understand that CCCFPD is engaged in conversation with the cities regarding the establishment of CFDs within the nine cities served by the District. Further, that CCCFPD and the City of Pittsburg are currently working together on a CFD.

In support of these efforts, the LAFCO staff recommendation includes a condition to address the impact of the proposed development on the CCCFPD.

*Sewer Services* – The City provides wastewater collection services, while DD provides conveyance, treatment and disposal services to the City. DD serves the cities of Antioch and Pittsburg and the unincorporated Bay Point community. DD serves 190,567 residents in a service area of 49+ square miles. DD has over 49 miles of sewer main and five pump stations.

The DD treatment plant has an average dry weather flow capacity of 19.5 million gallons per day (mgd). During the reporting period (2010), the average dry weather flow was 13.4 mgd. In 2012, 2013, and 2014, the average dry weather flows at the plant were 13.2, 13.1 and 12.5 mgd, respectively.

The subject area is located in Zone 2 of DD's service area. DD estimates that the proposed 351unit residential subdivision will generate approximately 77,000 gpd of wastewater discharge. The City's Plan for Service includes details regarding the City's wastewater system, the infrastructure needed to serve the proposed project, and the method to finance wastewater service to the subject area. DD has provided a "will serve" letter agreeing to serve the project area.

## 8. **Timely Availability of Water and Related Issues:**

Pursuant to the CKH, LAFCO must consider the timely and available supply of water in conjunction with a boundary change proposal. Contra Costa LAFCO policies state that any proposal for a change of organization that includes the provision of water service shall include information relating to water supply, storage, treatment, distribution, and waste recovery; as well as adequacy of services, facilities, and improvements to be provided and financed by the agency responsible for the provision of such services, facilities and improvements.

The City of Pittsburg is a retail water purveyor that obtains the majority of its potable water supply under a wholesale contract with CCWD. This water is diverted as raw water from CCWD's Contra Costa Canal. The remainder of the potable water supply is obtained from the City's two groundwater wells. In 2015, 87% of the City's potable supply was provided by CCWD and 13% was from local groundwater wells.

Raw water from the canal and the groundwater wells is treated at the Pittsburg Water Treatment Plant before distribution throughout the City's service area. The service area is bounded by the City limits, which is currently  $15.49\pm$  square miles.

Service area population has shown steady growth over the last 20 years, but its future growth rate will be limited by available open and developable land. The City's 2015 population was estimated at 67,628 (DOF, 2015) and is projected to grow to 91,600 by 2040 (Pittsburg, City of Pittsburg 2015-2023 Housing Element, 2015).

According to the City's 2015 Urban Water Management Plan (UWMP), the City's potable water use for 2015 was 8,772 acre-feet per year (AFY), more than 7% lower than the projected water use from the 2010 UWMP. It is anticipated that the City's initiatives in decreasing water use to meet urban water use targets, as well as the State-mandated drought restrictions, have been the biggest factors leading to this lower than previously anticipated water use.

CCWD's boundary encompasses  $220\pm$  square miles in central and eastern Contra Costa County. CCWD's untreated water service area includes Antioch, Bay Point, Oakley, Pittsburg, and portions of Brentwood and Martinez. The District's treated water service area includes Clayton, Clyde, Concord, Pacheco, Port Costa, and parts of Martinez, Pleasant Hill, and Walnut Creek. CCWD also treats and delivers water to the City of Brentwood, Golden State Water Company (Bay Point), Diablo Water District (Oakley), and the City of Antioch. CCWD serves approximately 500,000 (61,085 water connections). The primary sources of water are the U.S. Bureau of Reclamation (USBR) Central Valley Water Project and delta diversions. One of CCWD's prerequisites for service, including annexation, is inclusion in the Central Valley Project (CVP) Service Area. The CVP inclusion review is a separate process, and requires specific environmental documents. The City, the developer and CCWD will work together to complete the CVP process.

The City's Plan for Services provides details regarding the City's water system, the water supply infrastructure needed to serve the proposed project, the water sources, and the method to finance water service to the subject area. CCWD estimates that the Montreux development, once fully developed, will utilize up to 175 AFY of treated water. CCWD indicates that based on the

District's most recent Future Water Supply Study and UWMP, CCWD has sufficient supplies to serve the proposed project.

## 9. Assessed Value, Tax Rates and Indebtedness:

The annexation area is within tax rate area 86010. The assessed value for the annexation area is \$946,217 (2015-16 roll). The territory being annexed shall be liable for all authorized or existing taxes and bonded debt comparable to properties presently within the annexing agencies.

The City and the County have agreed to use the Master Property Tax Transfer Agreement for the proposed reorganization.

## **10. Environmental Impact of the Proposal:**

In November 2013, the City of Pittsburg, as Lead Agency, released for public review the Draft Environmental Impact Report (EIR) for the Montreux Residential Subdivision. In December 2014, the City released Recirculated Sections of the 2013 Draft EIR (i.e., relating to impacts on biological resources that the City determined were deficient in the original Draft EIR). On August 17, 2015, the City of Pittsburg, as Lead Agency, certified the EIR for the project; and on November 2, 2015, the City approved CEQA Findings, adopted a Statement of Overriding Considerations, and adopted a MMRP for the project. The EIR found that there were significant and unavoidable impacts relating to Aesthetics, Air Quality and Public Services (fire). Further, the EIR found that while there is no impact to agricultural land based on the Farmland Mapping and Monitoring Program, there is an impact to Prime Agricultural Land as defined in the CKH. Copies of the City's environmental documents were previously provided to the Commissioners and are available for review in the LAFCO office.

LAFCO staff provided comment letters to the City in response to the various CEQA documents. In our letters, we provided questions and comments covering various issues, including impacts to agricultural land (based on LAFCO's definition) and to fire service, noting that the provision of fire service to the proposed development remains a concern to LAFCO. The recommended option to approve the proposed reorganization includes LAFCO terms and conditions to address these issues.

## 11. Landowner Consent and Consent by Annexing Agency:

According to County Elections, there are fewer than 12 registered voters in the area proposed for annexation; thus, the area proposed for annexation is considered uninhabited.

The City indicates that 100% of the affected landowners have provided written consent to the annexation. Thus, if the Commission approves the annexation, the Commission may waive the protest hearing (Gov. Code §56662). All landowners and registered voters within the proposal area(s) and within 300 feet of the exterior boundaries of the area(s) have received notice of the September 14, 2016 hearing.

## 12. Boundaries and Lines of Assessment:

The annexation area is within the SOIs of the City of Pittsburg, CCWD and DD and is contiguous to the city and district service boundaries. A corresponding detachment from CSA P-6 of the same area is also proposed. A map and legal description to implement the proposed boundary changes have been received and are subject to final approval by the County Surveyor.

## **13.** Environmental Justice:

LAFCO is required to consider the extent to which proposals for changes of organization or reorganization will promote environmental justice. As defined by statute, "environmental justice" means the fair treatment of people of all races, cultures, and incomes with respect to the location of public facilities and the provision of public services. The proposed annexation is not expected to promote or discourage the fair treatment of minority or economically disadvantaged groups.

## 14. Disadvantaged Communities:

In accordance with recent legislation (SB 244), local agencies and LAFCOs are required to plan for disadvantaged unincorporated communities (DUCs). Many of these communities lack basic infrastructure, including streets, sidewalks, storm drainage, clean drinking water, and adequate sewer service. LAFCO actions relating to Municipal Service Reviews, SOI reviews/ amendments, and annexations must take into consideration DUCs, and specifically the adequacy of public services, including sewer, water, and fire protection needs or deficiencies, to these communities. According to the County's Department of Conservation and Development, the annexation area does not meet the criteria of a DUC.

## 15. Comments from Affected Agencies/Other Interested Parties:

On September 7, 2016, Contra Costa LAFCO received a letter from Save Mount Diablo (SMD) stating their opposition to the Montreux Residential Subdivision Project, and asking that LAFCO deny the proposal for reasons numerous outlined in their comment letters (available on the LAFCO website), including that the project violates California planning and zoning law and the Subdivision Map Act, and that the project EIR is inadequate under CEQA. Further, SMD notes an inconsistency in the project EIR as it concludes that there is an impact to prime agricultural land based on LAFCO's definition; however, the Final EIR contains no section on Agriculture and no agriculture impact analysis.

SMD also indicates that if LAFCO is inclined to approve the proposal, it should defer recording the annexation until there is assurance that the full  $78.2\pm$  acres of open space are permanently protected.

## 16. Regional Transportation and Regional Growth Plans:

In its review of a proposal, LAFCO shall consider a regional transportation plan adopted pursuant to Section 65080 [Gov. Code section 56668(g)]. Further, the commission may consider the regional growth goals and policies established by a collaboration of elected officials only, formally representing their local jurisdictions in an official capacity on a regional or subregional basis (Gov. Code section 56668.5).

Regarding these sections, LAFCO looks at consistency of the proposal with the regional transportation and other regional plans affecting the Bay Area.

SB 375, a landmark state law, requires California's regions to adopt plans and policies to reduce the generation of greenhouse gases (GHG), primarily from transportation. To implement SB 375, in July 2013, ABAG and the Metropolitan Transportation Commission (MTC) adopted Plan Bay Area as the "Regional Transportation Plan and Sustainable Communities Strategy" for the San Francisco Bay Area through 2040. Plan Bay Area focuses on where the region is expected to grow and how development patterns and the transportation network can work together to reduce GHG emissions. The Plan's key goals are to reduce GHG emissions by specified amounts; and to plan sufficient housing for the region's projected population over the next 25 years.

The Plan Bay Area directs future development to infill areas within the existing urban footprint and focuses the majority of growth in self-identified Priority Development Areas (PDAs). PDAs include infill areas that are served by transit and are located close to other amenities, allowing for improved transit, bicycle and pedestrian access thereby reducing the amount of transportation related GHG generated. Plan Bay Area supports infill development in established communities and protects agricultural and open space lands. The Plan assumes that all urban growth boundaries are held fixed through the year 2040 and no sprawl-style development is expected to occur on the regions' open space or agricultural lands.

Plan Bay Area includes projections for the region's population, housing and job growth and indicates that the region has the capacity to accommodate expected growth over the next 25 years without sprawling further into undeveloped land on the urban fringe.

ABAG and MTC are in the process of updating the Plan Bay Area. "Plan Bay Area 2040" is currently a work in progress that will be updated every four years to reflect new priorities. Recently, a series of public open houses were held to present "Alternative Scenarios" which show different options for how the Bay Area can grow based on local land use development patterns and transportation investment strategies. These scenarios take into consideration jobs, housing, population, travel needs and funding for Transportation Improvements. Three scenarios were presented (i.e., Main Street, Connected Neighborhood, Big Cities), each showing a different combination of housing development, commercial growth and transportation investments. Based on public input and feedback from local jurisdictions, a "preferred scenario" will be constructed from these three alternatives.

The draft preferred scenario will go through a series of committee reviews and refinement. In September 2016, ABAG and MTC will be asked to adopt the final preferred scenario at a joint meeting. All of this work, in turn, will form the foundation for Plan Bay Area 2040, to be adopted in summer 2017.

The 2013 Plan Bay Area "aims to protect open space and agricultural land by directing 100 percent of the region's growth inside the year 2010 urban footprint, which means that all growth occurs as infill development or within established urban growth boundaries or urban limit lines. As the plan assumes that all urban growth boundaries/urban limit lines are held fixed through the year 2040, no sprawl-style development is expected to occur on the region's scenic or agricultural lands."

As noted above, a Land Conservation Agreement (Williamson Act Contract) previously existed on the site, and expired in January 2016. The project site is currently used for grazing, and qualifies as "Prime Agricultural Land" as defined in the CKH. Consequently, the project will result in the conversion of prime agricultural land to an urban use, with no specific mitigations measures to address the impacts to Prime Agricultural Land.

The proposed Montreux residential subdivision is within the City's ULL, and is not designated as a "Priority Conservation Area" or a "Priority Development Area." This proposal does not focus growth within the urbanized area of the City. To the contrary, it extends the urban footprint into an undeveloped area, predominately used for grazing. Further, the project area has minimal access to the local or regional transit network. As such, this proposal would not appear to minimize GHG emissions. The goals and strategies contained in Plan Bay Area encourage compact development in existing downtowns, main streets and neighborhoods with transit access, and discourage urban edge development in open space and/or agricultural lands. *It is debatable whether the Montreux project is consistent with Plan Bay Area.* 

### ALTERNATIVES FOR COMMISSION ACTION

After consideration of this report and any testimony or additional materials that are submitted the Commission should consider taking one of the following actions:

#### **<u>Option 1</u>** Approve the reorganization.

- A. Find that, as a Responsible Agency under CEQA, the Commission has reviewed and considered the information contained in the Montreux Residential Subdivision EIR as certified by the City of Pittsburg on August 17, 2015 (Resolution No. 15-13097), and in the City's CEQA Findings, Statement of Overriding Considerations, and MMRP for the Montreux Residential Subdivision as certified by the City of Pittsburg on November 2, 2015 (Resolution No. 15-13123).
- B. Adopt this report, approve LAFCO Resolution No. 16-05 (Attachment 2), and approve the proposal, to be known as the Montreux Residential Subdivision Boundary Reorganization: Annexations to the City of Pittsburg, Contra Costa Water District and Delta Diablo Zone 2 and Detachment from County Service Area P-6 subject to the following terms and conditions:
  - 1. The territory being annexed shall be liable for the continuation of any authorized or existing special taxes, assessments and charges comparable to properties presently within the annexing agencies.
  - 2. The City of Pittsburg has delivered an executed indemnification agreement providing for the City to indemnify LAFCO against any expenses arising from any legal actions challenging the annexation.
  - 3. Water service is conditional upon CCWD receiving acceptance for inclusion of the annexed area from the USBR, pursuant to the requirements in CCWD's contract with USBR for supplemental water supply from the CVP.
  - 4. Prior to LAFCO issuing a Certificate of Completion, a Community Facilities District (CFD) bond or similar revenue instrument shall be passed by the property owners and/or voters of the area proposed for annexation. The financing shall be used to support additional fire and ambulance services to the area proposed for annexation. The City of Pittsburg, CCCFPD, and the developer shall work together to develop and implement a CFD or similar revenue instrument.
  - 5. The recordation of LAFCO's Certificate of Completion is conditioned on the City providing LAFCO with a certified copy of a recorded grant deed of development rights, from the developer to the City, that restricts development on the 43.4+ acres designated as Open Space, and remains in effect until the 43.4+ acres are permanently preserved as a greenbelt buffer, in accordance with the City of Pittsburg's General Plan Policy 2-P-73 and Mitigation Measure LUP-1, through the recordation of an easement, a deed restriction, or other instrument or mechanism approved by the City.

- C. Find that the subject territory is uninhabited, the proposal has 100% landowner consent, and the conducting authority (protest) proceedings are hereby waived.
- **<u>Option 2</u>** Accept this report and DENY the proposal.

**Option 3** If the Commission needs more information, CONTINUE this matter to a future meeting.

**RECOMMENDED ACTION:** 

## **Approve Option 1.**

## LOU ANN TEXEIRA, EXECUTIVE OFFICER CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION

Attachments

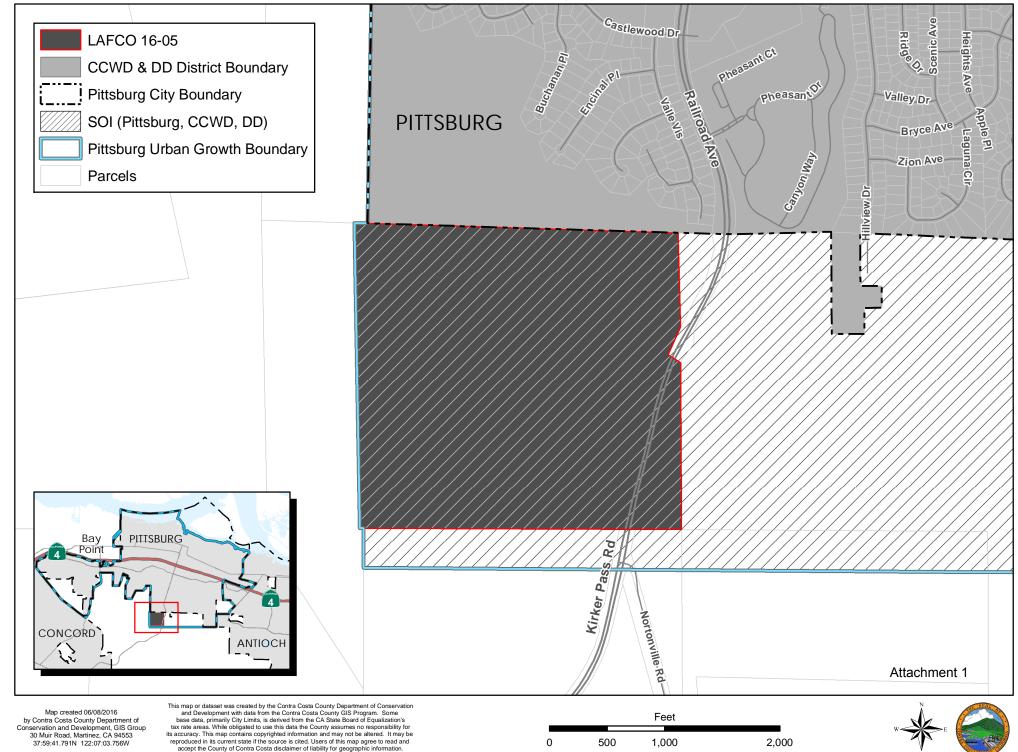
1 – Montreux Residential Subdivision Boundary Reorganization Map

2 - Letter dated September 7, 2016 from Save Mount Diablo

3 - Draft LAFCO Resolution 16-05

c: Distribution

LAFCO No.16-05 - Montreux Reorganization: Annexations to City of Pittsburg, Contra Costa Water District (CCWD) and Delta Diablo (DD) Zone 2; Detachment from CSA P-6





Board of Directors Scott Hein

President

Amara Morrison *Secretary* 

Burt Bassler *Treasurer* 

Heath Bartosh Joe Canciamilla John Gallagher Liz Harvey Claudia Hein Bob Marx Sue Ohanian Malcolm Sproul Jeff Stone *Directors* 

#### **Staff Directors**

Edward Sortwell Clement Jr. *Executive Director* Seth Adams *Land Conservation Director* 

Meredith Hendricks Land Programs Director

Monica E. Oei *Finance & Administration Director* 

Deborah Toll White Development Director

Founders

Arthur Bonwell Mary L. Bowerman

**Proud Member of** 

Land Trust Alliance California Council of Land Trusts Bay Area Open Space Council



September 7<sup>th</sup>, 2016

Supervisory Mary Piepho LAFCO Chair 651 Pine St., 6<sup>th</sup> Floor Martinez, CA

## **RE:** Comments on the Contra Costa Local Agency Formation Commission (LAFCO) Annexation Request for the Proposed Montreux Residential Subdivision

Dear Supervisor Piepho,

Save Mount Diablo (SMD) is a non-profit conservation organization founded in 1971 which acquires land for addition to parks on and around Mount Diablo and monitors land use planning which might affect protected lands. We build trails, restore habitat, and are involved in environmental education. In 1971 there was just one park on Mount Diablo totaling 6,778 acres; today there are almost 50 parks and preserves around Mount Diablo totaling 110,000 acres. We include more than 8,000 donors and supporters.

We are writing this letter to state our opposition to the Montreux Residential Subdivision (Project) annexation request. We believe that LAFCO should deny this application request due to the numerous reasons that we and our legal representation have cited in previous comment letters (attached here as appendices). These letters show in great detail that the Project violates California planning and zoning law as well as the Subdivision Map Act, and that the Project Environmental Impact Report (EIR) is inadequate under the California Environmental Quality Act.

However, if LAFCO does decide to approve the Project annexation, it should, at the least, withhold recordation of the annexation until after mitigation for Project impacts has been secured in the form of a binding easement that will permanently protect the 78.2 acres of open space detailed in the annexation application. The applicant currently proposes the permanent protection via deed restriction of only the 42 acre so-called "greenwall" portion of the Project site. Given that 77 acres of agricultural land used to graze cattle will be lost to development if this annexation request is approved, a larger mitigation requirement is appropriate.

There is an important inconsistency with regard to agricultural impacts between the Project EIR documents and the annexation application materials. The Project's final EIR states in the last sentence of the first paragraph on page 2.0-4 that, "As the project site is currently used for grazing, it does meet the definition of prime agricultural land under this definition." [Gov. Code section 56064]. However, there is no agricultural impact section in the EIR and the Project annexation application materials repeatedly state that there are no impacts to agricultural land.



Attachment 2

Since both the EIR and annexation application materials recognize that the area proposed for annexation is currently grazed by cattle, and until very recently was protected under Williamson Act contract, we submit that this area qualifies as agricultural land and is worthy of mitigation from Project impacts.

The annexation application for the Project states that 351 single-family houses will be constructed on approximately 77 acres and that an additional 78.2 acres will be set aside for open space. However, no easement is proposed to protect these 78.2 acres. The only proposed protection is a recordation of a deed restriction over 42 acres of proposed open space on the southern side of the property, the proposed "greenwall." If 77 acres will be developed, the proposed protection of 42 acres on the south side of the main Project site is both weak and inadequate.

The Project proponent has proposed to protect areas as open space several times in the past, only to come back some time in the future and seek to develop these same areas. A clear example of this is the Pointe project in Antioch, since renamed Black Diamond Ranch Unit 4.

Given the proponent's record of developing areas formerly identified as protected or as "open space", the significant disparity between the acreage of the Project to be developed and the area currently proposed for protection, and the stated intention that 78.2 acres of the Project site serve as open space, it is appropriate and fully within LAFCO's power to require a binding conservation easement be placed over the entire 78.2 acres that would not be developed as part of the Project before recordation of the annexation, in order to ensure the permanent protection of this land.

We encourage LAFCO to deny this annexation request, but if LAFCO decides to approve, we strongly encourage it to withhold recordation of the annexation until after binding mitigation for Project impacts has been secured in the form of a permanent conservation easement over the 78.2 acres of the Project area that would not be developed.

Appendices:

- Appendix A SMD Comments on Montreux final EIR; August 14<sup>th</sup> 2015
- Appendix B Shute, Mihaly and Weinberger Comments on Montreux recirculated draft EIR; February 6<sup>th</sup> 2015
- Appendix C Shute, Mihaly and Weinberger Comments on Montreux draft EIR; January 10<sup>th</sup> 2014
- Appendix D SMD Comments on Montreux draft EIR; January 9th 2015
- Appendix E SMD Comments on Montreux Notice of Preparation; April 29th 2013

Sincerely,

Juan Pablo Galván Save Mount Diablo

CC: Meredith Hendricks, Save Mount Diablo Seth Adams, Save Mount Diablo Ted Clement, Save Mount Diablo Joel Devalcourt, Greenbelt Alliance Brian Holt, East Bay Regional Park District

#### **RESOLUTION NO. 16-05**

### RESOLUTION OF THE CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION MAKING DETERMINATIONS AND APPROVING MONTREUX RESIDENTIAL SUBDIVISION REORGANIZATION: ANNEXATIONS TO THE CITY OF PITTSBURG, CONTRA COSTA WATER DISTRICT AND DELTA DIABLO ZONE 2, AND DETACHMENT FROM COUNTY SERVICE AREA P-6

WHEREAS, the Montreux Residential Subdivision Boundary Reorganization proposal has been filed with the Executive Officer of the Contra Costa Local Agency Formation Commission pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act (Government Code §56000 et seq.); and

WHEREAS, at the time and in the manner required by law the Executive Officer has given notice of the Commission's consideration of the Montreux Residential Subdivision Boundary Reorganization proposal; and

WHEREAS, the Commission held a public hearing on September 14, 2016 on the Montreux Residential Subdivision Boundary Reorganization proposal; and

WHEREAS, the Commission heard, discussed and considered all oral and written testimony related to this proposal including, but not limited to, the Executive Officer's report and recommendation, the environmental documents and determinations, Spheres of Influence and applicable General and Specific Plans; and

WHEREAS, no subsequent change may be made to the general plan or zoning for the annexed territory that is not in conformance to the prezoning designations for a period of two years after the completion of the annexation, unless the legislative body for the city makes a finding at a public hearing that a substantial change has occurred in circumstances that necessitate a departure from the prezoning in the application to the Commission [Government Code §56375(e)];

NOW, THEREFORE, the Contra Costa Local Agency Formation Commission DOES HEREBY RESOLVE, DETERMINE AND ORDER as follows:

- 1. Find that, as a Responsible Agency under CEQA, the Commission has reviewed and considered the information contained in the Montreux Residential Subdivision EIR as certified by the City of Pittsburg on August 17, 2015 (Resolution No. 15-13097), and in the City's CEQA Findings, Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program for the Montreux Residential Subdivision as certified by the City of Pittsburg on November 2, 2015 (Resolution No. 15-13123).
- 2. Said reorganization is hereby approved.
- 3. The subject proposal is assigned the distinctive short-form designation:

MONTREUX RESIDENTIAL SUBDIVISION BOUNDARY REORGANIZATION: ANNEXATIONS TO THE CITY OF PITTSBURG, CONTRA COSTA WATER DISTRICT AND DELTA DIABLO ZONE 2, AND DETACHMENT FROM COUNTY SERVICE AREA P-6

- 4. The boundaries of the affected territory are found to be definite and certain as approved and set forth in Exhibit A, attached hereto and made a part hereof.
- 5. Approval of the Montreux Residential Subdivision Boundary Reorganization Annexations to the City of Pittsburg, Contra Costa Water District and Delta Diablo Zone 2, and detachment from County Service Area P-6 is subject to the following:

- a. The territory being annexed shall be liable for the continuation of any authorized or existing special taxes, assessments and charges comparable to properties presently within the annexing agency.
- b. The City of Pittsburg has delivered an executed indemnification agreement between the City and Contra Costa LAFCO providing for the City to indemnify LAFCO against any expenses arising from any legal actions challenging the Montreux Residential Subdivision Reorganization.
- c. Water service is conditional upon CCWD receiving acceptance for inclusion of the annexed area from the USBR, pursuant to the requirements in CCWD's contract with USBR for supplemental water supply from the CVP.
- d. Prior to LAFCO issuing a Certificate of Completion, a Community Facilities District (CFD) bond or similar revenue instrument shall be passed by the property owners and/or voters of the area proposed for annexation. The financing shall be used to support additional fire and ambulance services to the area proposed for annexation. The City of Pittsburg, CCCFPD, and the developer shall work together to develop and implement a CFD or similar revenue instrument.
- e. The recordation of LAFCO's Certificate of Completion is conditioned on the City providing LAFCO with a certified copy of a recorded grant deed of development rights, from the developer to the City, that restricts development on the 43.4+ acres designated as Open Space, and remains in effect until the 43.4+ acres are permanently preserved as a greenbelt buffer, in accordance with the City of Pittsburg's General Plan Policy 2-P-73 and Mitigation Measure LUP-1, through the recordation of an easement, a deed restriction, or other instrument or mechanism approved by the City.
- 6. The territory proposed for reorganization is uninhabited, the proposal has 100% landowner consent, and the conducting authority (protest) proceedings are hereby waived.
- 7. All subsequent proceedings in connection with the Montreux Residential Subdivision Boundary Reorganization shall be conducted only in compliance with the approved boundaries set forth in the attachments and any terms and conditions specified in this resolution.

PASSED AND ADOPTED THIS 14<sup>th</sup> day of September 2016, by the following vote:

AYES: NOES: ABSTENTIONS:

ABSENT:

#### MARY N. PIEPHO, CHAIR, CONTRA COSTA LAFCO

I hereby certify that this is a correct copy of a resolution passed and adopted by this Commission on the date stated.

Dated: September 14, 2016



**Board of Directors** Scott Hein

President

Amara Morrison *Secretary* 

Burt Bassler *Treasurer* 

Heath Bartosh Joe Canciamilla John Gallagher Liz Harvey Claudia Hein Bob Marx Sue Ohanian Malcolm Sproul Jeff Stone *Directors* 

#### **Staff Directors**

Edward Sortwell Clement Jr. *Executive Director* Seth Adams *Land Conservation Director* 

Meredith Hendricks Land Programs Director

Monica E. Oei *Finance & Administration Director* 

Deborah Toll White Development Director

Founders

Arthur Bonwell Mary L. Bowerman

**Proud Member of** 

Land Trust Alliance California Council of Land Trusts Bay Area Open Space Council



September 7<sup>th</sup>, 2016

Supervisory Mary Piepho LAFCO Chair 651 Pine St., 6<sup>th</sup> Floor Martinez, CA

## **RE:** Comments on the Contra Costa Local Agency Formation Commission (LAFCO) Annexation Request for the Proposed Montreux Residential Subdivision

Dear Supervisor Piepho,

Save Mount Diablo (SMD) is a non-profit conservation organization founded in 1971 which acquires land for addition to parks on and around Mount Diablo and monitors land use planning which might affect protected lands. We build trails, restore habitat, and are involved in environmental education. In 1971 there was just one park on Mount Diablo totaling 6,778 acres; today there are almost 50 parks and preserves around Mount Diablo totaling 110,000 acres. We include more than 8,000 donors and supporters.

We are writing this letter to state our opposition to the Montreux Residential Subdivision (Project) annexation request. We believe that LAFCO should deny this application request due to the numerous reasons that we and our legal representation have cited in previous comment letters (attached here as appendices). These letters show in great detail that the Project violates California planning and zoning law as well as the Subdivision Map Act, and that the Project Environmental Impact Report (EIR) is inadequate under the California Environmental Quality Act.

However, if LAFCO does decide to approve the Project annexation, it should, at the least, withhold recordation of the annexation until after mitigation for Project impacts has been secured in the form of a binding easement that will permanently protect the 78.2 acres of open space detailed in the annexation application. The applicant currently proposes the permanent protection via deed restriction of only the 42 acre so-called "greenwall" portion of the Project site. Given that 77 acres of agricultural land used to graze cattle will be lost to development if this annexation request is approved, a larger mitigation requirement is appropriate.

There is an important inconsistency with regard to agricultural impacts between the Project EIR documents and the annexation application materials. The Project's final EIR states in the last sentence of the first paragraph on page 2.0-4 that, "As the project site is currently used for grazing, it does meet the definition of prime agricultural land under this definition." [Gov. Code section 56064]. However, there is no agricultural impact section in the EIR and the Project annexation application materials repeatedly state that there are no impacts to agricultural land.



Since both the EIR and annexation application materials recognize that the area proposed for annexation is currently grazed by cattle, and until very recently was protected under Williamson Act contract, we submit that this area qualifies as agricultural land and is worthy of mitigation from Project impacts.

The annexation application for the Project states that 351 single-family houses will be constructed on approximately 77 acres and that an additional 78.2 acres will be set aside for open space. However, no easement is proposed to protect these 78.2 acres. The only proposed protection is a recordation of a deed restriction over 42 acres of proposed open space on the southern side of the property, the proposed "greenwall." If 77 acres will be developed, the proposed protection of 42 acres on the south side of the main Project site is both weak and inadequate.

The Project proponent has proposed to protect areas as open space several times in the past, only to come back some time in the future and seek to develop these same areas. A clear example of this is the Pointe project in Antioch, since renamed Black Diamond Ranch Unit 4.

Given the proponent's record of developing areas formerly identified as protected or as "open space", the significant disparity between the acreage of the Project to be developed and the area currently proposed for protection, and the stated intention that 78.2 acres of the Project site serve as open space, it is appropriate and fully within LAFCO's power to require a binding conservation easement be placed over the entire 78.2 acres that would not be developed as part of the Project before recordation of the annexation, in order to ensure the permanent protection of this land.

We encourage LAFCO to deny this annexation request, but if LAFCO decides to approve, we strongly encourage it to withhold recordation of the annexation until after binding mitigation for Project impacts has been secured in the form of a permanent conservation easement over the 78.2 acres of the Project area that would not be developed.

Appendices:

- Appendix A SMD Comments on Montreux final EIR; August 14<sup>th</sup> 2015
- Appendix B Shute, Mihaly and Weinberger Comments on Montreux recirculated draft EIR; February 6<sup>th</sup> 2015
- Appendix C Shute, Mihaly and Weinberger Comments on Montreux draft EIR; January 10<sup>th</sup> 2014
- Appendix D SMD Comments on Montreux draft EIR; January 9th 2015
- Appendix E SMD Comments on Montreux Notice of Preparation; April 29th 2013

Sincerely,

Juan Pablo Galván Save Mount Diablo

CC: Meredith Hendricks, Save Mount Diablo Seth Adams, Save Mount Diablo Ted Clement, Save Mount Diablo Joel Devalcourt, Greenbelt Alliance Brian Holt, East Bay Regional Park District





August 14<sup>th</sup>, 2015

**Board of Directors** 

Scott Hein *President* 

Amara Morrison *Secretary* 

Burt Bassler *Treasurer* 

Heath Bartosh Joe Canciamilla John Gallagher Claudia Hein Scott Hein Gary Johnson Frank Martens Doug Knauer Sue Ohanian Marty Reed Malcolm Sproul *Directors* 

#### **Staff Directors**

Ronald Brown Executive Director

Seth Adams Land Conservation Director

Monica E. Oei *Events & Volunteers Director* 

Meredith Hendricks Land Programs Director

Doug Jalen *Finance & Administration Director* 

**Founders** Arthur Bonwell Mary L. Bowerman

Proud Member of Land Trust Alliance California Council of Land Trusts

Bay Area Open Space Council

Kristin Pollot Planning Manager Community Development Department – Planning Division 65 Civic Av. Pittsburg, CA 94565

# **RE:** Comments on the Final Environmental Impact Report (fEIR) for the Proposed Montreux Residential Subdivision – SCH # 2013032079

Dear Ms. Pollot,

Save Mount Diablo (SMD) is a non-profit conservation organization founded in 1971 which acquires land for addition to parks on and around Mount Diablo and monitors land use planning which might affect protected lands. We build trails, restore habitat, and are involved in environmental education. In 1971 there was just one park on Mount Diablo totaling 6,778 acres; today there are almost 50 parks and preserves around Mount Diablo totaling 110,000 acres. We include more than 8,000 donors and supporters.

We appreciate the opportunity to submit comments on the fEIR for the Montreux Residential Subdivision (Project), proposed by Altec Homes Inc. and Seecon Financial Inc. (Applicants). The Project would entail, among other things, construction of 356 singlefamily houses, annexation of approximately 165 acres into the City of Pittsburg (City) and massive grading of a valley floor and the grading of two ridges.

Our review of the fEIR confirms that many of the inadequacies of the previous two EIR documents (the draft EIR (dEIR) and recirculated draft EIR (rdEIR) remain unresolved.

For example, visual simulations of the Project from Black Diamond Mines Regional Preserve that were requested in previous comment letters submitted by SMD and Shute, Mihaly and Weinberger on behalf of SMD were not included. Therefore, the aesthetic impacts of the Project that will be apparent from a highly popular recreation area remain unanalyzed.

In addition, throughout the fEIR's discussion of the supposed adherence of the Project to the goals and policies of the City's General Plan, the explanations provided resort to literal word-by-word interpretations of key policy elements in order to dismiss commenter's concerns over the Project's agreement with the General Plan.



One clear example is the fEIR's assertion that the "encouragement" of certain project design elements in the General Plan, such as those related to clustering, shared driveways, and placement of houses in locations that would minimize the need for grading, does not conflict with the Project designs because the General Plan does not "require" such design elements.

If the General Plan only encourages Projects to follow certain guidelines, without stating such guidelines are formal requirements, then there is no conflict even if the Project runs entirely counter to what the General Plan encourages. Such reasoning is the definition of using the literal interpretation of the words in the City's "constitution for development" in order to escape its intent.

Another example which is repeatedly encouraged in the General Plan is the concept of "clustering". The fEIR correctly points out that no definition of clustering exists in the General Plan. Which is exactly why the comment letters submitted include visual graphics from the General Plan and Project site plan to allow a direct comparison of the type of development the Project proposes and what the General Plan aims for in development in the City's southern hills.

The fEIR maintains that mass grading of the valley in the Project site and placement of the housing units throughout the valley is clustering because the ridges to the north and south of the Project remain open space. This is like saying that the suburban development that characterizes the whole of east and central Contra Costa County is clustered because it is concentrated in valleys and leaves steep highlands intact. Such obfuscation of scale renders the intent of the policies of the General Plan meaningless.

With regard to biological impacts, mitigation, and the inadequacy of the analyses carried out for the Project thus far, we refer to the comments on the rdEIR that have previously been submitted.

The Project remains inconsistent with the City's General Plan and would lead to numerous significant and unmitigated environmental impacts. Despite the explanations provided in the fEIR, the City's environmental review remains deficient and inadequate under CEQA. As a result, we strongly encourage the City to deny certification of the Project fEIR.

Thank you for the opportunity to provide comments.

Sincerely, Juan Pablo Galván Land Use Planner

Cc: Meredith Hendricks, Save Mount Diablo Seth Adams, Save Mount Diablo Ron Brown, Save Mount Diablo Joel Devalcourt, Greenbelt Alliance





396 HAYES STREET, SAN FRANCISCO, CA 94102 T: (415) 552-7272 F: (415) 552-5816 www.smwlaw.com WINTER KING Attorney king@smwlaw.com

February 6, 2015

## Via E-Mail and U.S. Mail

Kristin Pollot Associate Planner City of Pittsburg, Planning Department 65 Civic Avenue Pittsburg, CA 94565

E-Mail: kpollot@ci.pittsburg.ca.us

## Re: <u>Montreux Residential Subdivision and Recirculated Draft</u> Environmental Impact Report

Dear Ms. Pollot:

On behalf of Save Mount Diablo ("SMD"), we have reviewed the City of Pittsburg's December 2014 Recirculated Draft Environmental Impact Report ("RDEIR") for the proposed Montreux Residential Subdivision Project ("Project"). Our firm submitted extensive comments on the 2013 DEIR for the Project. The City subsequently revised the DEIR with respect to the Project's impacts on biological resources only. We submit this letter to reiterate our earlier, unaddressed comments and to provide additional, new comments on the revised portions of the RDEIR. The RDEIR continues to violate the California Environmental Quality Act ("CEQA") and the CEQA Guidelines for the reasons stated below.

## BACKGROUND

After receiving new information on biological resources in response to its November 2013 DEIR, the City decided to revise and recirculate the document pursuant to the CEQA Guidelines. *See* CEQA Guidelines § 15088.5. The City made the RDEIR available for public comment in December 2014, and explicitly limited the scope of the RDEIR to "only those sections of the previously circulated Draft EIR that have been affected by the additional information related to biological resources." RDEIR at 1.0-2. The City also asked that reviewers submit new comments "related to the revised

information on biological resources . . . only." *Id.* Comments on the DEIR that were not addressed in the RDEIR would be responded to in the Final EIR, according to the City. *Id.* 

It is unclear to us why the City took the time and energy to develop an RDEIR but failed to address most of the DEIR's inadequacies. As described in our previous comment letter (attached here), the DEIR lacked basic information regarding the Project description, elements of the development agreement, impacts to aesthetic, historic, and hydrologic resources, and the Project's public services, public safety, and growth inducing effects.

Even the revised portions of the EIR remain deficient. The Project's anticipated impacts to biological resources are a manifest violation of the City's General Plan, and the RDEIR takes a blinkered approach to its analysis of those resources. It plays down the Project area's recognized sensitivity and understates its importance as habitat for endangered, threatened, and sensitive species. The RDEIR fails to analyze the cumulative impacts of nearby and anticipated future development projects on these resources.

These flaws render the RDEIR inadequate. CEQA requires that an EIR provide the analysis and detail about environmental impacts that is necessary to enable decision-makers to make intelligent decisions in light of the environmental consequences of their actions. See CEQA Guidelines § 15151; King County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692. The EIR is also the "primary means" of ensuring that public agencies "take all action necessary to protect, rehabilitate, and enhance" the environment. Laurel Heights Improvement Ass'n v. Regents of the University of California (1988) 47 Cal.3d 376, 392. Thus, CEQA incorporates a substantive requirement that the lead agency adopt feasible mitigation measures or alternatives that can substantially lessen the project's significant environmental impacts. Pub. Resources Code § 21002; CEQA Guidelines § 15002(a)(3). Finally, the EIR is a "document of accountability," intended to demonstrate to the public that the agency has considered the environmental implications of its action. Laurel Heights, 47 Cal.3d at 392. The RDEIR does not comply with CEQA's objectives because it fails to (1) provide sufficient information for informed decision-making; (2) provide substantive mitigation requirements; and (3) demonstrate that the City has fully grappled with the environmental implications of the Project. To comply with these requirements, the City must revise the RDEIR to address the issues raised below and in our prior comments.

## I. The Recirculated DEIR Fails to Adequately Identify and Mitigate the Project's Inconsistencies with the Applicable General Plan.

As we noted in our previous letter, the City's General Plan calls for development that is compatible with the environment and sensitive habitats, "particularly habitats that support special status species." Resources Conservation Element Goals 9-G-1 and 9-G-2 and Policies 4-P-14, 4-P-15, 9-P-13. The City acknowledges the existence of some of these goals and policies in the RDEIR (see RDEIR at 5.3-45 and 46), but nonetheless presents a Project that would result in significant and unmitigated adverse impacts to sensitive habitats and species on and adjacent to the Project site. See section II below. Perhaps sensing that the Project's impacts are incompatible with the General Plan, the RDEIR begins by noting that the southern portion of the Project area will "provide a greenwall (defined as open space with no water or sewer services passing through) as required by General Plan Policy 2-P-73." RDEIR at 5.3-1. Policy 2-P-73 requires "[p]ermanent greenbelt buffers." General Plan Land Use Element, Woodlands, 2-P-73. No mention is made of whether the proposed "greenwall" is protected by a conservation easement or any other mechanism that could provide the "permanent" protection required by the General Plan. As a result, the land remains vulnerable to future development.

Not only do these unmitigated inconsistencies render the RDEIR inadequate, they also make the Project unapprovable. Under the Subdivision Map Act and the City's own code, the City cannot approve a tentative map unless it is consistent with the City's General Plan. *See* Gov't Code §§ 66473.5 & 66474 (prohibiting approval of tentative maps that are inconsistent with general plan policies); *see also Friends of "B" Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 998 (Subdivision Map Act expressly requires consistency with general plan); City of Pittsburg Municipal Code § 17.20.060 (to approve a tentative map, the following findings must be made, among others: 1) the proposed map is consistent with the general plan and any applicable specific plan, or other applicable provisions of [the municipal] code; 2) the site is physically suitable for the proposed density of development; and 3) the design of the subdivision or the proposed improvements will not cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat). Because the City cannot make these required findings, it cannot approve the requested rezoning and tentative map.

## II. The Recirculated DEIR Fails to Analyze and Mitigate the Project's Significant Impacts to Biological Resources.

The RDEIR's purported analysis of biological impacts achieves a result exactly opposite from what CEQA requires. Under CEQA, decision-makers and the public are to be given sufficient information about impacts and mitigation to come to their own judgments and decisions. *See* Pub. Res. Code § 21061 ("The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project."). Where, as here, the environmental review document fails to fully and accurately inform decision-makers, and the public, of the environmental consequences of proposed actions, it does not satisfy the basic goals of CEQA.

It appears this RDEIR's strategy is to withhold information and to encourage the public and decision makers to trust that the applicant will ultimately mitigate the Project's impacts. The Project's critical discussion of biological impacts must explain exactly what will happen on the Project site and the surrounding ecosystem if the Project goes forward. *See Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 568 ("[T]he EIR must contain facts and analysis, not the agency's bare conclusions . . . ."). The RDEIR must offer some specific information about the consequences of this Project. It cannot, as the RDEIR does over and over again, merely acknowledge that the Project will have consequences and then assert that those consequences will be mitigated without providing evidentiary support. Thus, this document, like its predecessor, remains inadequate under CEQA.

## A. The Recirculated DEIR Continues to Employ a Faulty Methodology.

Despite the opportunity to correct previously identified deficiencies in the DEIR's methodology, the RDEIR continues to rely upon a flawed methodology and incorrect assumptions about the project setting. The RDEIR describes surveys that involved visiting "representative habitat locations" and "generally" mapping plant communities, suggesting that the City failed to perform thorough surveys for special status species despite the known presence of those species in the project area. RDEIR at 5.3-2. Moreover, much of the limited surveying took place between October and January during "the driest winter on record," conditions that would make it difficult to accurately identify plant species. RDEIR at 5.3-1 and 5.3-3. The likelihood of missing special status plants is particularly worrisome given the RDEIR's conclusion that a variety of



special status plants could occur in the project site but are unlikely to occur because they were not "observed during the surveys." RDEIR at 5.3-15. As the RDEIR notes, certain species may have been missed given that the "surveys were not conducted during the peak blooming period . . . ." RDEIR at 5.3-24.

Other conclusions appear flawed due to the timing of the surveys. For example, during the discussion of California Tiger Salamander habitat, the RDEIR concludes that the seasonal wetlands on the site do not pond for an adequate duration or depth to support the species. RDEIR at 5.3-36. The RDEIR never explains whether this conclusion remains true during a normal rainy season or if the conclusion is based on the present drought.

As a result, the survey information still fails to provide an accurate description of the environmental setting and thereby underestimates the Project's biological impacts. The EIR cannot be approved without properly timed surveys that accurately determine the presence of special status species rather than reliance on "general" mapping.

## B. The Recirculated DEIR Continues to Present an Inaccurate Description of the Project's Biological Setting.

Our previous letter noted that an EIR "must include a description of the environment in the vicinity of the project, as it exists before the commencement of the project, from both a local and a regional perspective." Guidelines § 15125; *see also Environmental Planning and Info. Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354. Special emphasis should be placed on rare or unique resources that will be affected by the Project. Guidelines § 15125(c). Curiously, the City undertook the additional time and effort to prepare an RDEIR, yet that document continues to present an inaccurate description of the environmental resources in the Project area. This failure makes it impossible for the public and decision-makers to accurately assess the Project's environmental effects.

The RDEIR characterizes the Project site as containing a "limited variety of wildlife species," (RDEIR at 5.3-11), but the data presented in the document undercut that characterization. For example, the RDEIR contains a long list of potentially occurring special status animal species. RDEIR at 5.3-25, 26. Aerial photographs in the RDEIR depict a project site within an regional open space area home to a panoply of special status species. RDEIR Figure 5.3-5. Yet as explained above, the RDEIR

employs a faulty methodology to measure the richness of this biodiversity, and the document never presents an accurate picture of the resources on the project site.

The RDEIR incorrectly characterizes the dispersal patterns of the California Red-legged Frog ("CRF"). The document refers to a study by Zeiner et al. for the proposition that the CRF might travel "up to 300 feet away" from breeding ponds during rainy nights. RDEIR at 5.3-34. The Zeiner study, however, reached no such conclusion about the maximum dispersal range of the CRF. According to a biologist familiar with the study, it concluded simply that CRF might travel 300 feet from breeding ponds on a nightly basis in order to forage. Other studies confirm that the maximum dispersal distance of the CRF is much higher. Gary M. Fellers and Patrick M Kleeman, California Red-legged Frog (Rana draytonii) Movement and Habitat Use: Implications for Conservation, 41 Journal of Herpetology 276, 283-84 (2007) (observing "a wide range of migration distances (30-1400 m[eters])" and concluding that average dispersal distances have limited value to land management decisions and that "[a] herpetologist familiar with [the species'] ecology needs to assess the local habitat requirements"). With a seasonal pond 100 feet from the project site and known breeding habitat 550 feet from the site, it is likely that there is non-temporary, terrestrial estivation habitat in the project area. At a minimum, a herpetologist familiar with the CRF should have examined this possibility.

The document reaches similarly unfounded conclusions regarding the movements of California Tiger Salamander ("CTS"). The RDEIR cites a U.S. Fish and Wildlife study finding CTS dispersal is generally less than 1.24 miles when suitable estivation habitat occurs in proximity to a pond, but it ignores newer research suggesting that larger numbers of CTS travel farther from breeding ponds than previously believed. See, e.g., Susan G. Orloff, Movement Patterns and Migration Distances in an Upland Population of California Tiger Salamander (Ambystoma californiense), 6 Herpetological Conservation Biology 266, 273 (2011) (noting that large numbers of CTS were captured at least 800 meters from a breeding pond in one study). In light of these studies, concluding that it is unlikely that a "large number of CTS" would disperse onto the project site when there are two confirmed breeding ponds within one mile of the site and a possible breeding pond within 100 feet of the site is pure conjecture. The RDEIR underlines its own deficiencies in this regard by imposing a mitigation measure that the project proponent should conduct additional biological surveys. RDEIR, MM BIO-1b. These surveys need to be included in the RDEIR's description of the existing setting, not postponed until after CEQA review.

### C. The Recirculated DEIR Fails to Analyze the Extent and Severity of Impacts and to Mitigate Those Impacts to Less Than Significant Levels.

Despite acknowledging the Project's potentially adverse impacts to special status species, the RDEIR fails to disclose the extent of those adverse impacts. Compounding this deficiency, the RDEIR then relies on the payment of mitigation fees in many instances where more direct and effective mitigation could be employed. See California Native Plant Society v. County of El Dorado (2009) 170 Cal.App.4th 1026, 1055 (holding payment of fees into county habitat preserve program insufficient mitigation, and noting that "payment of the fee does not obviate the need for projectspecific analysis of impacts"). While it is true that CEQA permits payment of fees as mitigation for cumulative impacts, see Save Our Peninsula Committee v. Monterey County Bd. Of Supervisors (2001) 87 Cal.App.4th 99, 140-41, that does not permit the RDEIR to rely on fees to mitigate direct impacts where more direct avoidance or mitigation is available. Ultimately the RDEIR depends on fees and other mitigation measures without providing evidence that those measures will actually mitigate impacts to less than significant levels. The RDEIR must quantify the Project's effects on biological resources rather than relying on programmatic analysis in the regional habitat conservation plan ("HCP") and must disclose the efficacy of the proposed mitigation so that the public and decision-makers may reach their own conclusions. Id. at 130.

For example, the RDEIR reveals that "most of the plants listed in Table 5.3-2 [i.e. special status species] as occurring within clay soils have potential to occur on Diablo clay soils." RDEIR at 5.3-7. This is the type of soil existing on the site on steep slopes that will be impacted by the Project. *Id.* The RDEIR does not discuss how the predominance of this soil type relates to the Project design and the foreseeable impacts associated with the Project. Given that the Project includes extensive grading and filling on these steep slopes, the RDEIR's oversight is particularly problematic.

Where the RDEIR identifies potentially significant impacts, the proposed mitigation measures do nothing to avoid or minimize those impacts. The proposed mitigation measure for impacts to wetlands, MM BIO-1a, relies on HCP fees alone. RDEIR at 5.3-50. The RDEIR never presents any evidence that this type of mitigation will reduce impacts to less than significant levels, and indeed admits that with respect to certain protected species the "HCP/NCCP does not include or recommend any avoidance or minimization measures . . . ." RDEIR at 5.3-54. Instead the fees compensate for expected loss to species and habitat by funding a "regional strategy." *Id.* This sort of mitigation does not address the site-specific impacts that must be analyzed and mitigated



pursuant to CEQA. The HCP itself expresses an expectation that future project-level analysis of biological resources will occur. East Contra Costa County HCP/NCCP at 6-6 (Oct. 2006) ("Some avoidance and minimization is still required at the project level . . . ."). Avoidance and minimization is a standard way to mitigate project-level impacts and is understood as best practice. The RDEIR itself incorporates avoidance and minimization measures. *See, e.g.*, RDEIR, MM BIO-2b and MM BIO-2c (applying avoidance and minimization undermines the RDEIR's purpose as an informational document, making it difficult for the public to determine the efficacy of the mitigation measures that rely on fees alone. *Save Our Peninsula Committee*, 87 Cal.App.4th at 130.

Even assuming that HCP fees were adequate mitigation for project-specific impacts here, the Project proposes density in this area that exceeds the amount of density contemplated by the HCP. *Compare* RDEIR at 1.0-1 (assuming an average lot size of 7,668 square feet) *with* HCP/NCCP Signed Implementing Agreement, Exhibit B n.4 (basing development fees on an assumption of 4 units per acre, or lot sizes of roughly 10,890 square feet). Therefore, the Project appears to be inconsistent with the HCP, and fees established by the HCP might not provide adequate mitigation for the Project. CEQA requires site-specific analysis of impacts for precisely this type of situation.

Other mitigation measures are based on incomplete analyses of the Project site. As noted in our previous comment letter, the EIR neither includes nor references any hydrologic or hydraulic engineering reports regarding the Project's expected hydraulic and flood risks. *See* Letter from SWM to Kristin Pollot at 8 (January 10, 2014) (citing the Baseline Report at 1 and 2). Yet the RDEIR contains mitigation measures that are tied directly to potentially significant "hydrological interruption." RDEIR at 5.3-65. Without a proper hydrological analysis, whether the proposed mitigation (MM BIO-1a) will be effective is nothing more than a guess.

Finally, many of the mitigation measures in the RDEIR are unenforceable. For example, measures MM BIO-7a through 7d rely on deed disclosures and recommendations to future homeowners. Even if these measures were enforceable, the RDEIR provides no evidence to support its conclusion that they will reduce indirect impacts to nearby sensitive species to less than significant levels. RDEIR at 5.3-71 and 72.



### D. The Recirculated DEIR Fails to Adequately Analyze Cumulative Impacts and Mitigate Them to Less Than Significant Levels.

According to the RDEIR, this Project "would extend suburban development into an area which is currently undeveloped and provides largely unrestricted access to wildlife, and could thus create a barrier to wildlife movement." RDEIR at 5.3-66. Incoherently, the RDEIR simultaneously concludes that the Project would contribute to the preservation of high quality habitat. *See* RDEIR at 5.3-72. It is absurd to suggest that by developing presently undeveloped land, the Project will actually enhance habitat. The Project does the opposite. While the payment of in-lieu fees may protect other areas, the Project area will be permanently disturbed. Moreover, development in this area will set a precedent for further urban and suburban sprawl into open space. Without providing an assessment of how this development will affect biological resources when considered alongside other proposed and approved developments in the region, the RDEIR continues to provide an impoverished and unhelpful analysis of the Project's cumulative impacts.

#### CONCLUSION

As currently designed, the Montreux Residential Subdivision Project remains inconsistent with the City's General Plan and would lead to numerous significant and unmitigated environmental impacts. The City's environmental review—even as presented in the RDEIR—remains deficient and inadequate under CEQA. Therefore Save Mount Diablo urges the City to delay further consideration of the Montreux Residential Subdivision until the City prepares and recirculates a revised draft EIR that fully complies with CEQA and the CEQA Guidelines.



Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Winter King

But

Benjamin J. Brysacz

Attachments: January 10, 2014 Letter re Montreux Residential Subdivision and DEIR

Bruce Abelli-Amen, Comments on Draft Environmental Impact Report and Initial Study, Baseline Environmental Consulting, Jan. 8, 2014

Gary M. Fellers and Patrick M Kleeman, *California Red-legged Frog* (Rana draytonii) *Movement and Habitat Use: Implications for Conservation*, 41 Journal of Herpetology 276 (2007)

Susan G. Orloff, *Movement Patterns and Migration Distances in an Upland Population* of California Tiger Salamander (Ambystoma californiense), 6 Herpetological Conservation Biology 266 (2011)

655059.2



# Attachment 1



396 HAYES STREET, SAN FRANCISCO, CA 94102 T: (415) 552-7272 F: (415) 552-5816 www.smwlaw.com WINTER KING Attorney

January 10, 2014

#### Via Email and U.S. Mail

Kristin Pollot Associate Planner City of Pittsburg, Planning Department 65 Civic Avenue Pittsburg, CA 94565 E-Mail: kpollot@ci.pittsburg.ca.us

#### Re: <u>Montreux Residential Subdivision and Draft Environmental Impact</u> <u>Report</u>

Dear Ms. Pollot:

This firm represents Save Mount Diablo ("SMD") with regard to the Montreux Residential Subdivision Project ("Project"). SMD is a non-profit organization dedicated to preserving Mount Diablo's peaks, surrounding foothills and watersheds through land acquisition and preservation strategies designed to protect the mountain's natural beauty, biological diversity and historic and agricultural heritage. To advance this goal, SMD regularly participates in land use planning processes for projects that could impact Mount Diablo and its surrounding foothills, such as the Montreux Project. We submit these comments on the Project and associated draft Environmental Impact Report ("DEIR") on SMD's behalf.

As described below, SMD has serious concerns about the impacts of the Project, which proposes to transform 77 acres of largely untouched open space lands in the Woodlands subarea, immediately adjacent to the open spaces of the South Hills subarea, into a residential subdivision with 356 estate homes, onsite access roadways, drainage basins, and a water storage tank. DEIR at 3.0-8 and 9. The urban-scale Project is currently outside the City limits, outside the service areas for the Delta Diablo Sanitation District and the Contra Costa Water District Service Area boundary, and therefore lacks a certain water supply. The Project is patently inconsistent with the City's general plan and requires rezoning to permit development at the proposed density. In short, the Project has all the hallmarks and adverse environmental impacts of leapfrog development. It is

therefore perhaps unsurprising that it directly conflicts with numerous general plan policies that discourage such development.

In addition, the DEIR for the Project fails to provide the public and decision makers with crucial information about the Project, its impacts, and feasible mitigation measures, in direct violation of the California Environmental Policy Act ("CEQA").<sup>1</sup> For example, the Project description lacks sufficient detail for the public to determine what the impacts of the Project will be. Although the City is apparently contemplating a development agreement as part of the Project, the agreement itself is not included as an attachment to the DEIR or otherwise made available to the public, and the description of the agreement's terms is cursory at best. Similarly, consultant reports on various impact areas are referred to in the DEIR but not provided for public review. At the very least, the DEIR must be revised and recirculated to include these documents and information.

The DEIR's analysis of specific environmental impacts is similarly lacking. As discussed in this letter and the attached report from consulting hydrologist Bruce Abelli-Amen of Baseline Environmental Consulting ("Baseline Report"), developing the Project on the area's the steep terrain will require extensive cut and fill, which, in turn, will drastically affect the hydrology of the area and could even damage downstream properties. Baseline Report attached as Exhibit 1. Yet the DEIR contains *no discussion whatsoever* of these potential impacts, relying solely on the Initial Study's cursory discussion of the issue. Similar flaws are found in other impact analysis, including aesthetics, biological resources, public services, and public safety. More is required of an adequate EIR.

In sum, after reviewing the DEIR and other Project documents, it is our opinion that the Project conflicts with the City of Pittsburg's General Plan and Municipal Code in violation of State Planning and Zoning Law, Gov't Code § 65000 et seq. For this and other reasons, the City cannot make the findings necessary to approve the Project's requested rezoning and tentative map. *See* Gov't Code §§ 66473.5 & 66474. In addition, the DEIR for the Project violates the minimum standards of adequacy under CEQA. As a result, the City cannot approve the Project as currently proposed and must, at a minimum, recirculate a revised DEIR that addresses the inadequacies identified in this letter.

<sup>&</sup>lt;sup>1</sup> Public Resources Code § 21000 et seq. (hereinafter "CEQA"); Cal. Code of Regulations, tit. 14, § 15000 et seq. (hereinafter "Guidelines").



### I. Approval of the Project Would Violate California Planning and Zoning Law and the Subdivision Map Act.

The State Planning and Zoning Law (Gov't Code § 65000 et seq.) requires that development decisions be consistent with the jurisdiction's general plan. *See* Gov't Code §§ 65860 (requiring consistency of zoning to general plan), 66473.5 & 66474 (requiring consistency of subdivision maps to general plan), and 65359 and 65454 (requiring consistency of specific plan and other development plan and amendments thereto to general plan). Thus, "[u]nder state law, the propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements." *Resource Defense Fund v. County of Santa Cruz* (1982) 133 Cal.App.3d 800, 806. Accordingly, "[t]he consistency doctrine [is] the linchpin of California's land use and development laws; it is the principle which infuses the concept of planned growth with the force of law." *Families Unafraid to Uphold Rural El Dorado County v. Board of Supervisors* (1998) 62 Cal.App.4th 1332, 1336.

It is an abuse of discretion to approve a project that "frustrate[s] the General Plan's goals and policies." *Napa Citizens for Honest Gov't v. Napa County* (2001) 91 Cal.App.4th 342, 379. The project need not present an "outright conflict" with a general plan provision to be considered inconsistent; the determining question is instead whether the project "is compatible with and will not frustrate the General Plan's goals and policies." *Napa Citizens*, 91 Cal.App.4th at 379.

Here, the proposed Project does more than just frustrate the General Plan's goals. It is directly inconsistent with numerous provisions in the General Plan. Consequently, the Project cannot be approved in its current form.

# A. The Project Is Inconsistent with Numerous General Plan and Municipal Code Provisions.

The City's General Plan and Municipal Code contains several provisions intended to ensure that development occur in an environmentally sensitive manner. As discussed below, the Project is inconsistent with many important Plan and Code provisions.

///

///

///



### 1. General Plan and Code Provisions Relating to the Preservation of Hillsides

The Project site is designated and pre-zoned for Hillside Plan Development. DEIR at 3.0-8. The General Plan requires that development in the hills be sensitive to the natural terrain, minimize cut-and-fill, and incorporate natural features (*e.g.*, topography and creeks) into the design of residential neighborhoods. General Plan Land Use Element Policies 2-P-21, 2-P-23, 2-P-24, 2-P-25, 4-P-9. General Plan Land Use Element Policy 2-P-21. The General Plan also indicates that the City must "ensure that all General Plan policies apply to hillside land irrespective of zoning –whether Planned Development or any other base district." General Plan Land Use Element Policy 2-P-22.

General Plan provisions specific to the Woodlands sub-area where the Project is located are even more protective. For example, the General Plan specifies a goal to support new residential development in locations that do not significantly impact the natural setting." General Plan Goal: Woodlands 2-G-27 and 2-G-28. As discussed below and throughout this letter, the Project proposes mass grading that fills a natural drainage and denudes the site of natural vegetation. Other Woodlands-area specific provisions require that the "natural topography be retained to the *maximum extent feasible*, and large-scale grading discouraged" and that development be minimally visible from Kirker Pass Road. General Plan Policy: Woodlands 2-P-73.

The Municipal Code accordingly establishes regulations for development in hillside areas that establish several goals to protect hillsides. For example, the Code establishes the goal "to protect natural topographic features, aesthetic view, vistas, and prominent ridges." It also calls for the City to "protect adjacent properties from potential adverse impacts of grading and drainage associated with hillside development," and "encourage the use of development techniques and alternatives that will be compatible to the terrain of the hillside areas." Municipal Code § 18.56.02.

The Municipal Code contains provisions requiring topographic maps indicating the steepness of the site's slopes. Municipal Code § 18.56.070.K. The Code also requires landscape plans indicating the location of existing and proposed trees and other plant materials, and before and after grading details. *Id.* But neither the DEIR nor technical appendix actually include these details.

Despite the lack of information in the DEIR, it is clear that the Project would be inconsistent with these provisions. The DEIR concludes that the Project is consistent with the General Plan because the Project proposes to preserve the southernmost portion of the site. DEIR at 4.0-2. However, the development plan



proposed for the remainder of the site would be anything but sensitive to the natural terrain. Rather than follow the natural topography and minimize grading, the Project site's steep slopes would be cut away to create unnaturally "flat" areas for building pads where steep slopes and drainage areas, including wetlands, previously existed. The Project requires a staggering 1.4 million cubic yards of excavation and fill material. DEIR at 3.0-12. Grading involving an estimated this level of excavation would result in the removal of trees and other natural vegetation throughout the development area and would also change much of the site's natural landform. Moreover, as made clear in the DEIR, the development would be very visible from Kirker Pass Road and would stand in stark contrast to the surrounding hillsides. DEIR at Figures 5.1-5 and 5.1-6.

# 2. General Plan Provisions Relating to the Protection of Natural Resources.

The General Plan encourages development that is compatible with the environment and sensitive habitats, "particularly habitats that support special status species" and calls for development that preserves significant ecological resources. Resources Conservation Element Goals 9-G-1 and 9-G-2 and Policies 4-P-14, 4-P-15, 9-P-13. The DEIR again concludes that the Project is consistent with the General Plan because the Project proposes to preserve the southernmost portion of the site and because the site's resources were "considered and documented." DEIR at 4.0-6. However, as discussed below, the DEIR's documentation of natural resources is seriously flawed. See section II.B.3 below. The Project is inconsistent with these provisions because, as discussed below, it will result in significant adverse impacts to sensitive habitats and species on and adjacent to the Project site. The DEIR has failed to provide a complete analysis of these impacts. *Id.* As a result, the Project will result in significant impacts related to direct and indirect impacts to special status species in contravention of the General Plan. *Id.* 

### **3.** General Plan Provisions Relating to the Protection of Drainages

The General Plan includes provisions that protect drainages and prevent erosion. Resources Conservation Element Policies 9-G-4 and 9-G-5. The General Plan also includes provisions to require evaluation and implementation of Best Management Practices to protect against creek bank destabilization and require assessments of downstream drainage impacts. Policies 9-P-15, 9-P-17, and 9-P-21. The DEIR fails to mention these General Plan provisions let alone analyze consistency with them. As discussed further below, and in the attached Baseline Report, the DEIR fails to evaluate these impacts. As a result, the Project is inconsistent with these General Plan provisions.



### 4. General Plan Provisions Relating to the Provision of Public Services.

The DEIR discloses that the Project would add school children to area schools that are already over capacity. DEIR at 5.6-8. The Project is inconsistent with General Plan provisions that specify the City is to "ensure that school facilities maintain adequate capacity to provide for current and projected enrollment." General Plan Policy 8-G-10. The Project is inconsistent with the General Plan in that it would approximately 277 new students to a school system already over-capacity.

The General Plan specifies that the City is to provide 1.8 *sworn officers* per each 1,000 residents. The DEIR discloses that the Project would add to the City's population so that additional police officers would be needed to serve the community. DEIR at 5.6-8. As the DEIR makes clear, there is "no guarantee that the General Fund revenues provided by the new development would fully fund the new positions." DEIR at 5.6-8. Thus, the Project conflicts with the General Plan requirements for police protection.

For all of these reasons, the Project is inconsistent with the General Plan and the Municipal Code. Because of the Project's inconsistencies with these planning documents, approval of this Project would violate State Planning and Zoning Law and the County's Development Code.

### **B.** Approval of this Project Would Violate the Subdivision Map Act.

The proposed Project requires approval of a tentative subdivision map. *See* DEIR at 3.0-13. As a result, the City must comply with the Subdivision Map Act. This statute requires that a tentative map approval be consistent with the local general plan. *See* Gov't Code §§ 66473.5; 66474; *see also Friends of "B" Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 998 (Subdivision Map Act expressly requires consistency with general plan). Approval of a project that is inconsistent with the general plan violates the Subdivision Map Act and may be enjoined on that basis. *See Friends of "B" Street*, 106 Cal.App.3d at 998 ("City approval of a proposed subdivision … may be enjoined for lack of consistency of the subdivision map with the general plan."); *see also* City of Pittsburg Municipal Code § 17.20.060 (to approve a tentative map, the following findings must be made, among others: 1) the proposed map is consistent with the general plan and any applicable specific plan, or other applicable provisions of [the municipal] code; 2) the site is physically suitable for the proposed density of development; and 3) the design of the subdivision or the proposed improvements will not cause substantial



environmental damage or substantially and avoidably injure fish or wildlife or their habitat).

As detailed throughout this letter, the Project is inconsistent with various goals and policies set forth in the City's General Plan. *See e.g.*, Section I(A), *supra*. Because approval of the Project would violate the general plan consistency requirements of the Subdivision Map Act and the City's own municipal code, the Project application must be denied.

### II. The DEIR Is Inadequate Under CEQA.

The environmental impact report is "the heart of CEQA." *Laurel Heights Improvement Ass'n v. Regents of University of California* (1988) 47 Cal.3d 376, 392 (citations omitted) ("*Laurel Heights I*"). It "is an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return. The EIR is also intended 'to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.' Because the EIR must be certified or rejected by public officials, it is a document of accountability." Id. (citations omitted). Where, as here, an EIR fails to fully and accurately inform decision makers, and the public, of the environmental consequences of proposed actions, it does not satisfy the basic goals of the statute. *See* CEQA § 21061("The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect that a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.").

As discussed in detail below and in the attached technical report, the DEIR is replete with serious flaws. *See* Baseline Report. It lacks a legally defensible description of the Project and contains so little information about the Project's potential environmental impacts that, in many instances, it is difficult to evaluate the accuracy of the environmental analysis. Nor does the DEIR provide the necessary evidence or analysis to support its conclusions that environmental impacts would be less than significant. Many of the so-called mitigation measures proposed in the DEIR are nothing more than general assertions that something will be done in the future about the Project's significant environmental impacts. Such deferral is prohibited by CEQA. Consequently, the City must prepare and recirculate a revised EIR if it chooses to proceed with the proposed Project.



### A. The DEIR Fails to Adequately Describe the Project.

### 1. The DEIR's Project Description Omits Critical Information.

Under CEQA, the inclusion in the EIR of a clear and comprehensive description of the proposed project is critical to meaningful public review. *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193. The court in *Inyo* explained why a thorough project description is necessary:

"A curtailed or distorted project description may stultify objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance." d. at 192-93. Thus, "[a]n accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR." *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818, 830.

Here, the description of the Project is inadequate. The DEIR fails to identify key components of the Project that have the potential to result in significant environmental impacts. For example, the DEIR entirely omits critical information about the improvements that would be needed to resolve the area's hydraulic and flood risks. *See* Baseline Report at 1 and 2. Additionally, the DEIR fails to adequately describe the Project's stormwater system and fails to include a Stormwater Control Plan. The proposed Project will result in a substantial increase in impermeable surfaces, which will, in turn, increase runoff from the site, yet the document does not include any detail about where drainage features (inlets, piping, culverts, etc.) would be located and how these systems, including the detention basins, would be operated. The DEIR does not appear to include, nor does it reference, any hydrologic or hydraulic engineering that supports the drainage plan. The reader of the DEIR has no idea how the detention basins were sized or how they would be operated. Without detailed information regarding the location and design of the drainage facilities, it is impossible for decision makers and the public to evaluate the accuracy of the DEIR's conclusions.



The DEIR also fails to include the following crucial information about the Project:

- Number and type of trees to be removed;
- Location of the Project staging areas;
- Location of spoils sites and haul routes;
- Construction-related activities (including timeline, location, number of construction employees, types of equipment, etc.);
- Other Project features such as fences, bridges, gates or other proposed improvements.

All of this information must be included in a revised EIR so that the impacts associated with these features and activities can be analyzed.

# 2. The Project Description Avoids Any Meaningful Discussion of the Proposed Development Agreement.

The DEIR notes that the Project will include a development agreement, and states that the agreement's primary purpose is to vest the applicant's entitlements. DEIR at 3.0-12. The DEIR also states that the development agreement will include provisions regarding integration of the project entrance with the future Donlon Boulevard extension, requirements for payment of fees related to open space and compliance with the City's inclusionary housing ordinance. *Id.* However, no information is provided about the conditions, terms, restrictions and requirements for subsequent actions. The text of this development agreement is not included anywhere in the DEIR. And the development agreement was not included among the publicly available environmental documents for the project. Without any more detailed information about the terms of the agreement, key elements of the project description are omitted and cannot be analyzed in the EIR, in direct violation of CEQA. *See, e.g., Laurel Heights Improvement Ass'n v. Regents of the University of California* (1993) 6 Cal.4th 1112, 1123 ("*Laurel Heights II*") (the purpose of CEQA "is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made").

This omission is particularly disturbing as development agreements typically seek to "lock in" development rights – including existing regulations and the density and intensity of development – over an extended period of time. As such, development agreements have the potential to greatly exacerbate the potential impacts of



a project by limiting the lead agency's permitting authority and ability to impose additional mitigation measures or reduce the intensity of development at later discretionary phases of the project. This problem is only compounded where, as here, the development of critical mitigation measures is deferred to the indefinite future.

The DEIR's failure to provide any specifics regarding the development agreement constitutes a fatal shortcoming in the Project Description and the subsequent analysis of Project impacts. To comply with CEQA, the DEIR must be recirculated with a more detailed description of the development agreement or with the draft agreement attached.

# **3.** The DEIR Minimizes the Extent of the Project By Failing to Describe and Analyze Full Build-Out Conditions.

Courts have held that, when analyzing the environmental impacts of a general plan or other planning document, the lead agency must analyze "the future development *permitted* by the [plan]... Only then can the ultimate effect of the [plan] upon the physical environment be addressed." *Christward Ministry v. Superior Court of San Diego County* (1986) 184 Cal.App.3d 180, 194 (emphasis added); *see also City of Redlands v. County of San Bernardino* (2002) 96 Cal.App.4th 398, 409 (quoting same).

Here, the Project proposes rezoning not only for the 77-acre portion of the site designated for residential development but for entire site. DEIR at 3.0-8. Nowhere does the DEIR analyze the impacts of a potential increase in density on the entire site. The DEIR proposes that the 71-acre area proposed for open space will be subject to "recordation of a deed restriction or some other appropriate mechanism, prior to the acceptance of the last Final Map for the site (should it be broken into phases)." DEIR at 2.0-21. This approach is not adequately protective of the open space. First, recording the deed restriction prior to the last Final Map (rather than prior to the *first* Final Map) leaves the open space area vulnerable to damaging uses during construction. Second, deferring recordation of the deed restriction to such a late date leaves the open space vulnerable to future proposals for alteration of the open space area to other uses.

Alternatively, the DEIR could have specified use of a conservation easement on the open space area, conveyed to a land trust capable of managing and enforcing it, to preserve and protect the area in perpetuity. Such an easement should be recorded prior to acceptance of the first Final Map. As proposed, the open space area is vulnerable to future proposals for alteration of the open space area to other uses, and therefore, the DEIR must analyze the potential impacts at full build-out should the City approve the change in zoning.



# **B.** The DEIR Fails to Analyze and Mitigate the Project's Significant Environmental Impacts.

CEQA requires that an EIR be detailed, complete, and reflect a good faith effort at full disclosure. Guidelines § 15151. The document should provide a sufficient degree of analysis to inform the public about the proposed project's adverse environmental impacts and to allow decision-makers to make intelligent judgments. *Id.* Consistent with this requirement, information regarding the project's impacts must be "painstakingly ferreted out." *Environmental Planning & Info. Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 357 (finding an EIR for a general plan amendment inadequate where the document did not make clear the effect on the physical environment).

Meaningful analysis of impacts effectuates one of CEQA's fundamental purposes: to "inform the public and responsible officials of the environmental consequences of their decisions before they are made." *Laurel Heights II*, 6 Cal.4th at 1123. To accomplish this purpose, an EIR must contain facts and analysis, not just an agency's bare conclusions. *Citizens of Goleta Valley*, 52 Cal.3d at 568. Nor may an agency defer its assessment of important environmental impacts until after the project is approved. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 306-07. An EIR's conclusions must be supported by substantial evidence. *Laurel Heights I*, 47 Cal.3d at 409.

As documented below, the DEIR fails to identify, analyze, or support with substantial evidence its conclusions regarding the Project's significant environmental impacts. These deficiencies render the DEIR inadequate under CEQA.

# 1. The DEIR Fails to Analyze and Disclose Significant Aesthetic Impacts of the Project.

The proposed Project will alter and adversely impact the visual landscape of the site and the surrounding area by completely transforming this scenic, hilly area into a dense, residential one. As discussed above, the Project will cut and fill large swaths of hillside and excavate an enormous amount of soil: 1.4 million cubic yards. DEIR at 3.0-12. (Assuming a dump truck holds 10 cubic yards, the proposed excavation equates to 140,000 truckloads of soil.) The DEIR acknowledges that the Project would result in significant and unavoidable impacts relating to a the degradation of the existing visual character of the area. DEIR 2.0-6. Despite this assessment, the DEIR concludes that the Project's other aesthetic impacts will be less than significant because of certain landscaping and design features. However, landscaping and design features cannot reduce



the significant topographic impacts of the Project to a level of insignificance. Furthermore, the DEIR's conclusion that aesthetic impacts will be insignificant flies in the face of established CEQA precedent.

Under CEQA, it is the state's policy to "[t]ake all action necessary to provide the people of this state with . . . enjoyment of *aesthetic*, natural, scenic, and historic environmental qualities." CEQA § 21001(b) (emphasis added). "A substantial negative effect of a project on view and other features of beauty could constitute a significant environmental impact under CEQA." *Ocean View Estates Homeowners Assn., Inc. v. Montecito Water District* (2004) 116 Cal.App.4th 396, 401. No special expertise is required to demonstrate that the Project will result in significant aesthetic impacts. *Ocean View Estates*, 116 Cal.App.4th at 402 ("Opinions that the [project] will not be aesthetically pleasing is not the special purview of experts."); *The Pocket Protectors v. City of Sacramento* (2005) 124 Cal.App.4th 903, 937 ("[N]o special expertise is required on this topic.").

As explained by the court in *Quail Botanical Gardens Foundation, Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1606, it is "self-evident" that replacing open space with a subdivision will have an adverse effect upon "views and the beauty of the setting." Instead of addressing and analyzing the Project's visual effects, the DEIR employs contorted logic to mask its clear impacts. For example, the DEIR acknowledges that the General Plan identifies views of the "rolling, grassy hills to the south," which characterize the site, as important visual resources for the City and that the development will be visible from area parks. DEIR at 5.1-8. The DEIR also acknowledges that the Project site "could be considered an element of broad scenic vistas of hills and open space visible from Kirker Pass Road, a designated scenic route in the General Plan. *Id.* The DEIR even states that the Project could have a substantial adverse effect on a scenic vista. *Id.* Surprisingly, the DEIR then concludes that impacts to scenic vistas would be less than significant because design guidelines included in Mitigation Measure AES-1 would mitigate these significant impacts. DEIR at 5.1-9.

Such a conclusion is misguided and unsupported by evidence. The guidelines and standards that the DEIR relies on address the colors and materials to be used in the development but in reality they do nothing to reduce the height, mass, or location of structures or to ensure that the development is less visible from public viewpoints. The DEIR fails to provide any specific information or analysis, as to how the proposed measure would mitigate significant impacts to existing views from parks and other public viewpoints. A neutral color palette will not camouflage this large subdivision.

Moreover, the DEIR fails to provide evidence to support its conclusion that the Project's impacts to area scenic vistas would be less than significant. Specifically, the EIR fails to evaluate the Project's impacts to views from East Bay Regional Park District ("EBRPD") trails and from open space areas in Stoneman Park to the north. *See* DEIR Figure 5.1-3 indicating visual simulations performed only for views from Kirker Pass Road. The DEIR also fails to evaluate impacts to planned parklands to the south and southwest of the project site. As pointed out by during the scoping process, the EBRPD has acquired the "Thomas North" parcel to the south of the Project site and the "Land Waste Management" and "Affinito" parcels to the southwest. A revised EIR must be prepared to evaluate the Project's impacts to views from these parcels.

The Project will transform an undeveloped, rural area framed by rolling hills into a large residential subdivision. This change substantially degrades not only the existing visual character and quality of the site and its surroundings but the quality of scenic vistas enjoyed from area roadways, parks, and trails. These impacts are considered significant impact under CEQA. Guidelines, Appendix G(I)(c). Thus, the DEIR's conclusion that the Project's impact on scenic vistas would be less than significant cannot be sustained.

### 2. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Hydrology and Water Quantity.

The DEIR includes absolutely no discussion of the potential impacts to hydrology and water quality, having concluded in the Initial Study ("IS") that the Project's impacts in these areas would be less than significant. As explained in the attached Baseline Report, this conclusion is not supported by substantial evidence and, in fact, the Project would substantially alter site drainage and the stream channel that runs through the property. While the IS provides a general discussion of these potential impacts, it contains no supporting studies or data and relies entirely on future preparation of a Storm Water Pollution Prevention Plan ("SWPPP") and compliance with existing regulations to reduce the Projects impacts to a level of insignificance. As discussed in detail below, this approach does not comport with CEQA. In very steep terrain like this, it is virtually impossible for projects to comply with National Pollutant Discharge Elimination System ("NPDES") requirements, which is evidenced by the Project's proposed detention basins. Thus, relying on compliance with existing requirements is particularly unacceptable in this situation. In addition, steep terrain such as this makes remediation of unstable soils very challenging.



### (a) The DEIR Fails to Adequately Describe the Existing Hydrological Setting.

The DEIR/IS provides no information on the hydrology and water quality setting. Without describing the hydrology of the on-site drainage and that of Kirker Creek downstream, the reader of the DEIR/IS has no context within which to evaluate potential project impacts. Perhaps most important, the DEIR/IS does not provide any discussion of the hydrology of Kirker Creek and its susceptibility to flooding. The DEIR must be revised to include a Hydrology and Water Quality section that adequately describes the hydrologic setting.

### (b) The Project Does Not Comply with Applicable Requirements Under the NPDES

The IS states that the project would treat stormwater runoff "as required by provision C.3 of the Contra Costa County municipal stormwater NPDES permit by directing all site runoff into three detention basins." IS at 59. However, this statement appears to refer to an old (and superseded) NPDES permit. The current NPDES permit that the project would be required to comply with is the Municipal Regional Stormwater NPDES Permit, Order No. R2-2009-0074, NPDES Permit No. CAS612008, adopted October 14, 2009 and revised November 28, 2011 ("MRP"). Not only does the Initial Study refer to the wrong NPDES permit, it wrongly interprets what C.3 provisions would be required. Baseline Report at 3. The C.3 portion of the MRP, which refers to post-construction stormwater management for new development and redevelopment projects, requires Low Impact Development ("LID"). The Project as proposed includes centralized detention basins, which are not LID features.

The goal of LID is to reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and biotreatment through rain gardens, bioretention units, bioswales, and planter/tree boxes. LID also limits disturbance of natural water bodies and drainage systems; minimizes compaction of highly permeable soils; protects slopes and channels; and minimizes impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies. Baseline Report at 3 and 4.

Here, the Project would result in massive grading, moving approximately 1.4 million cubic yards of soil. DEIR at 3.0-12. No LID designs or feathers appear to be

incorporated or required. Instead, several large detention basins are proposed to collect the site's stormwater before discharging it into Kirker Creek. Incorporation of LID designs and features into the project would require extensive modifications to the grading plan and overall site plan. These design changes to the project should be made by the applicant and the revised project evaluated in a recirculated DEIR.

### (c) The Project Would Result in Flooding and Erosion Impacts Downstream

Based on a review of available mapping and aerial photographs, the Baseline Report concludes that Kirker Creek appears to have reaches that are highly incised with oversteepened creek banks. Baseline Report at 4. This indicates that portions of the creek may be unstable. *Id*. There are areas in the City of Pittsburg (e.g., Brush Creek Drive, Canyon Way), where homes are located within 20 to 30 feet of the top of the creek bank. Any change to the hydrology of flows in Kirker Creek could result in hydromodification and cause increased erosion and creek bank failure, which may jeopardize existing structures. *Id*.

The DEIR/IS fails to provide any explanation as to how the detention basins would be operated to prevent "erosion of existing stream banks and flooding downstream along Kirker Creek," and it is not clear that they can be so operated. IS at 60. Simply delaying flows in detention basins is not an effective approach to preventing downstream hydromodification of Kirker Creek. Baseline Report at 4. The Project would result in a substantial amount of new impervious surfaces conveying increased flows to centralized basins. This would in turn increase total discharge volume to Kirker Creek. *Id.* Even moderate flows to the creek, if sustained for longer periods of time than would occur without the project, could cause significant downstream erosion. *Id.* This is a potentially significant impact that must be fully analyzed under CEQA.

In sum, the DEIR lacks sufficient evidentiary support for its conclusion that the Project's impacts on hydrology and water quality would be less than significant. A revised DEIR that comprehensively evaluates and mitigates the proposed Project's hydrology and water quality impacts must be prepared and recirculated.

# **3.** The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Biological Resources

The DEIR presents an incomplete—and hence inadequate—discussion of the Project's potential impacts to biological resources. As detailed below, the DEIR underestimates Project-related impacts to biological resources as a result of a series of



errors, including: (1) faulty methodology; (2) the failure to describe accurately the environmental setting; (3) the failure to analyze the extent and severity of impacts to sensitive species and habitats; and (4) the failure to analyze the Project's cumulative effects. The DEIR's treatment of biological impacts does not meet CEQA's well established legal standard for impacts analysis. Given that analysis and mitigation of such impacts are at the heart of CEQA, the DEIR will not comply with the Act until these serious deficiencies are remedied.

### (a) The DEIR Appears to Employ Faulty Methodology.

The DEIR employs faulty methodology and incorrect assumptions in its analysis of Project impacts to biological resources. It appears that the DEIR's analysis is not based on focused surveys tailored to determine the likelihood that particular species would be present. In fact, the DEIR never describes the methodology employed for site surveys. Aside from one sentence that indicates the surveys consisted of "driving and walking around the site" (DEIR Appendix 5.3 at pdf page 4), the DEIR provides no description of the survey methods at all. The DEIR should have included focused surveys for all special status with the potential to occur on site. These surveys should have included surveys for grassland birds, rare plant surveys, and, as discussed below, appropriately timed protocol level surveys for species likely to occur on-site.

The survey information as it stands does not provide an adequate basis for determinations about the individual and cumulative impacts of this Project on either special-status species or rare habitats. The DEIR's inadequate analysis of the species and habitats on the site results in an understatement of the Project's biological impacts.

# (b) The DEIR Fails to Adequately Describe the Project's Biological Setting.

An EIR also "must include a description of the environment in the vicinity of the project, as it exists before the commencement of the project, from both a local and a regional perspective." Guidelines § 15125; *see also Environmental Planning and Info. Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354. CEQA requires that special emphasis be placed on environmental resources that are rare or unique to that region and that would be affected by the Project. Guidelines § 15125(c). Here, the DEIR's discussion of environmental setting is sorely deficient.

The DEIR fails to provide a complete description of the Project's biological setting and, in some cases, presents conflicting information. For example, the DEIR states that the Project site does not include alkali soils; an important distinction because some



special status plants occur solely in alkali soils. DEIR at 5.3-7. However, the DEIR also indicates that saltgrass (Distichlis spicata), a plant that is dependent on alkali soils, was observed on site. DEIR at Table 5.3-1.

In other cases, the DEIR simply presents erroneous information. For instance, the DEIR dismisses the potential occurrence of big tarplant stating that "the highly disturbed on-site grasslands do not provide suitable habitat . . . ." DEIR at Table 5.3-2. However, this species is found in annual grasslands, usually on slopes like the ones that characterize the Project site. Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014.

In other instances, the DEIR omits crucial information altogether. The DEIR fails to evaluate grassland birds likely to occur on site and entirely ignores the grasshopper sparrow, a California species of special concern. *Id.* and DEIR Table 5.3-2 (excludes grasshopper sparrow).

The DEIR also fails to analyze the presence and number of other special status species that it acknowledges may be present on the site and in the Project area. For example, although the DEIR acknowledges that California tiger salamander ("CTS"), a species protected by the federal Endangered Species Act, has been documented in the Project vicinity (DEIR at 5.3-18), the DEIR is dismissive of the potential for this species to occur on site. DEIR at 5.3-3 (lists species for which suitable habitat is found on the Project site but excludes CTS). The DEIR states that because there is no suitable breeding habitat for CTS within or near the project site and that the nearest occurrence is 0.5 miles away, the species is not likely to occur on the site. DEIR Table 5.3-2 at page 5.3-13.

However, the DEIR fails to evaluate potential upland habitat on site that may be used by CTS. As explained in the attached report, "Movement Patterns and Migration Distances in An Upland Population of California Tiger Salamander" (Orloff, 2011), CTS disperse over distances far greater than 0.50 miles. Orloff Report, attached as Exhibit 2. Thus, the Project site, which is within a half mile of a known breeding site, is very likely to provide aestivation habitat for CTS. Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014; biography attached as Exhibit 3. Moreover, it appears that other ponds providing potentially suitable habitat may be present in close proximity to the Project site. *See* map attached as Exhibit 4 and Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014. Accordingly, the DEIR's description of the biological setting (and the document's impact analysis) must be revised to include consideration of this species. *Id*.

Similarly, the DEIR acknowledges that burrowing owls are known to occur in the area, but dismisses their potential to occur onsite based on the fact that no owls were observed onsite and that the nearest occurrence of nesting burrowing owls is 2.5 miles west of the site. DEIR at Table 5.3-11. The DEIR's conclusion is not based on any evidence. In fact, burrowing owl have been observed nesting on the Thomas Home Ranch property located to the southwest of the Project site (between Nortonville Road and Kirker Pass Road) within the past year. Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014. Moreover, burrowing owl do not depend exclusively on ground squirrel burrows for nesting sites, as implied in the DEIR. DEIR at 5.3-11. Burrowing owls have been known to nest in shallow indentations such as those present in the rock outcroppings on site. DEIR at 5.3-1.

Moreover, the DEIR mischaracterizes the role of the Habitat Conservation Plan ("HCP") and its role in relation to environmental documentation for the project. First, the HCP is a conservation mechanism that includes a broad, programmatic review of resources throughout eastern Contra Costa County; it is not a project-specific, impactanalysis document. DEIR at 5.3-24. Thus, the information in the HCP cannot replace properly designed and implemented surveys of the project site to determine the biological resources there. Second, the DEIR states that the HCP's primary goal is to streamline review of development projects. DEIR at 5.3-24. This is incorrect. The HCP is intended to serve as a coordinated process for permitting and mitigating the incidental take of endangered species. It does not excuse the City from requiring site-specific analysis. Finally, the HCP is administered by the East Contra Costa County Habitat Conservancy ("Conservancy"). DEIR at 5.3-25. The Conservancy is not a land use agency and therefore is not tasked with making decisions about the appropriate location for siting land development. That responsibility falls to the City, which has the responsibility of completing site-specific analysis of the Project's significant impacts to special status species and habitat as part of the CEQA process. Therefore, the DEIR must be revised to include a thorough investigation of the site's existing biological setting and the Project's impacts on those resources.

The DEIR's perfunctory description of the sensitive species and habitats present in the Project area results in an incomplete description of the sensitive environmental setting of the Project. This failure to describe the Project setting violates CEQA. *See San Joaquin Raptor*, 27 Cal.App.4th at 724-25 (environmental document violates CEQA where it fails to completely describe wetlands on site and nearby wildlife preserve). The DEIR should have included surveys for these species as part of its assessment of biological resources. Accordingly, the DEIR's description of the biological setting must be revised to include consideration of these and other overlooked species.

(c) The DEIR Fails to Adequately Analyze the Project's Direct Impacts to Sensitive Species.

The DEIR's failure to describe the existing setting severely undermines its analysis of Project impacts. Despite the DEIR's acknowledgement that the Project would adversely affect potential habitat for several special status, the DEIR fails to adequately analyze adverse impacts to these species. For example, the DEIR acknowledges that the Project site includes potential habitat for burrowing owl, a California Species of Special Concern ("CSC"); San Joaquin kit fox, a federally endangered species and a California Threatened species; and vernal pool fairy shrimp, a federally Threatened species. DEIR at 5.3-26 and 27. Yet, rather than conduct appropriate surveys to evaluate the presence/absence of these species and analyze the extent and severity of the Project's impacts, the DEIR simply applies a laundry list of measures required by the Habitat Conservation Plan for the Project area and concludes that all impacts will be mitigated to less than significant levels. See, e.g., DEIR at 5.3-31 and 32. By failing to analyze the extent and severity of impacts to biological resources, the DEIR downplays the effects of the loss of open space on special status species. The end result is a document which is so crippled by its approach that decision makers and the public are left with no real idea as to the severity and extent of environmental impacts. See, e.g., Berkeley Keep Jets Over the Bay Com. v. Bd. of Port Comrs. (2001) 91 Cal.App.4th 1344, 1370-71; Galante Vineyards v. Monterey Peninsula Water management Dist. (1997) 60 Cal.App.4th 1109, 1123; Santiago County Water Dist. v. County of Orange (1981) 118 Cal.App.3d 818, 831 (a lead agency may not simply jump to the conclusion that impacts would be significant without disclosing to the public and decision makers information about how adverse the impacts would be).

Similarly the DEIR's analysis of impacts to raptors such as Swainson's hawk simply asserts that they would be affected by a reduction in nesting resources, ignoring altogether the impacts caused by loss of habitat. DEIR at 5.3-28. Urbanization has a profound effect on raptors because they require large areas to hunt and are disturbed by human activity near their nests. Moreover, the DEIR's sole mitigation proposal for raptors focuses exclusively on avoiding active nests. It ignores perch resources and the role that loss of habitat and urbanization have on raptors. In any event, the DEIR must quantify the Project's effects on raptors, and the efficacy of the proposed mitigation, so that the public and decision makers may reach their own conclusions. *Save Our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 130.

#### (d) Indirect Impacts on Wildlife

The DEIR ignores altogether the Project's indirect impacts on wildlife. Indirect impacts from low density residential development can be as devastating to wildlife as the direct loss of habitat. (*See generally* Exhibit 5 [Hansen, et al., Land Use Change in Rural America: Effects Of Exurban Development On Biodiversity: Patterns, Mechanisms, And Research Needs]). For example, toxic compounds from the residential activities could adversely impact wildlife that rely on Kirker Creek. The use of common fertilizers and pesticides associated with routine yard maintenance and landscaping can generate concentrations of pollutants that degrade water quality and harm wildlife.

It is also well established that noise—and even low ambient noise levels from typical residential activities adversely impacts wildlife species, causing them to flee their habitats and even abandon nests. Wildlife can also be quite sensitive to glare from ambient night lighting. Also, cats, unless they are kept indoors, are skilled predators on wildlife. Cats can radically decrease the potential for bird species and small reptiles to survive in sensitive habitats adjacent to project sites. *See* "Domestic Cat Predation on Birds and Other Wildlife" attached as Exhibit 6. These indirect impacts would be significant and therefore must be analyzed in an EIR.

In short, the DEIR's analysis of impacts to biological resources dramatically understates the Project's potential to significantly affect sensitive species and sensitive habitats. To comply with CEQA, the City must prepare a revised DEIR fully analyzing the Project's potential impacts to these resources and identifying effective mitigation measures. Given the substantial revisions that are necessary, the City must recirculate the revised DEIR. Guidelines 15088.5(a)(4).

### 4. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Cultural and Historic Resources.

The Project is located on the site of a former historic ranch complex considered a significant historic resource under CEQA (*i.e.*, Thomas Ranch complex). *See* DEIR Appendix 1.0; IS at 41. According to a historic resources survey performed in 1995, the complex consisted of a house and a number of small barns in a style typical of the period from the late 1800's through the turn of the century. *Id*. The IS indicates that the historic buildings were demolished and the area leveled, but that the ranch complex was never inventoried as recommended in the 1995 study. IS at 42. It also indicates that historic and/or prehistoric archaeological deposits may be present on the site. *Id*.

Nonetheless, while the DEIR acknowledges the likelihood of significant archaeological resources on the site, it fails to identify the extent of potential cultural resources, adequately analyze potential impacts to those resources, or adequately mitigate the project's potentially significant impacts to cultural resources. Instead, the DEIR relies on the IS analysis and incorporates the mitigation measures proposed in that document. DEIR at 2.0-19. These measures provide for monitoring during construction and data collection and recording should resources be discovered. Based on implementation of these measures, the DEIR concludes that resulting impacts would be less than significant.

However, the assertion that post-approval data collection will mitigate the project's impacts to known resources on the site to a less-than-significant level is not supported by substantial evidence, constitutes an inappropriate deferral of mitigation measures under *Sundstrom v. County of Mendocino*, 202 Cal.App.3d at 296, and is erroneous as a matter of law. In fact, "where a historic resource is to be demolished, documentation of the resources usually falls short of full mitigation."). *See* Discussion following Guidelines § 15126.4. Moreover, courts have explained that the mitigation of the effects of demolition of an historic resource (as defined by CEQA) through documentation of the resource and placement of commemorative markers is not adequate to reduce impacts to a level of insignificance. *League of Protection of Oakland's Architectural and Historic Resources v. City of Oakland* (1997) 52 Cal.App.4th 595.

Moreover, under CEQA, the preferred method of reducing impacts to cultural resources is avoidance. *See Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal.App.4th 48, 86-87. The only feasible way to avoid cultural resources with a development project like this is to conduct surveys before final project design is approved; identify all known historic properties that will be affected by the project; and consider redesigning the project to avoid them.

Here, given that the site includes known significant historical resources, and especially given the fact that known historical resources were destroyed without proper evaluation or documentation, the City should require a third party consultant to perform trenching tests now, as part of the CEQA process, to assess whether the Project would impact significant resources and what Project modifications could be incorporated to avoid the resources. Until such additional investigation and analysis of potential impacts to cultural resources is prepared, the DEIR cannot be certified under CEQA and the Project must not be approved.

Finally, the cultural resources evaluations prepared by Holman and Associates (1995, 1999, and 2000) were not included as appendices to the DEIR. Although it is customary to exclude location maps and specific language related to the



location of resources to protect potential resources on site, the DEIR omitted the studies altogether. Without these studies, it is impossible for the public and decision makers to evaluate the impacts the proposed project would have on cultural resources. Accordingly, for this and the other reasons discussed above, the DEIR's analysis of impacts to cultural resources is inadequate under CEQA.

# 5. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Public Services.

As the DEIR acknowledges, several schools within the Pittsburg Unified School District are currently operating at or near capacity. DEIR at 5.6-3. The Project will generate up to 277 Kindergarten through Twelfth grade students. DEIR at 5.6-8. The DEIR discloses that the Project would generate the need for new school facilities to be constructed. The DEIR concludes that school impacts will be mitigated to a less-thansignificant level, however, by payment of fees established by the school districts. DEIR at 5.6-9 (citing Gov't Code § 65996).

While it may be true that the payment of such fees is deemed mitigation under Government Code section 65996, this provision does not excuse the City from analyzing the impacts to the environment of sending 277 new students to schools that are already at or near capacity. Indeed, the DEIR's threshold of significance states that the Project could have a significant effect on the environment if it would: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios . . . for schools. DEIR at 5.6-7. With several schools already at capacity, the Project will necessarily require the construction of "new or physically altered" school facilities. Construction of these school facilities may have land use and planning impacts and, if sited on undeveloped open space lands, potential biological, agricultural, recreational, and other impacts as well. The DEIR must be revised to analyze these potential environmental impacts.

Moreover, the DEIR failed to consider cumulative impacts of school construction. The DEIR lists five Major Projects (DEIR at 5.0-4), most of which are residential projects, in its cumulative impacts analysis. In addition, the City of Pittsburg's Project Pipeline List includes at least a dozen residential projects. Considering that the Pittsburg Unified School District is already at or near capacity, the DEIR must analyze how this project, along with the related projects, will cumulatively affect school services in the District.

### 6. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Public Safety.

The Project site has an existing high-pressure petroleum pipeline within the area proposed as a buffer. DEIR at 3.0-9. The Project proposes to site residences within 1,000 feet of the pipeline, yet the DEIR provides no analysis of related safety impacts. *Id.* Although leaks, ruptures, and explosions may not be common for underground pipelines, the impacts from pipeline failures when they do occur can be catastrophic. *See* "Pipelines Explained: How Safe are America's 2.5 Million Miles of Pipelines?" attached as Exhibit 7. As explained in that article, pipelines are prone to failure as they age and corrode. Given the Project's proposal to locate housing in close proximity to the pipeline, the DEIR should have provided an analysis of the condition of the pipeline and the likelihood of failure or accidents.

Instead, the DEIR includes a mitigation measure (carried over from the IS) that only requires the developer to disclose the location of the pipeline to prospective homebuyers. DEIR at 2.0-2.0. However, this measure does nothing to minimize risks to homeowners. Indeed, the DEIR fails to provide any evidence to support its conclusion that risks associated with potential rupture of the pipeline would be reduced to a less-than-significant level with implementation of the measure.

# 7. The DEIR's Analysis of Growth Inducing Impacts Is Incomplete and Flawed.

CEQA requires that an EIR include a "detailed statement" setting forth the growth-inducing impacts of a proposed project. CEQA § 21100(b)(5); *City of Antioch v. City Council of Pittsburg* (1986) 187 Cal. App. 3d 1325, 1337. The statement must "[d]iscuss the ways in which the proposed project could foster economic growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Guidelines §15126.2(d). It must also discuss how the project "may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively" or "remove obstacles to population growth." *Id*.

Here, the DEIR's analysis of growth-inducing impacts is legally inadequate. As with other issues, the document relies on speculation instead of evidence to support its conclusions. The DEIR's conclusion that the Project will have no growthinducing impacts is not supported by substantial evidence.

The DEIR relies on the promise that the required facility upgrades necessary to serve the Project would only serve development on the main Project site to



conclude that there is little chance that the Project will cause adjacent, undeveloped land to be developed, and thus that the Project will not induce significant growth. DEIR at 7.0-5. With a growing population in the Bay Area, extending infrastructure to an area currently outside the City Limit will remove one barrier that currently keeps pressure for development in the area in check.

The City's General Plan specifies a goal of efficient land use patterns which reduce environmental impacts and minimize the potential for residential and commercial sprawl. Approval and development of the Montreux Project would expand development and extend utility infrastructure beyond the City's existing service area, effectively removing an obstacle to future development approvals in the area. That new development has yet to be approved does not excuse the requirement to analyze a project's environmental or growth inducing impacts. Guidelines § 15126.2(d); *City of Davis v. Coleman* (9th Circuit 1975) 521 F.2d 661,675-76.

The DEIR fails to conduct such an analysis. As the *City of Davis* court directed "the purpose of an EIS/EIR is to evaluate the possibilities in light of current and contemplated plans and to produce an informed estimate of the environmental consequences." *Id.* at 676. Accordingly, the DEIR must be revised to identify the extent and location of new development facilitated by removing the obstacle of limited existing infrastructure and to analyze the environmental impacts of the growth.

If the City has contrary data demonstrating that the Project will not induce growth – and there is no indication in the DEIR that it does – it must reference it in the document. However, it may not lawfully rely on unsupported assumptions to summarily conclude that no induced growth will occur. CEQA § 21080(e)(2) ("Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative").

# 8. The DEIR Fails to Provide an Adequate Analysis of the Project's Potentially Significant Cumulative Impacts.

CEQA requires lead agencies to disclose and analyze a project's "cumulative impacts," defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Guidelines § 15355. Cumulative impacts may result from a number of separate projects, and occur when "results from the incremental impact of the project [are] added to other closely related past, present, and reasonably foreseeable probable future projects," even if each project contributes only "individually minor" environmental effects. Guidelines §§ 15355(a)-(b). A lead agency must prepare an EIR if



a project's possible impacts, though "individually limited," prove "cumulatively considerable." CEQA § 21083(b); Guidelines § 15064(i).

Extensive case authority highlights the importance of a thorough cumulative impacts analysis. In *San Bernardino Valley Audubon Society v. Metropolitan Water Dist. of Southern Cal.* (1999) 71 Cal.App.4th 382, 386, 399, for example, the court invalidated a negative declaration and required an EIR for the adoption of a habitat conservation plan and natural community conservation plan. The court specifically held that the negative declaration's "summary discussion of cumulative impacts is inadequate," and that "it is at least potentially possible that there will be incremental impacts. . . that will have a cumulative effect." *See also Kings County Farm Bureau*, 221 Cal.App.3d at 728-729 (EIR's treatment of cumulative impacts on water resources was inadequate where the document contained "no list of the projects considered, no information regarding their expected impacts on groundwater resources and no analysis of the cumulative impacts").

In contravention of the above authorities, the DEIR provides no analysis of the Project's cumulative impacts on biological resources, but simply concludes that, because the applicant will pay permit fees under the Habitat Conservation Plan for the area, cumulative impacts are less than significant. DEIR at 5.3-37. The DEIR thus completely ignores the cumulative effects of recent development approvals and potential future approvals in the City. For example, as discussed earlier in this letter, the City's Project Pipeline List indicates that the City has approved, or is in the process of approving, at least a dozen residential development projects constructing thousands of residential units. See Exhibit 7. The DEIR lists only five projects considered in the cumulative analysis. DEIR at 5.0-4. Other projects that should have been considered in a cumulative analysis include projects that have been approved but not yet constructed (Alves Ranch (364 units); Bancroft Gardens II (28 units); the San Marco Development (1,588 units); and Vista del Mar (518 units). See generally Exhibit 8. These development projects, together with the present subdivision, would have a cumulatively significant impact on open space and natural resources in the Project area. Notwithstanding such evidence, the DEIR fails to provide any analysis of this potentially significant impact.

In another particularly glaring omission, the DEIR also neglects to analyze cumulative impacts on hydrological resources. Specifically, the DEIR contains no analysis of the Project's impacts together with the effects of other development projects proposed within the Project area that may contribute to changes in hydrology in Kirker Creek. Another major project, the James Donlon Boulevard Extension, which is currently under review by the City and would include massive grading and alteration of local drainage patterns and hydrology within the Kirker Creek watershed, is not considered in



the DEIR's hydrology analysis. The effects on water quality, flooding, and hydromofication from these two major projects, and others, on Kirker Creek must be analyzed in a revised DEIR.

# 9. The DEIR Fails to Adequately Analyze and Mitigate Alternatives to the Project.

The alternatives section, along with the mitigation section, is the core of an EIR. *Citizens of Goleta Valley*, 52 Cal.3d at 564. Every EIR must describe a range of alternatives to a proposed project, and to its location, that would feasibly attain the project's basic objectives while avoiding or substantially lessening the project's significant impacts. CEQA § 21100(b)(4); Guidelines § 15126(d). In preparing an EIR, the lead agency must ensure "that all reasonable alternatives to proposed projects are thoroughly assessed." *San Joaquin Raptor*, 27 Cal.App.4th at 717. An EIR's alternatives discussion must focus on alternatives that avoid or substantially lessen significant effects of the project. Guidelines § 15126.6(b); *Citizens of Goleta Valley*, 52 Cal.3d at 556 (EIR must consider alternatives that offer "substantial environmental advantages."). The range must be sufficient "to permit a reasonable choice of alternatives so far as environmental aspects are concerned." *San Bernardino Valley Audubon Soc'y v. County of San Bernardino* (1984) 155 Cal.App.3d 738, 750. The DEIR's discussion of alternatives fails to meet these standards.

Sound planning principles dictate that the City carefully consider alternatives in the present case because the proposed Project would require annexation of the Project site into the City limits and into service areas for water and sanitation districts and would result in admittedly significant impacts to air quality, visual resources, and public services. DEIR at 2.0-6, 2.0-8, 2.0-10, and 2.0-16. This DEIR's analysis of alternatives is insufficient under CEQA because the document fails to consider feasible alternatives that would reduce Project impacts. Guidelines § 15126.6(c); *Citizens of Goleta Valley*, 52 Cal.3d at 566.

As a preliminary matter, the DEIR's failure to disclose the extent and severity of the Project's broad-ranging impacts necessarily distorts the document's analysis of Project alternatives. As a result, the alternatives are evaluated against an inaccurate representation of the Project's impacts. Proper identification and analysis of alternatives is impossible until Project impacts are fully disclosed. Moreover, as discussed above, the document's analysis is incomplete and/or inaccurate so that it is simply not possible to conduct a comparative evaluation of the Project's and the alternatives' impacts.

The DEIR also fails to describe an alternative location for the Project, stating that because neither the developer nor the City owns or controls any other property in the vicinity of the site that is of sufficient size to accommodate the project, the ability of the developer to find and purchase an alternative site to develop the project is considered speculative. DEIR at 6.0-3. The DEIR goes on to state that "... the development of the same number of residential uses at a different location would result in similar visual character and construction air quality impacts. Thus, placing the proposed development at an alternative site would not avoid the significant impacts of the proposed project." *Id.* 

This approach fails to meet CEQA's requirements for the analysis of alternatives. It provides no information on the alternative sites that might be available or event the criteria for such a site search. Without this information and, if possible, a further identification of alternative sites, the DEIR is inadequate and cannot be certified under CEQA. Moreover, even if it is true that no alternative sites exist that could accommodate all of the Project in one location, a feasible alternative could break the Project up into two or more locations. Such an alternative could involve in-fill sites and would likely disperse some of the significant project impacts associated with the proposed Project. An alternative that examines dividing the Project among two or more locations should be included in a revised DEIR.

Contrary to CEQA, the DEIR also fails to explain why the proposed Project was selected over alternatives that are identified as environmentally superior. CEQA requires that the EIR explain why environmentally superior alternatives were rejected. Guidelines § 15126.6(d). As the California Supreme Court held in *Laurel Heights I*, 47 Cal.3d at 405, "[i]f the [lead agency] considered various alternatives and found them to be infeasible . . . those alternatives and the reasons they were rejected . . . must be discussed in the EIR with sufficient detail to enable meaningful participation and criticism by the public." The DEIR fails to include this analysis.

### **III. CONCLUSION**

To cure the many defects identified in this letter, the DEIR must be revised and recirculated. These steps are necessary to provide the public and decision makers with an opportunity to gauge the true impacts of this significant, proposed development. Moreover, the Project itself must be revised to comply with the City's general plan. Only then could the City make the findings necessary to approve this subdivision.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Winter King

1. Bong  $\bigcirc$ 

Carmen J. Borg, AICP Urban Planner

### List of Exhibits

Exhibit 1:	Bruce Abelli-Amen, Comments on Draft Environmental Impact Report and Initial Study, Baseline Environmental Consulting, Jan. 8, 2014.
Exhibit 2:	Susan Orloff, Movement Patters and Migration Distances in an Upland Population of California Tiger Salamander ( <i>Ambystoma Californiense</i> ), Ibis Environmental Inc., Apr. 1, 2011.
Exhibit 3:	Malcolm Sproul Biography, Retrieved Jan. 8, 2014.
Exhibit 4:	Potential Pond Site Image and Location, Retrieved on Jan. 8, 2014 from <u>http://earth.google.com</u>
Exhibit 5:	Andrew J. Hansen, et al, Effects of Exurban Development on Biodiversity: Patterns, Mechanisms, and Research Needs, Ecological Society of America, Dec. 1, 2005.
Exhibit 6:	Domestic Cat Predation on Birds and Other Wildlife, Cats Indoors and American Bird Conservancy.
Exhibit 7:	Lena Groeger, Pipelines Explained: How Safe are America's 2.5 Million Miles of Pipelines?, ProPublica, Nov. 15, 2012.
Exhibit 8:	City of Pittsburg, Project Pipeline List- Updated September 2013, Retrieved Jan. 8, 2014.

SHUTE, MIHALY O-WEINBERGER LP

# Attachment 2



8 January 2014 13316-00

Ms. Carmen Borg Shute, Mihaly, and Weinberger 396 Hayes Street San Francisco, CA 94102

#### Subject: Montreux Residential Subdivision Draft Environmental Impact Report

Dear Ms. Borg:

At your request, BASELINE Environmental Consulting ("BASELINE") has reviewed the CEQA analysis of the hydrology and water quality issues included in the November 2013 Montreux Residential Subdivision Draft Environmental Impact Report ("DEIR") and appended March 2013 Montreux Residential Subdivision Project Initial Study ("Initial Study"). Specifically, we reviewed the Hydrology and Water Quality section of the Initial Study only, because the DEIR does not include any analysis of hydrology or water quality (this topic was scoped out of the DEIR). In order to provide a meaningful context, we also reviewed the Project Descriptions included in the Initial Study and DEIR. Our comments are presented below.

#### COMMENTS ON DEIR AND INITIAL STUDY

#### **Project Description**

The Project Description does not include adequate details of the design and function of the stormwater drainage system to allow the reader of the DEIR to understand this important project element. The description of the stormwater drainage features is limited to the location of the detention basins and a mention that the stormwater system would use inlets and piping. As stated in the Project Description (DEIR page 3.0-9), the project would include grading to construct stormwater detention basins:

Three stormwater detention basins are included in the preliminary grading plan, with two large basins located on the east side of the main project site (Parcels C and D) along Kirker Pass Road, and a third small basin with a 12 foot access road located on the offsite parcel to the northwest of the main project site. Construction of these basins would require grading to re-contour the eastern end of the southern ridgeline on the main project site, and the north-facing slope above the proposed off-site basin located on the off-site parcel. While the entire off-site parcel totals approximately 72 acres, only 16.8 acres would be graded in order to accommodate the new off-site basin (which has an actual footprint of 0.83 acre).

Based on information included on Figure 3.0-6 (DEIR page 3.0-10) the parcels containing the large detention basins would be 5.91 and 3.75 acres. The off-site detention basin would have a



bottom area of 0.83 acres and approximately 16.8 acres of grading would be required to construct the off-site basin. In total, more than 26 acres of land would be graded to construct these three basins.

The project would convey runoff to the detention basins using drainage inlets and piping (DEIR page 3.0-9):

New storm drainage infrastructure, including drainage inlets and piping, would be installed in the proposed roadways on the main project site to connect developed areas to the stormwater detention basins.

The Project Description fails completely to describe where drainage features (inlets, piping, culverts, etc.) would be located and how these systems, including the detention basins, would be operated. The DEIR does not appear to include, nor does it reference, any hydrologic or hydraulic engineering that supports the drainage plan. The reader of the DEIR has no idea how the detention basins were sized or how they would be operated. The DEIR Project Description should be revised to include this information and appropriate hydrologic/hydraulic studies should be appended to the DEIR.

### Hydrology and Water Quality Analysis

*Hydrologic Setting.* The DEIR/Initial Study provides no information on the hydrology and water quality setting. Without describing the hydrology of the on-site drainage and that of Kirker Creek downstream, the reader of the DEIR has no context within which to evaluate potential project impacts. The DEIR should be revised to include a Hydrology and Water Quality section that includes a detailed hydrologic setting.

*Stormwater Quality and NPDES Compliance.* The Hydrology and Water Quality section of the Initial Study indicates that (Initial Study page 59):

Postconstruction, the project would treat stormwater runoff from the new impervious surfaces created onsite, as required by provision C.3 of the Contra Costa County municipal stormwater NPDES permit by directing all site runoff into three detention basins where the runoff would be detained and released at a rate that does not exceed the current rate at which site runoff is discharged into receiving waters. The detention and slow release would allow pollutants, especially sediment to settle in the detention basins and not be discharged into the receiving waters. Therefore the site runoff would not exceed any water quality standards. This impact is considered less than significant.

The paragraph above represents the sum total of the Initial Study/DEIR analysis and discussion of post-construction stormwater management issues. This paragraph not only fails to convey the scope of post-construction stormwater management issues and potential impacts related to the proposed project, it misrepresents NPDES requirements.



The Initial Study states that the project would treat stormwater runoff "as required by provision C.3 of the Contra Costa County municipal stormwater NPDES permit by directing all site runoff into three detention basins." The actual NPDES permit that the project would be required to comply with is the Municipal Regional Stormwater NPDES Permit, Order No. R2-2009-0074, NPDES Permit No. CAS612008, adopted October 14, 2009 and revised November 28, 2011 ("MRP"). Not only does the Initial Study refer to the wrong NPDES permit, it wrongly interprets what C.3 provisions would be required. The C.3 portion of the MRP, which refers to post-construction stormwater management for new development and redevelopment projects, <u>requires</u> Low Impact Development ("LID").<sup>1</sup>

The goal of LID is to reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and biotreatment through rain gardens, bioretention units, bioswales, and planter/tree boxes. LID also limits disturbance of natural water bodies and drainage systems; minimizes compaction of highly permeable soils; protects slopes and channels; and minimizes impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies. The project would include the following (Initial Study page 60):

The project includes alteration of site drainage and the alteration of the unnamed intermittent and ephemeral stream channel that runs through the project site.

Under the project, the existing "unnamed intermittent and ephemeral stream channel" would be eliminated and placed in an underground pipe (contrary to LID principles and MRP requirements).

The basic design of the project, which includes mass grading, destruction of natural drainages, extensive new impervious surfaces, no small-scale distributed stormwater treatment features, conventional gutter and pipe collections systems, and centralized detentions basins is completely contrary to LID principles and therefore would be in violation of the MRP. The Initial Study/DEIR fails completely to identify and mitigate the flaws in project design related to post-construction stormwater management.

Incorporation of LID designs and features into the project would require extensive modifications to the grading plan and overall site plan. These design changes to the project

<sup>&</sup>lt;sup>1</sup> A stormwater management strategy aimed at maintaining or restoring the natural hydrologic functions of a site. LID design detains, treats, and infiltrates runoff by minimizing impervious area, using pervious pavements and green roofs, dispersing runoff to landscaped areas, and routing runoff to rain gardens, cisterns, swales, and other small-scale facilities distributed throughout a site (source: Contra Costa County C.3 Guidebook).



should be made by the applicant and the revised project should be subject to CEQA review (which should include an EIR-level analysis of Hydrology and Water Quality).

Centralized detention basins are not LID features and should be eliminated from the stormwater quality management plan for the project. However, it is possible that some sort of detention may be required to mitigate the potential for downstream flooding of Kirker Creek.

**Downstream Flooding and Erosion.** The following paragraph is the only Initial Study/DEIR discussion provided related to potential downstream flooding (Initial Study page 60):

A majority of stormwater runoff on the site would be channeled to two detentions basins located along Kirker Pass Road, which would delay the flow of water downstream in the event of a storm, thus preventing erosion of existing stream banks and flooding downstream along Kirker Creek.

The Initial Study/DEIR does not provide any discussion of the hydrology of Kirker Creek and its susceptibility to flooding, and therefore it is impossible for the reader to know if downstream flooding is an important issue. Based on review of available mapping and aerial photographs, Kirker Creek appears to have reaches that are highly incised with oversteepened creek banks. This indicates that portions of the creek may be unstable. There are areas in the City of Pittsburg (e.g., Brush Creek Drive, Canyon Way), where homes are located within 20 to 30 feet of the top of the creek bank. Any change to the hydrology of flows in Kirker Creek could cause increased erosion and creek bank failure, which may jeopardize existing structures. This is a potentially significant impact which must be fully analyzed under CEQA.

The Initial Study fails to provide any explanation as to how the detention basins would be operated so that "erosion of existing stream banks and flooding downstream along Kirker Creek" would be prevented. The concept of "hydromodification"<sup>2</sup> is not even mentioned in the Initial Study/DEIR. Simply delaying flows in detention basins is not an effective approach to preventing downstream hydromodification of Kirker Creek. By introducing widespread new impervious surfaces and conveying the increased flows to centralized basins (which tend to become sealed and do not infiltrate much water), the project would increase total discharge volume to Kirker Creek (i.e., with an increased volume of runoff, the detention basins may be able to limit increases in peak discharges, but the duration of flows would almost certainly increase). Even moderate flows to the creek, if sustained for longer periods of time than would occur without the project, could cause significant downstream erosion. The Initial Study/DEIR fails completely to analyze and mitigate this potential impact.

In summary, the project proposes mass grading, elimination of existing natural drainage channels, and drastic changes to site hydrology and flow discharge characteristics. The Initial

<sup>&</sup>lt;sup>2</sup> Hydromodification is generally defined as changes in channel form associated with alterations in flow and sediment due to past or proposed future land use alteration.



Study/DEIR includes no description of the hydrologic setting, provides no substantive analysis of the hydrology or water quality effects of the project, and provides no substantial evidence for the findings of less than significant for all hydrology and water quality impacts. For a project of this magnitude, located just upstream from a potentially unstable creek system, a full EIR-level analysis of hydrology and water quality issues must be completed.

*Cumulative Impacts.* The Initial Study/DEIR completely fails to evaluate (or even mention) cumulative impacts related to hydrology and water quality. For example, another major project, the James Donlon Boulevard Extension, which would include massive grading and alteration of local drainage patterns and hydrology within the Kirker Creek watershed is not mentioned in the DEIR analysis. The effects and water quality, flooding, and hydromofication of these two major projects on Kirker Creek should be analyzed in the DEIR.

Should you have any questions or comments, please contact us at your convenience.

Sincerely,

ulle

Bruce Abelli-Amen Senior Hydrogeologist Cert. Hydrogeologist No. 96

BAA:km

556803.1

# Attachment 3

## California Red-Legged Frog (*Rana draytonii*) Movement and Habitat Use: Implications for Conservation

### GARY M. FELLERS<sup>1</sup> AND PATRICK M. KLEEMAN

#### Western Ecological Research Center, USGS, Point Reyes National Seashore, Point Reyes, California 94956 USA

ABSTRACT.—Nonbreeding habitats are critically important for *Rana draytonii*, especially for individuals that breed in temporary bodies of water. We radiotracked 123 frogs to evaluate seasonal habitat use. Individual frogs were continuously tracked for up to 16 months. Some individuals remained at breeding ponds all year, but 66% of female and 25% of male frogs moved to nonbreeding areas, even when the breeding site retained water. Frogs at our main study site moved 150 m (median), roughly the distance to the nearest suitable nonbreeding area. The greatest straight-line distance traveled was 1.4 km, although the presumed distance traveled was 2.8 km. Females were more likely than males to move from permanent ponds (38% of females, 16% of males), but among dispersing frogs, males and females did not differ in distance moved. Some frogs left breeding sites shortly after oviposition (median = 12 days for females, 42.5 days for males), but many individuals remained until the site was nearly dry. Fog provided moisture for dispersal or migration throughout the summer. Our data demonstrate that maintaining populations of pondbreeding amphibians requires that all essential habitat components be protected; these include (1) breeding habitat, (2) nonbreeding habitat, and (3) migration corridors. In addition, a buffer is needed around all three areas to ensure that outside activities do not degrade any of the three habitat components.

Rana draytonii (California Red-Legged Frog) was once an abundant frog throughout much of central and southern California and is believed to have inspired Mark Twain's fabled story "The Celebrated Jumping Frog of Calaveras County." Now this frog is rare in both the Sierra Nevada foothills and the southern portion of its range (Jennings and Hayes, 1994). In parts of the central Coast Range, there are still large, vigorous populations, some of which probably rival those present 200 years ago (Fellers, 2005). Rana draytonii was federally listed as a Threatened species on 24 June 1996, and the recovery plan states that it "... has been extirpated from 70 percent of its former range . . . Potential threats to the species include elimination or degradation of habitat from land development and land use activities and habitat invasion by non-native aquatic species" (U.S. Fish and Wildlife Service, 2002:iv).

*Rana draytonii* use ponds or pools for breeding during the wet season (December through March) and ponds, riparian areas, or other aquatic habitats during the rest of the year. In Marin County, stock ponds are the most commonly used breeding sites. There is only one published report on migration or nonbreeding habitat requirements for this frog. Bulger et al. (2003) described movements of 56 *R. draytonii* in a coastal area about 100 km south of San Francisco. They found that 80–90% of the frogs remained at one breeding site all year. Frogs radiotagged at nonbreeding sites often moved in a straight-line between breeding and upland habitats without apparent regard to intervening vegetation or topography. Frogs traveled overland up to 2,800 m, and Bulger et al. (2003) recommended a 100 m buffer zone around breeding sites.

The California Red-Legged Frog recovery plan outlines the necessary actions for recovery. One task is to "conduct research to better understand the ecology of the California Red-Legged Frog including the use of uplands, dispersal habits, and overland movements" (U.S. Fish and Wildlife Service, 2002:84). This is a concern not only for *R. draytonii*, but also for many endangered and nonendangered vertebrates that migrate between breeding and nonbreeding areas. This includes salamanders (Ambystoma; Madison, 1997; Triturus; Joly et al., 2001), frogs (Rana; Richtor et al., 2001; Pope et al., 2000), snakes (Farancia; Gibbons et al., 1977), turtles (Burke and Gibbons, 1995; Bodie, 2001), and many species of passerine birds (Keast and Morton, 1980). Lamoureux and Madison (1999) made the point that studies need to examine amphibian habitat requirements at all times of the year not just during the breeding season. We designed our study to address this concern for R. draytonii.

#### MATERIALS AND METHODS

Study area.—Our study was conducted in Marin County, California, 45 km northwest of

<sup>&</sup>lt;sup>1</sup>Corresponding Author. E-mail: gary\_fellers@ usgs.gov

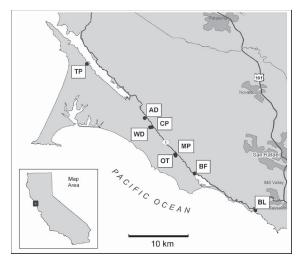


FIG. 1. Sites where California Red-Legged Frogs (*Rana draytonii*) were radiotagged at Point Reyes National Seashore and Golden Gate National Recreation Area, Marin County, California. Site descriptions are listed in Table 1.

San Francisco. All sites were within 6 km of the ocean and located at either Point Reves National Seashore or Golden Gate National Recreation Area (Fig. 1). The local climate is Mediterranean, with an average annual rainfall of 100 cm that largely occurs between November and March. Mean monthly temperatures range from 8.6°C (December) to 16.6°C (August/September) at the headquarters of Point Reyes National Seashore in Olema Valley (National Park Service weather records). Most frogs (N = 112)were tagged in the Greater Olema Valley (Olema Valley and Pine Gulch Valley; 38°01'41"N, 122°46'50"E). To evaluate movement and habitat use in areas with contrasting habitats, nine frogs were tagged at Big Lagoon (37°51′36″N, 122°34′29″E), and two were tagged at Tomales Point (38°09'19"N, 122°54'43"E; Fig. 1).

Most of the Greater Olema Valley was characterized by a mixture of grazed and ungrazed grasslands interspersed with seasonal drainages with California bay (Umbellularia californica) and coast live oak (Quercus agrifolia). The west side of the valley was predominantly a Douglas fir forest (Pseudotsuga menziesii). Olema and Pine Gulch Creeks had well-defined riparian zones composed of California bay, red alder (Alnus rubra), willow (Salix spp.), big-leaf maple (Acer macrophyllum), and Douglas fir, with an understory dominated by blackberry (Rubus discolor), poison oak (Toxicodendron diversilobum), stinging nettles (Urtica dioica), and western sword fern (Polystichum munitum). Within the valley, there were 24 R. draytonii breeding sites. Fourteen of these were artificial stock ponds, and the others were naturally occurring ponds or marshes. Aquatic vegetation was predominantly cattails (*Typha* spp.), pennywort (*Hydrocotyle verticillata*), and rushes (*Juncus* spp.). About half of the ponds were seasonal, whereas the others usually held water all year. Study sites within the Olema Valley were selected to represent a range of habitats and because there was a sufficiently large *R. draytonii* population at each of the study sites.

The Big Lagoon study site consisted of a cattail marsh with a seasonal creek (Green Gulch Creek) that flowed into it. The marsh had several small areas where water depth was 1.0-1.5 m during the winter, but most of the marsh was covered by < 0.25 m of water, even during the wet season. A levee on the north side separated the marsh from a permanent creek (Redwood Creek), but a set of culverts allowed water to enter the marsh during higher winter flows. Water retention in the marsh varied with rainfall but was also influenced by how much water the National Park Service allowed to pass through flood gates on the culverts. The Tomales Point study site was a nonbreeding site at a seasonal seep. The dominant vegetation was coyote brush (*Baccharis pilularis*), with a few wax myrtle (Myrica californica). The nearest breeding pond was 650 m away.

Field methods.—Frogs were caught at night either with a dip net or by hand. We marked each frog with a passive integrated transponder (PIT) tag (TX1400L, Biomark, Meridian, ID; www.biomark.com) for individual identification and recorded sex, snout-vent length (SVL), and mass. Each frog was radiotagged by attaching a transmitter (model BD-2G, Holohil Systems Ltd., Carp, Ontario, Canada; www.holohil.com) to a belt of aluminum beaded chain that was slipped over the frog's extended rear legs and up onto the waist (Rathbun and Murphey, 1996). The transmitters were either a dull green or light brown color. The aluminum belt was painted flat black to eliminate reflections. The smallest frog we radiotagged was 32 g, and the mass of the transmitter and belt was approximately 2.1 g (6% of the frog's mass). When possible, we recaptured frogs before the battery died (20week life) and fitted a new transmitter. We tagged frogs during all months of the year except August, with most being tagged just prior to, or during, the December to March breeding season.

A total of 123 individual frogs was radiotagged (47 females, 76 males) between 5 November 1997 and 1 May 2003 at eight sites (Table 1). Twenty-three frogs were consecutively fitted with two transmitters, six frogs with three transmitters, and one frog wore six

		Number of	frogs tagged	Days tracked		
Site name	Habitat	М	F	Median $\bar{x} \pm SD$	Range	
Greater Olema	Valley					
СР	Permanent pond	44	31	86 89.6 ± 56.0	2–229	
MP	Seasonal pond	19	9	$76 \\ 80.5 \pm 47.3$	12–191	
AD	Seasonal pond	2	4	$127 \\ 139.0 \pm 75.0$	63–253	
BF	Seasonal pond	2	2	$112 \\ 109 \pm 74.9$	28–184	
WD	Permanent pond	0	1	134	134	
OT	Permanent pond	1	0	121	121	
All sites	_	68	47	$\begin{array}{r} 83\\91.3\pm56.1\end{array}$	5–253	
Big Lagoon						
BL	Permanent marsh	9	0	$\begin{array}{r} 68\\ 66.8 \pm 36.8\end{array}$	16–130	
Tomales Point						
TP	Seasonal seep and ditch	0	2	283	68–498	

TABLE 1. Sites where California Red-Legged Frogs (*Rana draytonii*) were fitted with radiotransmitters in Marin County, California. Figure 1 shows the geographic distribution of the sites.

consecutive transmitters. Seventy-eight percent of all transmitters (N = 166) were recovered. Three frogs (two females, one male) lost their transmitters but were subsequently recaptured and outfitted with new transmitters 54, 244, and 493 days later. This yielded 126 telemetry histories. We generally located radiotagged frogs twice weekly; more often when the frogs were making regular movements. We recaptured frogs every 3–4 weeks to check for injuries and ensure proper fit of the transmitter belt. Frogs were radiotagged for 91 days (median) at the Olema Valley study sites and for 67 and 283 days at the Big Lagoon and Tomales Point sites, respectively.

Frogs were located using a TR-2 receiver (Telonics, Mesa, AZ; www.telonics.com) or an R-1000 receiver (Communication Specialists, Inc., Orange, CA; www.com-spec.com) with a directional "H" or three-element yagi antenna. Fine scale location of transmitters was accomplished with a partially stripped coaxial cable inserted into a length of PVC pipe that was used as a probe (Fellers and Kleeman, 2003). Radio locations were only determined during the day.

Frog locations were plotted on a 7.5' USGS topographic map by noting proximity to a mapped feature or permanent local landmark (e.g., dead snag, fence corner). On a few occasions, locations were initially determined using a Garmin 12XL GPS unit (Garmin International Inc., Olathe, Kansas, www.garmin. com), but these locations were later visited and mapped on a topographic map using local

landmarks. Telemetry data were analyzed by plotting coordinates on digitized USGS topographic maps (1:24,000 scale) using Topo! software (National Geographic TOPO! Maps, San Francisco, California; maps.nationalgeographic. com/topo). Unless otherwise noted, movements represent straight-line distances between successive locations. For some frogs, we also calculated a longer distance moved based on locations between breeding and nonbreeding sites. For example, frogs found at several successively further distances along a riparian corridor were presumed to have followed the creek between sites. This typically resulted in a longer distance moved than would be obtained using a straightline distance and is referred to as presumed distance. Statistical analysis was conducted using Statistix (Version 7, Analytical Software, Tallahassee, Florida; www.statistix.com/home. html). We used  $\alpha = 0.05$  to evaluate statistical significance.

Olema Creek passed within 110 m of our main study site (CP) in Olema Valley (Fig. 1). To evaluate use of nonbreeding habitat, we conducted nocturnal surveys along all or part of a 4.8-km segment of Olema Creek where it flowed past our study area. One or two observers walked the creek while carefully searching both pools and stream banks for frogs. Observers used a combination of spotlights and binoculars to locate animals (Corben and Fellers, 2001). Radiotelemetry was not used as part of these nocturnal surveys. We believe that most of the frogs we located used the adjacent pond (CP) for breeding because (1) it

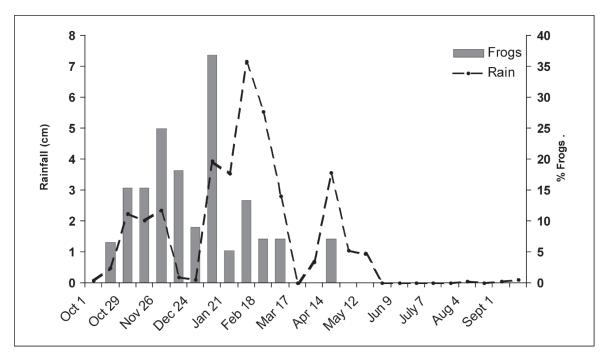


FIG. 2. Biweekly rainfall and the percent of radiotagged *Rana draytonii* that moved  $\geq$ 30 m between October 1999 and September 2000.

was the closest breeding site and (2) some of the frogs found along the creek had been fitted with radiotransmitters at the pond.

#### RESULTS

Frogs made small-scale movements (<30 m) throughout the year. Movements of <30 m could be made without leaving the breeding sites; hence, they were considered local, nondispersal. Movements  $\geq$  30 m generally coincided with winter rains, although some frogs did not move until their seasonal habitat was on the verge of completely drying. In general, frogs moved toward breeding ponds with the onset of heavy winter rains. Frogs departed from breeding ponds at varying times throughout the rainy season, with some frogs remaining at permanent ponds all year. Some frogs made largescale movements during the dry season (May through October), as seasonal breeding sites dried. A regression of the percent of frogs that moved  $\geq$  30 m versus rain showed that more frogs moved with higher amounts of rain (P =0.006). We show rainfall and movements for the 1999-2000 season (Fig. 2), the year we had the most frogs simultaneously radiotagged.

Frog movements in the greater Olema Valley.— One hundred fifteen frogs were tracked for a mean of 91 days each (range = 5–253, Table 1). Median distance moved from the breeding site was 0 m, but for the 36 frogs that moved  $\geq$ 30 m, the median was 150 m (range = 30-1400 m, Table 2, Fig. 3). In many cases, frogs almost certainly moved more than the straightline distance between sites. This was confirmed with individuals that were located in transit. Presumed distance moved for those frogs that moved ≥30 m was 185 m (median, range = 30-1400 m).

A higher proportion of radiotagged females moved  $\geq$  30 m than males (13 of 68 males, 23 of 47 females,  $\chi^2 = 11.49$ , df = 1, P < 0.01). For frogs that moved  $\geq$ 30 m, distance traveled was not significantly different for males (N = 13)and females (N = 23; median = 210 vs. 140 m, respectively; Wilcoxon rank sum T = 1.22, P =0.22). Because some frogs lost their transmitters or were killed by predators (see below), the median distance moved might be greater than what we measured. Of the 36 frogs that moved  $\geq$  30 m, 22 (11 males, 11 females) reached a destination where they remained for at least two weeks. For these frogs, median distance traveled was 175 m. The median for these males and females was not significantly different (210 vs. 120 m; Wilcoxon rank sum T = 0.56, P =0.58), in part because of the large variability in distance traveled.

A higher proportion of females left breeding sites than males. At our main study site (CP), nine of 21 (43%) females left the breeding site, whereas only four of 25 (16%) males departed. Females left the breeding site sooner than males (1, 5, 5, 5, 12, 55, 60, 76, 92 days for females [median = 12]; 31, 38, 47, 69 days for males

			Distance r	Frogs that moved <30 n				
	Sex	Minimum	Median	Maximum	Mean	SD	Ν	Ν
Olema V	alley							
CP	Males	200	240	490	293	135	4	31
CP	Females	100	320	1400	421	416	10	14
MP	Males	270	270	270	270	_	1	18
MP	Females	150	150	150	150	0	2	7
AD	Males	_	_	_	_	_	0	2
AD	Females	30	80	90	70	28	4	0
BF	Males	80	80	80	80	_	1	1
BF	Females	40	95	150	95	78	2	0
WD	Males	_	_	_	_	_	0	0
WD	Females	_	_	_	_	_	0	1
OT	Males	560	560	560	560	_	1	0
OT	Females	-	-	-	-	-	0	0
Big Lage	oon							
BL	Males	30	105	390	158	136	6	3
	Females	-	_	_	-	-	0	0
Tomales	Point							
TP	Males	_	_	_	_	_	0	0
TP	Females	30	40	50	40	14	2	0

TABLE 2. Distance moved for 110 California Red-Legged Frogs (*Rana draytonii*) with radiotransmitters at three study sites in Marin County, California. Sixteen frogs radiotagged at nonbreeding sites are not included in this tabulation.

[median = 42.5]), but the sample size was small, and the difference was not significant (T = 0.61, df = 11, P = 0.55).

Some of the dispersing frogs moved well away from the breeding site. One female (10.7 cm SVL) left the pond at our main study area (CP), crossed Olema Creek (the primary nonbreeding area) and stopped at a pond 320 m from the breeding pond. Two females (10.9 and 10.1 cm SVL) moved from CP, across Olema Creek and eventually resided in marshes, 0.88 and 1.02 km from the breeding site. Another female (10.6 cm SVL) moved down Olema Creek and up a small tributary for a total distance of 2.8 km (see individual case histories below).

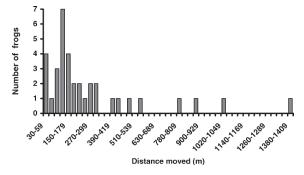


FIG. 3. Straight-line distance moved for all radiotagged Greater Olema Valley frogs that traveled  $\geq$ 30 m. Median = 185 m, N = 36.

Fourteen of the breeding sites in the Greater Olema Valley were stock ponds surrounded by pastures. At these sites, all frogs that left the breeding site had to cross heavily grazed grassland to reach another pond or the riparian area. Frogs moved directly across these fields, typically traveling the most direct route to their destination. Movements of 100-200 m across open grasslands were common. With one exception, movements taking more than one night were along riparian corridors. One frog, however, spent five days sitting in a small clump of rushes in an open grassland (45 m from the breeding pond) before moving another 100 m to a small riparian area where it spent the next 50 days.

In two instances, we radiotagged females that appeared to have recently laid eggs (i.e., gaunt sides, conspicuously loose skin). Both frogs left the breeding pond within two days and moved to a seasonal marsh 800 m away. One frog took 32 days (5 December 1997 to 5 January 1998), whereas the other took five days (14-19 January 2000). A gravid female was fitted with a transmitter at a seasonal pond on 29 January 2001. By 8 February 2001, she had moved to an adjoining swale dominated by rushes. When captured on 28 February 2001, she had laid her eggs, as indicated by a sudden drop in mass. By 3 April 2001, she had moved 150 m to a riparian area where she remained until the transmitter was removed on 1 August 2001.

Frog movements at Big Lagoon.—The nine male frogs at this site moved a median distance of 70 m (0-390 m, Table 2). Frogs made smallscale movements (<30 m) throughout the time they were radiotagged (26 December 2002 through 3 June 2003). Most movements were between three of the deeper parts of the marsh, but one frog moved 390 m up Green Gulch Creek (when part of the marsh dried), to a seasonal creek that flowed into the marsh system. The other frogs moved to the only remaining pool at the west edge of the marsh, 50-75 m away. Most frogs did not use the riparian zone along the adjacent Redwood Creek. One individual spent four weeks there, and another frog moved to the riparian zone just before it lost its transmitter. We found frogs in the riparian area during only one nocturnal survey, although we regularly found them in the marsh or adjacent cattails.

Frog movements at Tomales Point.-The two female frogs radiotagged at this site (6.7 and 10.6 cm SVL) were relatively sedentary and apparently did not move to a breeding site. They had transmitters for an average of 283 days (68 and 498 days). Both frogs moved >30 m, with a mean of 65 m (Table 2). Although it might have been possible for the female that we tracked for 498 days to have moved to a breeding pond, laid eggs, and returned to her nonbreeding site without our noticing her absence, the gradual increase in mass throughout the time we tracked her indicated that this did not happen, and she apparently did not breed during the time we radiotracked her.

Use of riparian habitat.-On six of the 21 nocturnal stream surveys, there were  $\geq$ 4 frogs per 100 m of stream, and one survey located seven frogs per 100 m (2 September 1999). Because radiotagged frogs known to be present (i.e., located during the same day by telemetry and also found along the creek on subsequent days) were frequently not seen during nocturnal surveys, the number of frogs along the creek was greater than what we observed, but it is not possible to determine by how much. For example, during a nocturnal survey on 5 July 2000, we observed one of the radiotagged frogs known to be along the creek, but we did not find two other radiotagged frogs whose presence had been confirmed earlier that day. Similarly, a nocturnal survey on 3 August 2000 did not detect either of two radiotagged frogs known to be present earlier that day; however, two untagged adults and nine subadults (<5.5 cm SVL) were observed. Nocturnal surveys also suggested that frogs tended to concentrate along portions of the creek nearest the breeding sites (Fig. 4).

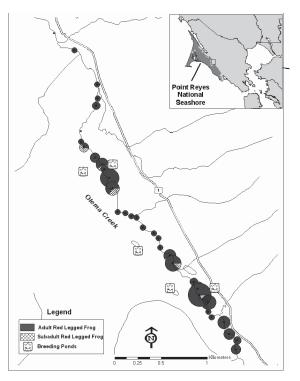


FIG. 4. Distribution of *Rana draytonii* along Olema Creek as detected during nocturnal surveys 4–6 October 1999. The distribution of frogs was similar during other surveys. Circles represent frogs, and size of each circle indicates relative number of frogs.

Diurnal behavior.—We conducted our radiotracking during the day and were frequently able to confirm visually the exact location of frogs with transmitters. This allowed us to evaluate diurnal microhabitat use. It was not unusual to find California Red-Legged Frogs basking in full sun, immediately adjacent to the water. Although we observed this behavior primarily at breeding ponds, occasionally frogs were found in similar situations in nonbreeding riparian areas.

Frogs that were not basking used a variety of cover. In permanent ponds, they sat entirely underwater in the deeper portions of the pond (>0.75 m), usually in association with the emergent vegetation. At sites with deeper water, R. draytonii sat on the bank in close proximity to the water. In shallow, seasonal ponds (<0.4 m deep), frogs were usually under vegetation (e.g., rushes, blackberries, hedge nettles [Stachys ajugoides]) at the edge of the pond. In seeps or seasonal streams, frogs were found under blackberry thickets interspersed with poison oak, covote brush, hedge nettles, stinging nettles, and mats of rushes. Along permanent streams, frogs were found in or near pools with a depth of >0.5 m and associated with structurally complex cover (e.g., root mass, logjam, or overhanging bank). When on stream

281

banks, frogs sat under dense vegetation as far as 2 m from the water's edge. Vegetation was predominantly western swordfern, blackberry, hedge nettle, and giant horsetail (*Equisetum telmateia*).

Predation.-We documented two predation events and had circumstantial evidence for three others. A Great Blue Heron (Ardea herodia) ate two radiotagged frogs sometime between 4 and 18 January 2000 (Fellers and Wood, 2004). Three other frogs appeared to have been killed by predators. The skin, bones, and transmitter of one frog were found at the base of a guanostained fence post, along with a number of raptor pellets. Two frogs appeared to have been killed by mammalian predators, although we have no definitive proof. We found the skin, internal organs, PIT tag, and transmitter of a frog in a riparian corridor, and we found pieces of skin, internal organs, and the transmitter of another frog. One frog appeared to have been stepped on by a large, hoofed animal, probably one of the cows that grazed in the pasture. We found the anterior two-thirds of the frog in a pasture; the posterior portion of the frog had been crushed into the ground. Although we did not observe any predation during our nocturnal surveys along Olema Creek, we regularly observed raccoons (Procyon lotor), Black-Crowned Night Herons (Nycticorax nycticorax), river otters (Lutra canadensis), and nonnative rats (Rattus spp.). At breeding sites, we observed Great Blue Herons, but other potential predators probably visited the ponds and marshes at times.

Injuries from transmitters.-Twenty frogs had injuries from transmitter belts (17% of radiotagged frogs). The most common injury consisted of small abrasions on the dorsum or, less frequently, a midventral abrasion. The wounds generally healed within two weeks if frogs were fitted with transmitter belts with one additional bead. Eleven of the injured frogs were reweighed at the time the wound was noticed, and all frogs had gained mass since their initial capture. We reweighed 23 uninjured frogs with transmitters; 18 (78%) gained mass after initial capture, two (9%) had no change, and three (13%) lost mass. The mean mass gain for these frogs was 21%, and mean mass loss was 8.5%. Overall, we do not believe that the minor injuries caused by the transmitter belt interfered with frog behavior.

*Individual case histories.*—The frog that was radiotagged for the longest time had a transmitter for 16 months. When first caught on 12 May 1999, the female frog weighed 42.5 g and was 7.3 cm SVL. It grew steadily and was 77.7 g and 8.9 cm when last captured on 14 June 2000.

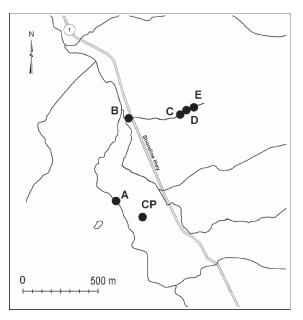


FIG. 5. Movements of a female radiotagged *Rana draytonii* that was captured at a breeding pond (CP) and subsequently moved to sites A–E. The frog was 10.5 cm (SVL) and was tagged during the breeding season (19 January 1999). The straight-line distance from CP to E was 1.4 km, but the presumed distance moved was 2.8 km.

The frog was caught in a puddle ( $1.0 \times 0.3$  m, 15 cm deep) that had formed in a rut created by a roadside seep along an abandoned dirt road on Tomales Point (site TP, Fig. 1). For 16 months, this frog made frequent, small (2-10 m) movements, within a 200-m<sup>2</sup> area surrounding the seep. The furthest the frog moved was 110 m. It used a variety of microhabitats: underwater in the puddle, underground in small mammal burrows, partially buried in duff beneath wax myrtle and coyote brush, and sitting in small clumps of grass. Although this frog was an adult female, it did not move to the nearest known breeding pond (650 m away) during the winter of 1999-2000. On 1 September 2000, the transmitter was found in the grass beneath a coyote brush, 6 m from where the frog had last been found. We could not determine whether the transmitter had fallen off or whether the frog had met a predator.

One frog moved at least 1.4 km. This was a female (10.5 cm SVL) tagged at a breeding pond (CP) during the breeding season (19 January 1999). On 23 January 1999, she was located under a fallen tree, 240 m away in Olema Creek. On 30 January 1999, she had moved a minimum of 650 m to a pool in a small tributary of Olema Creek (Fig. 5). It is quite likely that the frog followed Olema Creek to the tributary, which would have required a movement of 1.0 km to reach that point. By 14 February 1999, the frog had moved either across a two-lane, paved country road or under the road through a culvert. She then moved up a small, seasonal drainage, 430 m from her previous location. The presumed distance traveled by this frog was 2.8 km. The frog stayed in this drainage and was often found under blackberry brambles and thickets of poison oak along the stream. The transmitter and remains of the frog were found on 14 June 1999, apparently the victim of avian predation (see Predation above).

#### DISCUSSION

The California Red-Legged Frog recovery plan emphasizes protection and recovery of breeding habitat (U.S. Fish and Wildlife Service, 2002), and most protection efforts have focused on breeding sites. One challenge in managing *R. draytonii* has been the paucity of data on habitat use beyond the breeding site, thus making it difficult to evaluate requirements for nonbreeding habitat and connecting migration corridors. Our study provides insights into *R. draytonii* movement and habitat use in a coastal environment and establishes a basis for making decisions about habitat protection.

Migration of *R. draytonii* from the breeding sites we studied was highly variable. Some frogs remained at breeding ponds all year, whereas others spent only a few days. Twothirds of female frogs and 25% of male frogs moved from breeding areas. Bulger et al. (2003) found that 80-90% of R. draytonii remained at one breeding site all year. In our study, frogs at sites that held water only seasonally often lingered until the site was on the verge of drying completely. Because all our study sites were in an area where summer fog is the norm (E. J. Null, NOAA Technical Memorandum, NWS WR-126, 1995; Lundquist and Bourcy, 2000), frogs could move throughout much of the summer with little risk of desiccation. Once along the riparian corridor, frogs used a range of microhabitats that provided both cover and moisture, especially blackberry thickets, logjams, and root tangles at the base of standing or fallen trees. Regular summer dispersal across open grassland is in contrast to what Rothermel and Semlitsch (2002) reported for juvenile Ambystoma and Bufo in Missouri where desiccation appeared to be a significant factor affecting amphibian dispersal across fields adjacent to their artificial pools.

There was a wide range of migration distances (30–1400 m, straight-line). Our main study pond was 110 m from a riparian zone that provided suitable nonbreeding habitat (CP, Fig. 1). For frogs that moved at least 30 m from the pond, the median movement was 150 m. Relatively short movements from breeding sites was also suggested by the nocturnal surveys of riparian vegetation along Olema Creek (Fig. 4) where we found more frogs in areas adjacent to breeding sites. At Big Lagoon, where nonbreeding habitat was immediately adjacent to breeding sites in the marsh, the median distance moved was 68 m, and none of the frogs went more than 390 m. These short movements were similar to Columbia Spotted Frogs (Rana luteiventris); Pilliod et al. (2002) found no significant difference between males ( $\bar{x} = 367 \text{ m moved}$ ) and females ( $\bar{x} = 354$  m). Bartelt et al. (2004) reported that male Western Toads (Bufo boreas) traveled shorter distances from breeding ponds than females (581 m  $\pm$  98 and 1105 m  $\pm$  272, respectively). Because there is relatively little data on these species, it is not possible to determine whether the differences are speciesspecific or dependent on the local landscape.

When frogs moved beyond the minimum distance to reach a suitable nonbreeding area, some followed riparian corridors, whereas others moved directly toward sites where they stayed through the nonbreeding season. Because most frogs moved from a breeding pond, across a grazed pasture, to a riparian area, they did not have the option of following a waterway during their initial movement. This is similar to Bulger et al. (2003), where frogs mostly moved in a straight line without apparent regard to intervening vegetation or topography. However, there were a few individuals in each study that moved primarily along a creek.

During our nocturnal surveys of Olema Creek, some frogs were well hidden by cover, whereas others sat fully exposed on top of logs or even on the sandy edge of the creek, places where California Red-Legged Frogs were rarely seen during the day. It is unclear why some individuals spent hours exposed to predation when good cover was only 1–2 m away. A frog in the open would have a wider field of view to detect and capture prey, perhaps partially mitigating the risk of predation. We documented predation by a Great Blue Heron, had evidence of predation by a raptor, and suspect that two other frogs succumbed to mammal predators. Additionally, we occasionally observed predators along Olema Creek including raccoons, Black-Crowned Night Herons, river otters, and nonnative rats (Rattus spp.). At a marsh that was not part of this study, we regularly observed night herons, and R. drayto*nii* were so skittish that we have never been able to capture a single individual.

Based on their findings that 60% of the radiotagged frogs stayed within 30 m of their

breeding sites, Bulger et al. (2003) recommend a 100-m buffer with an array of suitable habitat elements around breeding sites. Although that might work well at their study area, we do not believe that a simple, symmetrical buffer is typically adequate. At our main study site, a 100m buffer would not include any suitable nonbreeding habitat. Because the pond completely dries every 4–5 years, such a buffer would result in the elimination of the local population. By contrast, the Big Lagoon site has suitable nonbreeding habitat immediately adjacent to the marsh. At that site, maintaining the marsh habitat and the natural water levels would likely be adequate for long-term survival.

Three important conclusions from our study are that (1) most frogs move away from breeding sites, but only a few move farther than the nearest suitable nonbreeding habitat; (2) the distance moved is highly site-dependent, as influenced by the local landscape; and (3) land managers should not use average dispersal or migration distances (from our study, or any other) to make decisions about habitat requirements. A herpetologist familiar with *R. draytonii* ecology needs to assess the local habitat requirements.

*Recommendations.*—Maintaining populations of pond-breeding amphibians, such as *R. draytonii*, requires that all essential habitat components be protected. These include (1) breeding habitat, (2) nonbreeding habitat, and (3) migration corridors. In addition, a buffer is needed around all three areas to ensure that outside activities do not degrade any of the three habitat components.

For *R. draytonii*, nonbreeding habitats must have several characteristics: (1) sufficient moisture to allow amphibians to survive throughout the nonbreeding season (up to 11 months), (2) sufficient cover to moderate temperatures during the warmest and coldest times of the year, and (3) protection (e.g., deep pools in a stream or complex cover such as root masses or thick vegetation) from predators such as raptors (hawks and owls), herons, and small carnivores.

Breeding habitat has been well described (U.S. Fish and Wildlife Service, 2002; Stebbins 2003) and receives most of the management attention (US Fish and Wildlife Service, 2002). However, nonbreeding areas are equally important because some *R. draytonii* spend only a week or two at breeding sites, yet nonbreeding habitat is frequently ignored and is generally not well understood. Aside from our study, Bulger et al. (2003) are the only ones to publish details on the use of nonbreeding habitat by *R. draytonii*. Additional research on nonbreeding habitat is needed, especially in

other parts of range where *R. draytonii* occupy a diversity of ecotypes.

Migration corridors are frequently not considered in management planning for California Red-Legged Frogs. Our work and that of Bulger et al. (2003) indicate that R. draytonii migration corridors can be less "pristine" (e.g., closely grazed fields, plowed agricultural land) than the other two habitat components. Bulger et al. (2003) observed that R. draytonii did not avoid or prefer any landscape feature or vegetation type. They tracked frogs that crossed agricultural land, including recently tilled fields and areas with maturing crops. Our study site did not encompass such a diversity of habitats, but frogs readily traversed pastureland that surrounded the breeding sites. While conducting other research, we observed five frogs crossing a recently burned field as they moved toward a breeding pond during the first rain of the season (25 October 2004). Both our study and that of Bulger et al. were conducted at study sites near the Pacific Ocean where summer fog and high relatively humidity reduce the risk of desiccation for dispersing amphibians (E. J. Null, NOAA Technical Memorandum, NSW, WR-126, 1995; Lundquist and Bourcy, 2000). Though desiccation was probably not a problem for frogs in our study, amphibians are often faced with a variety of hazards including roads (Gibbs, 1998; Vos and Chardon, 1998), degradation of habitat (Vos and Stumpel, 1995; Findlay and Houlahan, 1997; Gibbs, 1998), and predation (Gibbs, 1998), as well as desiccation (Rothermel and Semlitsch, 2002; Mazerolle and Desrochers, 2005).

Buffers are often described as the area that frogs use near breeding sites. Such usage combines migration corridors and nonbreeding habitat, as well as the adjacent area necessary to protect these areas. We believe that it is important to identify each habitat component separately and then include a buffer that is sufficiently large to maintain the integrity of each habitat type. Such a buffer cannot be defined as a standard distance but rather as an area sufficient to maintain the essential features of the amphibian habitat. Hence, a riparian area adjacent to a forest undergoing clear-cut logging would need a relatively large buffer to protect it from increased sedimentation and the increased temperature fluctuations that occur after logging. Less severe habitat modifications adjacent to amphibian habitat could be accommodated with a narrower buffer (deMaynadier and Hunter, 1995, 1999; Gibbs, 1998).

Buffers are typically described as a fixedwidth boundary around breeding sites (Semlitsch and Bodie, 2003). However, the distribution of habitat components is rarely symmetrical

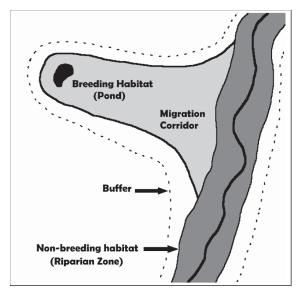


FIG. 6. Stylized diagram of typical *Rana draytonii* habitat showing the critical habitat components and the required asymmetrical buffer.

(e.g., a pond with frogs dispersing in all directions to surrounding nonbreeding area). At all of our study sites, frogs moved primarily in one direction, often toward the nearest riparian area, similar to what Rothermel and Semlitsch (2002) reported. As suggested by Regosin et al. (2005), protecting frog habitat in these situations requires an asymmetrical conservation area (Fig. 6). Because it is often not obvious from casual inspection what areas frogs are relying upon, delineating each habitat component and determining the size of a suitable buffer requires either an expert opinion from a field biologist with extensive experience with the species of interest or a field study to monitor radiotagged frogs.

The design of protected areas is often developed with the unstated assumption that only the most sedentary frogs can or need to be protected. The resulting systematic loss of individuals that move the farthest can have unexpected and unwanted effects (Gill, 1978; Berven and Grundzien, 1990). Long-distance dispersers are the individuals most likely to reach distant breeding sites and, hence, provide the genetic diversity that is important for survival of small populations. Additionally, those same dispersers are the individuals that would colonize sites where frogs have been lost because of random events that periodically extirpate local populations. By consistently selecting against frogs that disperse the greatest distances, the effective size of a metapopulation is reduced and the size of the effective breeding population is smaller; smaller breeding populations have a greater likelihood of extirpation (Gill, 1978; Sjogren, 1991).

Acknowledgments.--We thank S. Berendt, C. Corben, K. Freel, G. Guscio, and L. Wood for assistance with fieldwork. W. Perry prepared the maps. J. Fellers, G. Rathbun, and N. Scott offered useful comments on the manuscript. Fieldwork was funded by the U.S. Geological Survey, U.S. Fish and Wildlife Service, and the National Park Service. Collecting permits were provided by the National Park Service and the U.S. Fish and Wildlife Service. The Vedanta Society allowed us to radiotrack frogs on their property. This research was conducted under California Department of Fish and Game and U.S. Fish and Wildlife Service research collecting permits. The authors have complied with all applicable institutional Animal Care guidelines.

#### LITERATURE CITED

- BARTELT, P. E., C. R. PETERSON, AND R. W. KLAVER. 2004. Sexual differences in the post-breeding movements and habitats selected by Western Toads (*Bufo boreas*) in southeastern Idaho. Herpetologica 60:455–467.
- BERVEN, K. A., AND T. A. GRUDZIEN. 1990. Dispersal in the Wood Frog (*Rana sylvatica*): implications for genetic population structure. Evolution 44:2047– 2056.
- BODIE, J. R. 2001. Stream and riparian management for freshwater turtles. Journal of Environmental Management 62:443–455.
- BULGER, J. B., N. J. SCOTT JR., AND R. B. SEYMOUR. 2003. Terrestrial activity and conservation of adult California Red-legged Frogs *Rana aurora draytonii* in coastal forests and grasslands. Biological Conservation 110:85–95.
- BURKE, V. J., AND J. W. GIBBONS. 1995. Terrestrial buffer zones and wetland conservation: a case study of freshwater turtles in Carolina Bay. Conservation Biology 9:1365–1369.
- CORBEN, C., AND G. M. FELLERS. 2001. A technique for detecting eyeshine of amphibians and reptiles. Herpetological Review 32:89–91.
- DeMAYNADIER, P. G., AND M. L. HUNTER JR. 1995. The relationship between forest management and amphibian ecology: a review of the North American literature. Environmental Reviews 3:230– 261.
  - . 1999. Forest canopy closure and juvenile emigration by pool-breeding amphibians in Maine. Journal of Wildlife Management 63:441–450.
- FELLERS, G. M. 2005. *Rana draytonii* Baird and Girard 1852, California Red-Legged Frog. *In M. Lannoo* (ed.), Amphibian Declines: The Conservation Status of United States Species. Volume 2, pp. 552–554. University of California Press, Berkeley.
- FELLERS, G. M., AND P. M. KLEEMAN. 2003. A technique for locating and recovering radiotransmitters at close range. Herpetological Review 34:123.

- FELLERS, G. M., AND L. WOOD. 2004. Rana aurora draytonii (California Red-Legged Frog) predation. Herpetological Review 35:163.
- FINDLAY, C. S., AND J. HOULAHAN. 1997. Anthropogenic correlates of species richness in Southeastern Ontario wetlands. Conservation Biology 11:1000– 1009.
- GIBBONS, J. W., J. W. COKER, AND T. M. MURPHY. 1977. Selected aspects of the life history of the Rainbow Snake (*Farancia erytrogamma*). Herpetologica 33:276–281.
- GIBBS, J. P. 1998. Amphibian movements in response to forest edges, roads, and streambeds in southern New England. Journal of Wildlife Management 62:584–589.
- GILL, D. E. 1978. The metapopulation ecology of the Red-Spotted Newt, *Notophthalmus viridescens*. Ecological Monographs. 48:145–166.
- JENNINGS, M. R., AND M. P. HAYES. 1994. Amphibian and Reptile Species of Special Concern in California., California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova.
- JOLY, P., C. MIAUD, A. LEHMANN, AND O. GROLET. 2001. Habitat matrix effects on pond occupancy in newts. Conservation Biology 15:239–248.
- KEAST, A., AND E. S. MORTON (eds.). 1980, Migrant Birds in the Neotropics: Ecology, Behavior, Distribution, and Conservation. Smithsonian Institution Press, Washington, DC.
- LAMOUREUX, V. S., AND D. M. MADISON. 1999. Overwintering habitats of radio-implanted Green Frogs, *Rana clamitans*. Journal of Herpetology 33:430–435.
- LUNDQUIST, J. D., AND T. B. BOURCY. 2000. California and Oregon Humidity and Coastal Fog. Proceedings, 14th Conference on Boundary Layers and Turbulence. Aspen, CO.
- MADISON, D. M. 1997. The emigration of radioimplanted Spotted Salamanders, *Ambystoma maculatum*. Journal of Herpetology 31:542–552.
- MAZEROLLE, M. J., AND A. DESROCHERS. 2005. Landscape resistance to frog movements. Canadian Journal of Zoology 83:455–464.
- PILLIOD, D. S., C. R. PETERSON, AND P. I. RITSON. 2002. Seasonal migration of Columbia Spotted Frogs (*Rana luteiventris*) among complementary resources in a high mountain basin. Canadian Journal of Zoology 80:1849–1862.

- POPE, S. E., L. FAHRIG, AND H. G. MERRIAM. 2000. Landscape complementation and metapopulation effects on Leopard Frog populations. Ecology 81:2498–2508.
- RATHBUN, G. B., AND T. G. MURPHEY. 1996. Evaluation of a radio-belt for ranid frogs. Herpetological Review 27:187–189.
- REGOSIN, J. V., B. S. WINDMILLER, R. N. HOMAN, AND J. M. REED. 2005. Variation in terrestrial habitat use by four pool-breeding amphibian species. Journal of Wildlife Management 69:1481–1493.
- RICHTER, S., J. E. YOUNG, R. A. SEIGEL, AND G. N. JOHNSON. 2001. Post-breeding movements of the Dark Gopher Frog, *Rana sevosa* Goin and Netting: implications for conservation and management. Journal of Herpetology 35:316–321.
- ROTHERMEL, R. B., AND R. D. SEMLITSCH. 2002. An experimental investigation of landscape resistance of forest versus old-field habitats to emigrating juvenile amphibians. Conservation Biology 16: 1324–1332.
- SEMLITSCH, R. D., AND J. R. BODIE. 2003. Biological criteria for buffer zones around wetlands and riparian habitats for amphibians and reptiles. Conservation Biology 17:1219–1228.
- SJOGREN, P. 1991. Extinction and isolation gradients in metapopulations: the case of the Pool Frog (*Rana lessonae*). Biological Journal of the Linnean Society 42:135–147.
- STEBBINS, R. C. 2003. A Field Guide to Western Reptiles and Amphibians., Houghton Mifflin, New York.
- U.S. FISH AND WILDLIFE SERVICE. 2002. Recovery plan for the California Red-Legged Frog (*Rana aurora draytonii*). U.S. Fish and Wildlife Service, Portland, OR.
- Vos, C. C., AND J. P. CHARDON. 1998. Effects of habitat fragmentation and road density on the distribution pattern of the Moor Frog, *Rana arvalis*. Journal of Applied Ecology 35:44–56.
- Vos, C. C., AND A. H. P. STUMPEL 1995. Comparison of habitat-isolation parameters in relation to fragmented distribution patterns in the Tree Frog (*Hyla arborea*). Landscape Ecology 11:203–214.

Accepted: 20 January 2007.

# Attachment 4

# MOVEMENT PATTERNS AND MIGRATION DISTANCES IN AN UPLAND POPULATION OF CALIFORNIA TIGER SALAMANDER (AMBYSTOMA CALIFORNIENSE)

#### SUSAN G. ORLOFF

Ibis Environmental Inc., 340 Coleman Dr. San Rafael, California 94901, USA, email: Sue@ibisenvironmental.com

Abstract.—During five winter breeding seasons (October-April, 2000–2005), I investigated the migratory movements of an upland population of California Tiger Salamander (*Ambystoma californiense*) in Contra Costa County, California. I used a drift fence and pitfall trap array to partially enclose a proposed 27 ha housing project and capture migrating adult and juvenile salamanders. The study objective was to assess movement patterns and migration distances for upland life stages during an effort to translocate all captured salamanders and reduce their mortality from future development at the study site. I recorded substantial numbers of adult and juvenile *A. californiense* (90–417 annually) farther from breeding ponds than previously reported. The majority of salamanders were captured at least 800 m from the nearest breeding pond while a smaller number of salamanders were captured as far as 2.2 km from the nearest breeding pond. The study indicates that recent recommendations to protect 630 m of upland habitat adjacent to breeding ponds may leave large portions of upland life stages at risk. Adults appeared to exhibit fidelity to upland habitat, returning close to the initial point of capture. In situations where translocation is used to remove salamanders from upland habitats subject to development, results suggest it may take several years to successfully relocate a high proportion of individuals in the population.

Key Words.—Ambystoma californiense; buffer zones; California Tiger Salamander; conservation; pitfall trap; migration distance; terrestrial movements; upland ecology.

#### INTRODUCTION

Conserving terrestrial habitat surrounding wetlands is essential for maintaining populations of many pondbreeding amphibians (Semlitsch and Jensen 2001; Semlitsch 2002; Semlitsch and Bodie 2003). Upland habitat is critical for feeding, refuge, and migratory movements of juvenile and adult life stages (Semlitsch 1998; Semlitsch and Jensen 2001). Recent studies emphasize that amphibian population viability can be extremely sensitive to survivorship of upland life stages (Biek et al. 2002; Trenham and Shaffer 2005). Further, the importance of specific areas of upland habitat and preferences for a particular migratory route have been reported for several species of ambystomatid salamanders (Shoop 1968; Stenhouse 1985; Trenham and Cook 2008).

Despite research documenting the biological importance of terrestrial habitat for amphibians, the extent and location of appropriate areas required to sustain viable populations are poorly understood. Several recent studies estimated the area of terrestrial habitat needed to adequately protect amphibian populations, based on migration distances from multiple studies and species. Semlitsch (1998) estimated that a 164 m "buffer zone" would encompass 95% of most ambystomatid salamander populations (based on six species). Semlitsch and Bodie (2003) estimated that "core terrestrial habitat" for 13 species of salamanders

ranged from 117 to 218 m from the wetland. Rittenhouse and Semlitsch (2007) found that 95% of the adult breeding population for six species of salamanders occurs within 245 m of the wetland boundaries. However, because these studies were primarily of eastern species that typically inhabit forest or woodlands, the resulting recommendations may not be well suited to western *Ambystoma* species associated with grasslands. Although much remains to be learned regarding the appropriate size of buffer zones, it is clear that identifying and protecting upland habitat should be a management priority, especially for rare and endangered species (Marsh and Trenham 2001; Semlitsch 2007; Harper et al. 2008).

The California Tiger Salamander, Ambystoma californiense, is listed as a threatened species by the U.S. Fish and Wildlife Service (2004) and the state of California (California Fish and Game Commission 2010). The range of this species is restricted to grasslands and foothills of central California (Storer 1925). Adults spend the majority of their life cycle in small-mammal burrows in upland habitat (Loredo et al. 1996). With the onset of winter rains, adults emerge from underground terrestrial retreats and migrate to ponds for reproduction (Loredo and Van Vuren 1996). The importance of maintaining upland habitat adjacent to breeding ponds for A. californiense has only recently been emphasized (Trenham 2001; Trenham and Shaffer 2005). A more detailed under-

Copyright © 2011. Susan Orloff. All Rights Reserved.

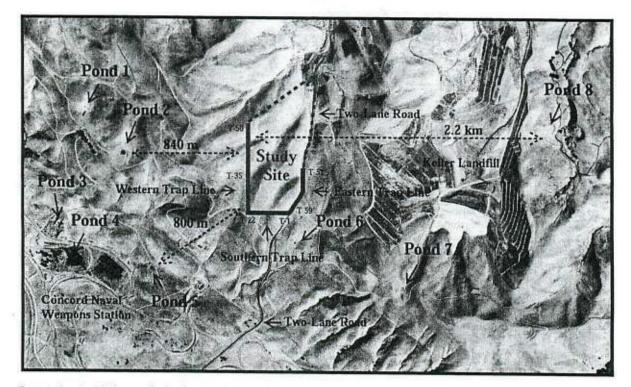


FIGURE 1. Aerial photograph showing the closest breeding ponds to the study site in Contra Costa County, California, USA (from <a href="http://www.ternaserver.com">http://www.ternaserver.com</a>; [Accessed 1 August 2002]). Bold red solid lines indicate trap line segments (western, southern, and eastern) along boundaries of the study site, T represents trap number, and dashed lines with arrows at both ends indicate distances from the western trap line to nearest breeding ponds. Ponds 1–5 are located on Concord Naval Weapons Station (CNWS) and Ponds 6–8 are located on a landfill adjacent to the study site

standing of migratory movements and activity patterns in upland habitats is fundamental to managing this species (Trenham and Shaffer 2005).

This paper presents findings of a five-year study investigating the migratory movements of upland life stages of a population of A. californiense at a proposed housing development. The primary objectives of the study were (1) to characterize movement patterns and timing of movements during the breeding season, (2) to measure distances from capture locations to closest known breeding ponds, and (3) to test for relationships between the timing of migratory movements and environmental parameters. An additional objective of the study was to reduce direct mortality from future development at the study site by translocating all captured salamanders outside the study site and restricting reentry. Conservation strategies involving translocations are a common wildlife management tool (Griffith et al. 1989; Fischer and Lindenmayer 2000; Dodd 2005). Although the effectiveness of translocation strategies has been subject to controversy (e.g., Dodd and Seigel 1991; Seigel and Dodd 2002; Trenham and Marsh 2002), a recent review has shown improved success rates for some species of amphibians when a critical minimum number of individuals are translocated (Germano and

Bishop 2008). Relatively few translocation studies have been conducted on amphibians (Germano and Bishop 2008) or addressed human and wildlife conflicts (e.g., Cooke and Oldham 1995; Rathbun and Schneider 2001), and none have assessed the efficacy of translocating adult amphibians within upland habitat.

#### MATERIALS AND METHODS

Study site.—The proposed housing development is located on the northern edge of the San Joaquin Valley in northeastern Contra Costa County, California. The 27-ha area consists of grazed annual grasslands on rolling to steep hills (elevation range = 213–274 m; Fig. 1). Two primary drainages traverse the site but amphibian breeding ponds are not present. Lands surrounding the site are primarily grazed grasslands. The Concord Naval Weapons Station (CNWS) is located to the west and south of the site and a privately owned, active landfill is located to the east and southeast.

Eight breeding ponds are known to occur near the study site (Fig. 1). To the west and southwest, the closest ponds are on CNWS (Ponds 1-5) and are the primary breeding ponds on CNWS lands (Stitt and Downard 2000; Shawn Smallwood, pers. comm.). To

# Orloff.-Movement patterns and migration distances of California Tiger Salamander.

the east and southeast, the closest ponds are located on the adjacent landfill (Ponds 6-8). To the north, no known breeding ponds occur within 2.5 km. I examined aerial photographs from several years (1999, 2000, 2004, and 2005) and USGS topographic maps, and found no other potential breeding ponds closer to the study site. Before the trapping study began, I conducted four night surveys during winter rain events to determine if A. californiense was present at the study site. During these initial surveys, I observed four adults at burrow entrances of California Ground Squirrels (Spermophilus beechevi) and thus commenced an intensive translocation effort.

Trapping techniques .- My field team and I (hereafter we) installed a drift fence and pitfall trap array along a partial perimeter (1.3 km) of the study site. The drift fence bordered the boundaries most likely to be used as movement corridors, and included the western, southern, and a portion of the eastern border of the study site (Fig. 1). We installed 118 pitfall traps (59 pairs of 7.5 L plastic buckets) located every 15 to 30 m along the inside and outside of the drift fence. We used a 0.9 m tall commercial quality silt fence buried 0.3 m underground, stretched taut, and secured by both wooden and steel fence posts. We placed elevated covers over the traps to provide shading and minimize predation, and placed a damp non-cellulose sponge in each trap to maintain moisture for captured salamanders. We replaced the drift fence and pitfall traps (i.e., trap line) each year of the study and repaired the fence line as needed to maintain its integrity as a barrier to movement.

Our surveys encompassed five winter breeding seasons, from October 2000 to April 2005 (hereafter, years 2000 to 2004). In 2001 and 2002, we increased the length of the trap line by installing nine pairs of pitfall traps along the eastern border of the study site. While the trap line encompassed over half the total perimeter of the proposed development, the entire area was not completely enclosed due to the large area of the site. We opened all traps at dusk on nights when the chance of rain was predicted to be 40% or greater and checked at dawn the following morning. Because amphibians are often active on the night after a heavy rain (Gibbons and Bennett 1974), we left the traps open on nights after a rain event that exceeded 0.6 cm, even when no rain was predicted for that night. At all other times the traps were closed. We immediately translocated individuals captured inside the trap line to small mammal burrows 15 to 100 m outside the development. We kept individuals captured outside the trap line outside and translocated them in the same manner.

For each capture, we recorded date, trap number, trap line side (inside or outside), sex (adults only), reproductive condition (reproductive or nonreproductive), snout-vent length (SVL), total length, and age class (adult or juvenile). We identified individuals

as adults if they had at least one of the following characteristics: keeled tail, swollen vent (reproductive males), gravid condition (reproductive females), or large body length (≥ 75 mm SVL; Trenham et al. 2000). We identified juveniles based on small body length (usually < 75 mm SVL; Loredo and Van Vuren 1996) and the absence of adult characteristics. Males were distinguished from females by the presence of a keeled tail, swollen vent, or proportionally longer tail (Petranka 1998; Searcy and Shaffer 2008). We recorded adultsized salamanders without other distinguishing characteristics as adults; these salamanders may have been subadults (≥ 1 year of age but not sexually mature) or salamanders returning from the ponds post breeding (i.e., non-reproductive). Because juvenile body lengths vary considerably (46-114 mm; Loredo and Van Vuren 1996) and can overlap adult sizes, we may have mistakenly classified some larger juveniles as adults in non-reproductive condition. In addition, we acquired two photographs of the dorsal surfaces of each captured salamander for individual identification.

*Environmental variables.*—In 2000 and 2001, 1 measured precipitation using a manual rain gauge located on site; the gauge was read and emptied when traps were opened at dusk and checked again at dawn the next morning. For the remainder of the study years, I used an automatic rain gauge (Hobo event logger, Onset Inc., Pocasset, MA., USA) to record hourly rain events (2.5 mm intervals). Air temperature was manually recorded on each morning traps were checked. I used additional data on hourly and yearly rainfall near the study site from California Department of Water Resources, California Data Exchange Center (available from <u>http://www.cdec.water.ca.gov</u> [last accessed 21 September 2006]).

Analyses.—I pooled daily capture data by week, year, sex, age class, and location (inside/outside trap line and trap line segment) as measures of salamander activity. I used the location of captures to infer likely movement patterns (i.e., attempting to leave or enter the study site, and directionality). To evaluate movement patterns within a breeding season, I divided capture data into early season (presumably migrating to breed) and late season (presumably returning from breeding) based on the temporal distribution of captures for all five study years combined.

To standardize for the variability in trapping effort (i.e., different number of traps per line segment and nights of trapping each year), I calculated capture rates (number of captures per 100 trap nights) for analyses. Distance calculations were measured as presumed straight line travel. Within each study year, I compared dorsal patterns in photographs to determine the number of intra-annual recaptures. Individual identification using photography has been employed successfully with amphibians that have unique patterns of coloration; unlike invasive marking techniques, this causes no harm to the animal (e.g., Donnelly et al. 1994; Doody 1995; Bailey 2004).

I used parametric statistics when data were normally distributed and non-parametric tests when data were not. To determine if recaptured individuals returned to a similar point from which they were initially trapped, the observed mean number of traps between initial and returning trap locations was compared with the expected mean number of traps under a uniformly random scenario (Shoop and Doty 1972). For this analysis, I pooled data from all five study years to obtain an adequate sample size and used only those individuals that were initially trapped early in the breeding season on the inside of the western trap line and then recaptured later in the season outside that same trap line segment (i.e., presumably returning to the study site after breeding). I used the western trap line data because it had the majority of returns and traps along this segment were evenly spaced providing the most accurate distance measurements between initial and returning trap locations.

I tested for annual and seasonal variation in capture numbers among all five study years. I used chi-square tests to determine if annual sex ratios differed significantly from an expected 1:1 ratio. I evaluated the association between seasonal rainfall (both early and late season) and the proportion of males and females captured both inside and outside the trap line using Pearson's correlation coefficient. I used the sign test to compare annual adult capture rates early in the season on the inside of the western trap line and capture rates later in the season outside that same trap line segment, and to compare annual rainfall between early and late seasons. I used Pearson's correlation coefficient to assess whether there was a negative association between translocation efforts and annual capture rates over time based on the proportions of inside versus outside captures, and to test for a relationship between annual on-site rainfall and annual capture rates.

I also analyzed within-year associations between environmental parameters and the number of *A. californiense* captured. To assess the influence of precipitation and temperature prior to capture, I used Spearman's rank correlation. This analysis used rainfall amounts 12 h prior to opening traps (i.e., day prior to capture), 12 h prior to checking traps (i.e., night of capture), and within 24 h prior to checking traps (total of day and night). In addition, I used Wilcoxon two-sample rank sum test to assess if rain at dusk on the night of capture or the night prior to opening the traps was associated with the number of captures. Precise measurements of rain using the automatic rain recorder (which allowed for analysis of rain amounts in intervals less than a 24-h period) were available only in 2002, 2003 and 2004. Of these three

TABLE 1. Adult and juvenile Ambystoma californiense captured inside and outside the trap line during five winter breeding seasons at the study site in Contra Costa County, California. Totals include recaptured individuals. Unique captures exclude recaptured individuals and are shown in parentheses.

Year	Adult Total No. (Unique No.)		Juvenile Total No. (Unique No.)		Adult & Juvenile Total No. (Unique No.)	
2000 - 2001						
Inside trap line	59	(58)	3	(3)	62	(61)
Outside trap line	76	(37)	62	(47)	138	
Totals 2001-2002	135	(95)	65	(50)	200	(145)
Inside trap line	184	(182)	4	(3)	188	(185)
Outside trap line	215	(158)	14	(13)		(171)
Totals 2002-2003	399	(340)	18	(16)	417	(356)
Inside trap line	63	(61)	3	(3)	66	(64)
Outside trap line	120	(96)	34	(33)		(129)
Totals 2003-2004	183	(157)	37	(36)		(193)
Inside trap line	37	(36)	0	(0)	37	(36)
Outside trap line	52	(37)	1	(1)	53	(38)
Totals 2004-2005	89	(73)	1	(1)	90	(74)
Inside trap line	23	(22)	0	(0)	23	(22)
Outside trap line	72	(61)	86	(81)	1000	(142)
Totals	95	(83)	86	(81)		(164)

years, I chose 2002 for analysis because it was least affected by translocation efforts and barrier fencing.

l excluded recaptures from the analysis of some data sets (i.e., capture distribution, movement patterns, sex ratios, and annual reductions). However, except for sex ratios, these analyses did include those individuals first captured during the early season inside the trap line and then later recaptured outside the same trap line during the late season. For annual comparisons of capture numbers, I deleted data on additional traps installed in 2001 and 2002 from the analyses. For all statistical tests, results were considered significant at  $\alpha = 0.05$ .

#### RESULTS

Capture numbers and movement patterns.—The annual number of A. californiense captured varied from 90 to 417 salamanders over the five year study period (Table 1). Recaptured individuals represented between 9-28% of annual totals, with 96% of these individuals captured on the outside of the trap line. Eight recaptured individuals were captured on or translocated to the outside of the trap line and then later captured on the inside, but these eight represented less than 1% of the total captures. Adult recaptures returning to the study site (presumably after breeding) were found Orloff.-Movement patterns and migration distances of California Tiger Salamander.

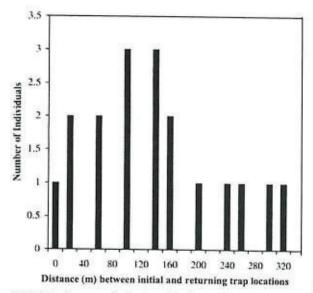


FIGURE 2. Frequency distribution of the distance between initial and returning trap locations for individual *Ambystoma californiense* for all five study years combined (2000–2005). Results include only those salamanders first trapped early during the breeding season inside the trap line and then recaptured outside the same trap line later in the season. Early season = late October to December 31; Late season = January 1 to end of March. Zero on the x-axis represents individuals that returned to the same trap location where they were initially captured.

significantly closer to where they were initially captured inside the trap line than would be expected by random (Z = -2.92, P = 0.003). Forty-four percent of adult recapture locations were within five traps ( $\leq 100$  m) of the initial inside trap location (Fig. 2). Several individuals were recaptured more than once outside the western trap line, presumably attempting to reenter the site. One male returned to the site five times.

Capture rates from all five study years combined indicate that males and females migrated to the breeding ponds from late October to the end of December (early season) and returned to their upland habitat from the beginning of January to the end of March (late season) (Fig. 3). Annual sex ratios differed significantly from 1:1 in 2002, with females outnumbering males by 2:1 ( $\chi^2$ = 20.46, df = 1, P < 0.001). By contrast males outnumbered females by 1.5:1 in 2000 ( $\chi^2 = 3.80$ , df = 1, P = 0.051). Sex ratios were near 1:1 in the other three study years (2001:  $\chi^2 = 0.02$ ; 2003:  $\chi^2 = 0.00$ ; and 2004:  $\chi^2 = 0.11$ ; all df = 1, all P > 0.70). Among all study years, the proportion of each sex in the population captured early in the season on the inside of the trap line (Table 2) was associated with early season rainfall (negatively associated for males: r = -0.808; positively associated for females: r = 0.808; P = 0.049 for both). However, there was no significant association between the proportion of each sex captured early in the season outside the trap line and early rainfall (males: r = -0.340;

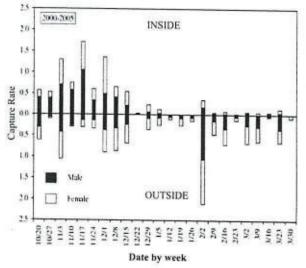


FIGURE 3. Weekly capture rates (no. per 100 trap nights) of male and female *Ambystoma californiense* inside and outside the trap line for all five study years combined (2000–2005). Early season = late October to December 31; Late season = January 1 to end of March. Dates on xaxis represent the beginning of each week. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then recaptured outside the same trap line later in the season.

females: r = 0.340; P = 0.288 for both) or captured late in the season outside the trap line and late rainfall (males: r = -0.494; females: r = 0.494; P = 0.198 for both).

Within each survey year, the capture rates of adults and juveniles were generally highest along the western trap line (Fig. 4). Analysis of early season capture data, when most salamanders presumably migrated to the ponds, indicated highest adult capture rates on the inside of the western trap line (Table 3). By contrast, analysis of late season data, presumably when most salamanders returned from the ponds, indicated highest adult capture rates outside the western trap line (Table 3). Capture rates for juveniles were highest outside the western trap line primarily in the early season (Table 4). Among all study years, more adults were captured early in the season inside the western trap line than were captured later in the season outside that same trap line segment (sign test, P = 0.031). Early and late rainfall was not significantly different among years (sign test, P = 0.50).

Migration distances.—The shortest distances from inside the western trap line, where the majority of adults were captured in the early season, to the closest breeding ponds to the west were 800 to 840 m (Ponds 5 and 2 on CNWS, respectively; Fig. 1). A smaller number of adults captured early in the season on the outside of the western trap line may be migrating east (Table 3). The closest breeding pond from the western trap line to the east is Pond 8 at 2.2 km. A few adults captured early in TABLE 2. Proportions of male and female *Ambystoma californiense* captured during the early and late winter breeding seasons on the inside and outside of the trap line. Parentheses indicate the number of each sex captured and N = the total number of adults captured. Early season = late October to December 31; Late season = January 1 to end of March. Results exclude all recaptured individuals.

Season/ Trap Line Sid	2000- c 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005
Early/Inside					
Male	0.76 (41)	0.50 (86)	0.39 (23)	0.68 (23)	0.52 (11)
Female	0.24 (13)	0.50 (87)	0.61 (36)	0.32 (11)	0.48 (10)
N =	54	173	59	34	21
Early/Outsid	e				
Male	0.42 (8)	0.55 (46)	0.28 (23)	0.43 (13)	0.41 (15)
Female	0.58 (11)	0.45 (38)	0.72 (58)	0.57 (17)	0.59 (22)
N =	19	84	81	30	37
Late/Outside					
Male	0.33 (6)	0.45 (52)	0.33 (11)	0.36 (5)	0.43 (12)
Female	0.66 (12)	0.55 (64)	0.66 (22)	0.64 (9)	0.57 (16)
N=	18	116	33	14	28

TABLE 3. Capture rates of adult Ambystoma californiense (no. per 100 trap nights) along the western, southern, and eastern trap lines during the early and late winter breeding seasons of the five study years. Early season = late October to December 31; Late season = January 1 to end of March. Data represent captures inside/outside each trap line. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then later recaptured outside the same trap line during the late season. Total number of adults captured is indicated by N.

Season/Trap Line	2000- 2001	2001- 2002	2002- 2003	2003 2004	2004- 2005
Early Season, N =	71	251	136	65	59
Western	8.6/2.5	28.4/6.7	9.8/12.3	4.4/2.1	3.5/4.5
Southern	1.0/1.0	4.8/5.9	1.9/3.4	1.0/3.1	0.5/2.7
Eastern		4.2/22.7	1.4/6.3	2.9/3.5	1.3/2.6
Late Season, N =	34	146	46	21	29
Western	0.8/4.8	1.9/19.7	0.5/4.6	1.5/3.3	0.4/3.2
Southern	0.0/1.9	0.7/2.6	0.7/2.2	0.4/1.7	0.0/0.6
Eastern	-	5.3/1.5	0.0/2.9	0.0/0.0	0.0/0.0

the season along the inside of the eastern trap line may have been traveling east as well. The closest known breeding pond is only 225 m from the southeast corner the study site (Pond 6). I captured relatively few adults along the inside of either the southern or eastern segments of the trap line in the early season.

Migratory movements and environmental parameters .- Based on trapping data adults began moving with the first night of substantial rain of the season (≥ 1 cm). Smaller amounts of nightly rain (≤ 0.5 cm) at the beginning of the breeding season did not appear to initiate movement. In all survey years, the earliest dates adults were captured ranged from 20 October (2004) to 11 November (2001). Most adult captures occurred between early November and mid-December with fewer more temporally dispersed captures later in the season. Juveniles began arriving at the boundaries of the study site each year within six nights of measurable rain. The earliest dates juveniles were captured ranged from 29 October (2000) to 22 November (2001).

Both the amount of rain within 12 h (night of capture) and 24 h prior to checking traps were positively correlated with number of *A. californiense* captured (r =0.626 for night rain; r = 0.603 for 24 h; P < 0.001 for both). Rain 12 h prior to opening traps was also correlated with captures (r = 0.375, P = 0.012). In addition, rain at dusk (Wilcoxon Z = 2.66, P < 0.005) and temperature (r = 0.363, P < 0.015) were positively associated with number of captures. Rain the night prior to opening traps was not associated with number of captures (Wilcoxon Z = 0.31, P = 0.378).

Annual reduction in captures.—Over the five study years, the proportion of adults captured inside the trap line decreased (r = -0.845, P = 0.036) and adult capture rates were not associated with on-site rainfall for those five years (Fig. 5, r = -0.753, P = 0.071). In 2000 and 2001, the capture rate of adults was higher inside than outside the trap line (Fig. 5). However, during 2002–2004 the capture rate was higher outside than inside. By 2004 the ratio of adult captures inside the trap line (versus outside) was much lower (0.35) than in previous years (0.62–1.2).

#### DISCUSSION

Successful conservation for Ambystoma californiense requires protection of both breeding sites and adequate surrounding uplands (Petranka 1998; Semlitsch 1998). Knowledge of terrestrial movement patterns and migration distances is essential to establishing appropriate upland protection zones adjacent to breeding ponds. My study expands the current understanding of upland habitat use for A. californiense and should better inform management for this species. The most important findings of my study are that A. californiense appeared to exhibit fidelity to upland habitat locations and occurred in relatively large numbers farther from breeding ponds than previously reported.

Study limitations.—The present study has certain limitations that should be taken into account when interpreting my findings. The partial drift fence may have affected my results in the following ways: 1) capture rates may have over- or under-estimated the actual number of salamanders entering or leaving the study site, 2) distribution of captures was limited to Orloff.-Movement patterns and migration distances of California Tiger Salamander.

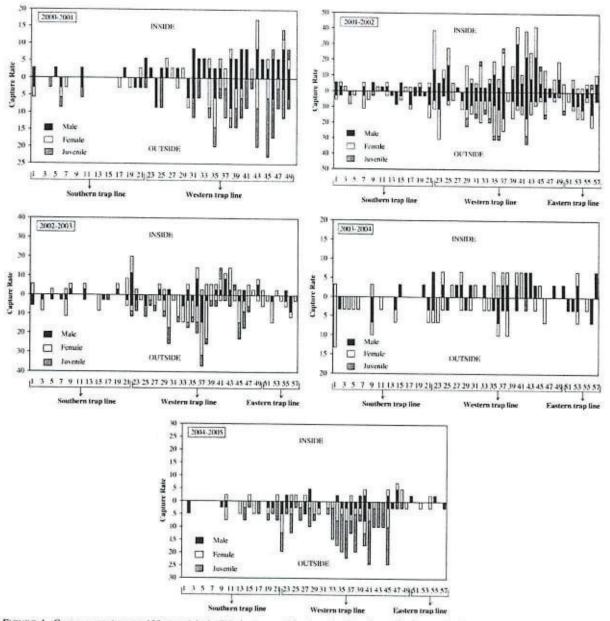


FIGURE 4. Capture rates (no. per 100 trap nights) of Ambystoma californiense inside and outside the trap line by sex, age class, and trap line for each of the five study years. Trap number for each trap line segment is indicated on the x-axis. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then recaptured outside the same trap line later in the season.

certain sections of the study site, and 3) trespass rates for the study site could not be determined (i.e., when a salamander exits or enters a site without being captured). These limitations may have influenced my analysis of patterns of movement, sex ratios/proportions, and annual reductions in number of individuals captured.

In addition, translocating salamanders and restricting their entry into the study site may have altered the age class distribution for those remaining within the site. Studies of *A. californiense* and other *Ambystoma* species have shown that age classes may differ in their use of habitat (Rothermel 2004; Trenham and Shaffer 2005) and vary in activity in response to environmental cues (Semlitsch 1983). This may have influenced my analysis of patterns of movement, and migratory movements with applicable data sets. Lastly, my findings are also limited by having only one study location. Although my results are directly applicable to this site, it may not be representative of other grassland areas that support *A. californiense*.

TABLE 4. Capture rates of juvenile A. californiense (no. per 100 trap nights) along the western, southern, and eastern trap lines during the early and late winter breeding seasons of the five study years. Early season = late October to December 31; Late season = January 1 to end of March. Data represent captures inside/outside the trap lines. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then later recaptured outside the same trap line during the late season. Total number of adults captured is indicated by N.

Season/Trap Line	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005
Early Season, N =	36	14	29	1	45
Western	0.5/5.3	0.2/2.4	0.6/5.2	0.2/0.0	0.0/8.0
Southern	0.0/0.7	0.0/0.0	0.0/0.3	0.0/0.0	0.0/1.1
Eastern	-	0.8/0.0	0.0/0.0	0.0/0.0	0.0/0.0
Late Season, N =	14	2	7	0	36
Western	0.0/2.7	0.2/0.0	0.0/1.1	0.0/0.0	0.0/3.8
Southern	0.0/0.3	0.0/0.2	0.0/0.2	0.0/0.0	0.0/1.7
Eastern	-	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0

Capture numbers and movement patterns.—Adults tended to return to a location close to where they were initially captured, which suggests fidelity to specific areas of upland habitat. Although several other studies have indicated Ambystoma species tend to follow the same nonrandom pathways as they move toward and away from breeding ponds (Stenhouse 1985; Phillips and Sexton 1989; Trenham and Cook 2008), these results were typically inferred from the distribution of captures around ponds, not from distant upland habitat capture data.

In all study years more adults were captured early in the season (presumably going to breed) than were captured later in the season along the same trap line segment (presumably returning from breeding). Rainfall amounts during the early and late seasons did not appear to account for this decrease in captures. The lower number of returning animals may be partly due to mortality, or salamanders straying off path when returning from their natal ponds or dispersing to different ponds (Trenham et al. 2001; Trenham and Cook 2008).

A higher proportion of migrating males than females has been correlated with low rainfall years in other studies of *A. californiense* (Loredo and Van Vuren 1996; Cook et al. 2006). My findings are consistent with this pattern. Apparently more females forego breeding in dry years than males (Loredo and Van Vuren 1996; Trenham et al. 2000). My results contrast with previous studies of *A. californiense* and other *Ambystoma* species that suggest a female bias at greater distances from breeding ponds (Regosin et al. 2003; Trenham and Cook 2008). The distances from the nearest breeding ponds in my study were considerably greater than these previous studies, yet my annual sex ratios were only female biased in one of the five study years.

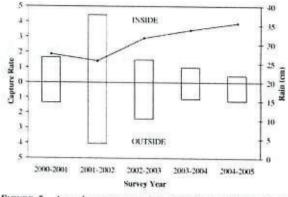


FIGURE 5. Annual capture rates (no. per 100 trap nights) of adult Ambystoma californiense inside and outside the trap line (bars) and onsite rainfall amounts (October-April; solid line) for the five study years. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then recaptured outside the same trap line later in the season.

Migration distances.--- I captured large numbers of A. californiense farther from breeding ponds than has been previously documented. In early studies of migration distances, maximum distance ranged from 130 m during one night of visually tracking (Loredo et al. 1996) to 248 m using radio tracking (Trenham 2001). However, these studies only examined movements during initial dispersal into the terrestrial habitat and thus may not be representative of the total distance adults may travel (Trenham and Shaffer 2005). In a more recent study using variable trap line distances from a pond, Trenham and Shaffer (2005) found that 50-95% of adults were trapped between 150 to 620 m from the pond, respectively. Continuing work at this site has documented a few individuals moving up to 1000 m from the most likely breeding pond (Peter Trenham, pers. comm.). Ambystoma californiense has also been observed up to 2.1 km from breeding ponds (U.S. Fish and Wildlife Service 2004); however, this was thought to be only a small number of individuals. Even in light of these studies showing a few individuals making longer distance movements, the large numbers of adults and juveniles I captured at least 800 m from the closest breeding ponds is noteworthy.

Current estimates that 95% of adult *A. californiense* occur within 620 m of the breeding pond (Trenham and Shaffer 2005) do not appear applicable to my study site. If this estimate were applied to my study site, which is greater than 620 m from the closest breeding ponds on CNWS, the large number of captures would represent less than 5% of the adult upland population. This would result in an exceedingly high extrapolated number of adults using the ponds on CNWS (~5,000 to 10,000 adults). However, Loredo and Van Vuren (1996) found an average of only 141 adults at their study pond on CNWS (Pond 5, Fig. 1), which is typical for other sites (Trenham et al. 2001; Cook et al. 2006). It is more likely that a greater percentage of the breeding population at

CNWS is moving farther away from the breeding ponds than previous research would have predicted.

Migratory movements and environmental parameters.—Movement patterns in my study area were influenced by the distribution of rainfall within the 24-h period prior to capture, with both rain at dusk and on the night of capture (12-h prior) strongly correlated to captures. Although several studies of *A. californiense* or other *Ambystoma* species also found adult migration to be positively associated with rainfall (Semlitsch 1983; Beneski et al. 1986; Trenham et al. 2000), these studies measured daily (24-h periods) or weekly rainfall, not rainfall within less than a 24-h period.

The majority of *A. californiense* adults were captured from early November to mid-December, which is earlier than other study sites where peak migration occurred in January in Monterey County (Trenham et al. 2000) or December and January in Sonoma and Contra Costa counties (Loredo and Van Vuren 1996; Cook et al. 2006). Unlike these other studies, which were conducted at study ponds and recorded only the date of arrival at those ponds, my data presumably represent the actual initiation of migration from upland emergence. Therefore, the discrepancy in peak migration periods may be because my study site was at least 800 m away from the closest probable breeding ponds, and it may have taken several rainy nights to reach the ponds.

Reduction in numbers .- My findings suggest that it takes multiple years of trapping and translocating animals to substantially reduce the number of adults within a project site. This is consistent with other research that has shown A. californiense typically spend up to four to five years in their upland burrows before they reach sexual maturity and migrate to breeding ponds for the first time (Trenham et al. 2000). The reduction in annual captures found over my five study years could have been affected by variables other than removal trapping. For example, rainfall has been shown to affect both the number of migrating adults and reproductive success among ambystomatids (e.g., Semlitsch 1983). However, my annual capture numbers were not correlated with on-site rainfall. In addition, I examined local annual rainfall data for the five years prior to my study and found no patterns that might have affected past reproductive success and subsequently influenced capture numbers during my study. It is important to note that because the drift fence was not a closed system, it was not possible to determine whether individuals captured inside or outside the trap line were resident to those sides of the study site.

The costs and benefits of amphibian translocation strategies have been debated and establishing criteria for success is difficult (Seigel and Dodd 2002; Trenham and Marsh 2002). Because my study only involved moving animals to adjacent grassland habitat a short distance from the capture point ( $\leq 100$  m), some of the more critical problems typically associated with translocation projects were not applicable, including the availability of suitable habitats, disease transmission, and genetic considerations (Dodd and Seigel 1991). However, because a portion of my translocated animals were recaptured presumably trying to return to the study site, they could have been subject to additional stress which reduced their survival (Matthews 2003; Germano and Bishop 2008). In addition, I do not know if the resources of the adjacent area were adequate to sustain an increase in population size (Petranka 1989).

Other options for managers to reduce the number of salamanders in a proposed construction area include passive relocation using wooden ramps with barrier fencing or excavating salamanders from their burrows. Although I have observed *A. californiense* using ramps to exit a project site, there are no published reports on the success of this passive relocation technique. Excavation is time consuming (Pittman 2005), difficult due to the complexity of burrow systems, and potentially hazardous to the salamanders.

Management implications.--My findings have several implications for future conservation and management of this species. First, the current suggested buffer zone of 630 m around breeding ponds for longterm preservation of individual A. californiense populations (Trenham and Shaffer 2005) may not protect a substantial portion of some upland populations. Second, the method proposed by Searcy and Shaffer (2008) for calculating mitigation value for A. californiense, which is based on the exponential decrease in salamander density with increased distance from breeding ponds, may not be applicable in all cases. Other factors could be influencing the density distribution around ponds, such as uneven distribution of resources and presence of other species (Rittenhouse and Semlitsch 2007; Searcy and Shaffer 2008). The results of my study underscore the need to consider other relevant biological factors in establishing buffer zones or mitigation credits. Third, trapping may be the most reliable means of predicting habitat value or detecting occurrence in uplands. I found that the number of salamanders observed during winter night surveys was not a reliable indication of population size. The limited number of salamanders I observed was probably due to few being above ground at the burrow entrances during the night surveys. Fourth, efforts to remove A. californiense, via trapping or passive relocation, from a proposed project site for only one year (to reduce impacts from development) may miss a large portion of the population. My findings suggest that multiple years are required to substantially reduce the abundance of adult life stages in upland habitat.

Herpetological Conservation and Biology

Acknowledgments.—I am grateful for the biologists who assisted in the field work for this study, including Kathy Willet, Derek Jansen, and Jill Bennett. I appreciate Mark Allaback of Biosearch (Santa Cruz, CA) for helping to develop and design this study. I thank Dr. Pete Trenham and Mark Allaback who reviewed and improved the original manuscript. I also thank the U.S. Fish and Wildlife Service and California Department of Fish and Game for authorizing this study through issuance of a 10(a)(1)(A) permit (TE-075898–1) and Scientific Collectors Permit (801083–05).

#### LITERATURE CITED

- Bailey, L.L. 2004. Evaluating elastomer marking and photo identification methods for terrestrial salamanders: marking effects and observer bias. Herpetological Review 35:38–41.
- Beneski J.T., Jr., E.J. Zalisko, and J.H. Larsen Jr. 1986. Demography and migratory patterns of the Eastern Long-toed Salamander, *Ambystoma marcrodactylum* columbianum. Copeia 1986:398–408.
- Biek, R., W.C. Funk, B.A. Maxell, and L.S. Mills. 2002. What is missing in amphibian decline research: insights from ecological sensitivity analysis. Conservation Biology 16:728–734.
- California Fish and Game Commission. 2010. List California Tiger Salamander as a threatened species. California Regulatory Notice Register. Title 14, Vol. No. 12–Z:425–427.
- Cook, D.G., P.C. Trenham, and P.T. Northen. 2006. Demography and breeding phenology of the California Tiger Salamander (*Ambystoma californiense*) in an urban landscape. Northwestern Naturalist 87:215–224.
- Cooke, A.S., and R.S. Oldham. 1995. Establishment of populations of the Common Frog, *Rana temporaria*, and the Common Toad, *Bufo bufo*, in a newly created reserve following translocation. Herpetological Review 5:173–180.
- Dodd, C.K., Jr. 2005. Population manipulations. Pp. 265– 270 In Amphibian Declines: The Conservation Status of United States Species. Lannoo, M. (Ed.). University of California Press, Berkeley, California, USA.
- Dodd, C.K., Jr., and R.A. Seigel. 1991. Relocation, repatriation, and translocation of amphibians and reptiles: are they conservation strategies that work? Herpetologica 47:336–350.
- Donnelly, M.A., C. Guyer, J.E. Juterbock, and R.A. Alford. 1994. Techniques for marking amphibians. Pp. 277–284 In Measuring and Monitoring Biological Diversity: Standard Methods for Amphibians. Heyer, W. R., M.A. Connelly, R.W. McDiarmid, L.C. Hayek, M.S. Foster (Eds.). Smithsonian Institution Press, Washington D.C., USA.
- Doody, J.S. 1995. A photographic mark-recapture method for patterned amphibians. Herpetological Review 26:19-21.

- Fischer, J., and D.B. Lindenmayer. 2000. An assessment of the published results of animal relocations. Biological Conservation 96:1–11.
- Germano, J.M., and P.J. Bishop. 2008. Suitability of amphibians and reptiles for translocation. Conservation Biology 23:7–15.
- Gibbons, J.W., and D.H. Bennett. 1974. Determination of anuran terrestrial activity patterns by a drift fence method. Copeia 1974:236–243.
- Griffith, B., J.M. Scott, J.W. Carpenter, and C. Reed. 1989. Translocation as a species conservation tool: status and strategy. Science 245:477–480.
- Harper, E.B., T.A.G. Rittenhouse, and R.D. Semlitsch. 2008. Demographic consequences of terrestrial habitat loss for pool-breeding amphibians: predicting extinction risks associated with inadequate size of buffer zones. Conservation Biology 22:1205–1215.
- Loredo, I., and D. Van Vuren. 1996. Reproductive ecology of a population of the California Tiger Salamander. Copeia 1996:895–901.
- Loredo, I., D. Van Vuren, and M.L. Morrison. 1996. Habitat use and migration behavior of the California Tiger Salamander. Journal of Herpetology 30:282–282.
- Marsh, D.M., and P.T. Trenham. 2001. Metapopulation dynamics and amphibian conservation. Conservation Biology 15:40–49.
- Matthews, K.R. 2003. Response of Mountain Yellowlegged Frogs, *Rana muscosa*, to short distance translocation. Journal of Herpetology 37:621-626.
- Petranka, J.W. 1989. Density-dependent growth and survival of larval *Ambystoma*: evidence from wholepond manipulations. Ecology 70:1752–1767.
- Petranka, J.W. 1998. Salamanders of the United States and Canada. Smithsonian Institution Press, Washington, D.C., USA.
- Phillips, C.A., and O.J. Sexton. 1989. Orientation and sexual differences during breeding migrations of the Spotted Salamander, *Ambystoma maculatum*. Copeia 1989:17–22.
- Pittman, B.T. 2005. Observations of upland habitat use by California Tiger Salamanders based on burrow excavations. Transactions of the Western Section of the Wildlife Society 41:26–30.
- Rathbun, G.B., and J. Schneider. 2001. Translocation of California Red-legged Frogs (*Rana aurora draytonii*). Wildlife Society Bulletin 29:1300–1303.
- Regosin, J.V., B.S. Windmiller, and J.M. Reed. 2003. Influence of abundance of small-mammal burrows and conspecifics on the density and distribution of Spotted Salamanders (*Ambystoma maculatum*) in terrestrial habitats. Canadian Journal of Zoology 81:596–605.
- Rittenhouse, T.A.G., and R.D. Semlitsch. 2007. Distribution of amphibians in terrestrial habitat surrounding wetlands. Wetlands 27:153–161.
- Rothermel, B.B. 2004. Migratory success of juveniles: a potential constraint on connectivity for pond-breeding amphibians. Ecological Applications 14:1535–1546.

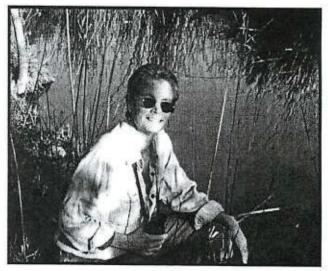
Orloff.-Movement patterns and migration distances of California Tiger Salamander.

- Searcy, C.A., and H.B. Shaffer. 2008. Calculating biologically accurate mitigation credits: insights from the California Tiger Salamander. Conservation Biology 22:997–1005.
- Seigel, R.A., and C.K. Dodd, Jr. 2002. Translocations of amphibians: proven management method or experimental technique? Conservation Biology 16:552–554.
- Semlitsch, R.D. 1983. Structure and dynamics of two breeding populations of the Eastern Tiger Salamander, *Ambystoma tigrinum*. Copeia 1983:608–616.
- Semlitsch, R.D. 1998. Biological delineation of terrestrial buffer zones for pond-breeding salamanders. Conservation Biology 12:1113–1119.
- Semlitsch, R.D. 2002. Critical elements for biologically based recovery plans of aquatic-breeding amphibians. Conservation Biology 16:619–629.
- Semlitsch, R.D. 2007. Differentiating migration and dispersal processes for pond-breeding amphibians. Journal of Wildlife Management 72:260–267.
- Semlitsch, R.D., and J.R. Bodie. 2003. Biological criteria for buffer zones around wetlands and riparian habitats for amphibians and reptiles. Conservation Biology 17:1219–1228.
- Semlitsch, R.D., and J.B. Jensen. 2001. Core habitat, not buffer zone. National Wetlands Newsletter 23:5-7.
- Shoop, C.R. 1968. Migratory orientation of *Ambystoma* maculatum: movements near breeding ponds and displacements of migrating individuals. Biological Bulletin 135:230-238.
- Shoop, C.R., and T.L. Doty. 1972. Migratory orientation by Marbled Salamanders (*Ambystoma opacum*) near a breeding area. Behavioral Biology 7:131–136.
- Stenhouse S.L. 1985. Migratory orientation and homing in Ambystoma maculatum and Ambystoma opacum. Copeia 1985:631–637.
- Stitt, E.W., and G.T. Downard. 2000. Status of the California Red-legged Frog and California Tiger

Salamander at Concord Naval Weapons Station, California. Transactions of the Western Section of the Wildlife Society 36:32–39.

- Storer, T.I. 1925. A synopsis of the amphibia of California. University of California Publications in Zoology 27:1–342.
- Trenham, P.C. 2001. Terrestrial habitat use by adult California Tiger Salamanders. Journal of Herpetology 35:343–346.
- Trenham, P.C., and D.G. Cook. 2008. Distribution of migrating adults related to the location of remnant grassland around an urban California Tiger Salamander (*Ambystoma californiense*) breeding pool. Pp. 9–16 In Urban Herpetology, Herpetological Conservation. Mitchell, J.C., and R.E. Jung Brown (Eds.). Society for the Study of Amphibians and Reptiles, Salt Lake City, Utah, USA.
- Trenham, P.C., and D.M. Marsh. 2002. Amphibian translocation programs: reply to Seigel and Dodd. Conservation Biology 16:555–556.
- Trenham, P.C., and H.B. Shaffer. 2005. Amphibian upland habitat use and its consequences for population viability. Ecological Applications 15:1158–1168.
- Trenham, P.C., W.D. Koenig, and H.B. Shaffer. 2001. Spatially autocorrelated demography and interpond dispersal in the salamander, *Ambystoma californiense*. Ecology 82:3519–3530.
- Trenham, P.C., H.B. Shaffer, W.D. Koenig, and M.R. Stromberg. 2000. Life history and demographic variation in the California Tiger Salamander (*Ambystoma californiense*). Copeia 2000:365–377.
- U. S. Fish and Wildlife Service. 2004. Determination of threatened status for the California Tiger Salamander; and special rule exemption for existing routine ranching activities; final rule. Federal Register 69:47212–47248

SUSAN ORLOFF is a Wildlife Biologist and principal of a consulting firm in the San Francisco Bay Area. She has degrees from San Francisco State University (B.A.) and Sonoma State University (M.A.). During the last 25 years, she has worked on a diversity of projects involving the status and conservation of sensitive wildlife species. Her early career focused on species of the Central Valley in California and she has authored several papers on the endangered San Joaquin Kit Fox (Vulpes macrotis mutica). Sue also has extensive experience assessing the impacts of windfarm development on raptor populations, which resulted in several publications. Her more recent research emphasizes sensitive amphibians and reptiles of California. This research includes a long-term population monitoring program for California Red-legged Frogs (Rana draytonii) and San Francisco Garter Snakes (Thamnophis sirtalis tetrataenia), a study on the impacts of variations in creek flow releases on California Redlegged Frogs, and a multiyear study on the effects of hydroelectric operations on the Foothill Yellow-legged Frog (Rana boylii). (Photographed by C.K. Cole)







396 HAYES STREET, SAN FRANCISCO, CA 94102 T: (415) 552-7272 F: (415) 552-5816 www.smwlaw.com WINTER KING Attorney

January 10, 2014

## Via Email and U.S. Mail

Kristin Pollot Associate Planner City of Pittsburg, Planning Department 65 Civic Avenue Pittsburg, CA 94565 E-Mail: kpollot@ci.pittsburg.ca.us

## Re: <u>Montreux Residential Subdivision and Draft Environmental Impact</u> <u>Report</u>

Dear Ms. Pollot:

This firm represents Save Mount Diablo ("SMD") with regard to the Montreux Residential Subdivision Project ("Project"). SMD is a non-profit organization dedicated to preserving Mount Diablo's peaks, surrounding foothills and watersheds through land acquisition and preservation strategies designed to protect the mountain's natural beauty, biological diversity and historic and agricultural heritage. To advance this goal, SMD regularly participates in land use planning processes for projects that could impact Mount Diablo and its surrounding foothills, such as the Montreux Project. We submit these comments on the Project and associated draft Environmental Impact Report ("DEIR") on SMD's behalf.

As described below, SMD has serious concerns about the impacts of the Project, which proposes to transform 77 acres of largely untouched open space lands in the Woodlands subarea, immediately adjacent to the open spaces of the South Hills subarea, into a residential subdivision with 356 estate homes, onsite access roadways, drainage basins, and a water storage tank. DEIR at 3.0-8 and 9. The urban-scale Project is currently outside the City limits, outside the service areas for the Delta Diablo Sanitation District and the Contra Costa Water District Service Area boundary, and therefore lacks a certain water supply. The Project is patently inconsistent with the City's general plan and requires rezoning to permit development at the proposed density. In short, the Project has all the hallmarks and adverse environmental impacts of leapfrog development. It is

therefore perhaps unsurprising that it directly conflicts with numerous general plan policies that discourage such development.

In addition, the DEIR for the Project fails to provide the public and decision makers with crucial information about the Project, its impacts, and feasible mitigation measures, in direct violation of the California Environmental Policy Act ("CEQA").<sup>1</sup> For example, the Project description lacks sufficient detail for the public to determine what the impacts of the Project will be. Although the City is apparently contemplating a development agreement as part of the Project, the agreement itself is not included as an attachment to the DEIR or otherwise made available to the public, and the description of the agreement's terms is cursory at best. Similarly, consultant reports on various impact areas are referred to in the DEIR but not provided for public review. At the very least, the DEIR must be revised and recirculated to include these documents and information.

The DEIR's analysis of specific environmental impacts is similarly lacking. As discussed in this letter and the attached report from consulting hydrologist Bruce Abelli-Amen of Baseline Environmental Consulting ("Baseline Report"), developing the Project on the area's the steep terrain will require extensive cut and fill, which, in turn, will drastically affect the hydrology of the area and could even damage downstream properties. Baseline Report attached as Exhibit 1. Yet the DEIR contains *no discussion whatsoever* of these potential impacts, relying solely on the Initial Study's cursory discussion of the issue. Similar flaws are found in other impact analysis, including aesthetics, biological resources, public services, and public safety. More is required of an adequate EIR.

In sum, after reviewing the DEIR and other Project documents, it is our opinion that the Project conflicts with the City of Pittsburg's General Plan and Municipal Code in violation of State Planning and Zoning Law, Gov't Code § 65000 et seq. For this and other reasons, the City cannot make the findings necessary to approve the Project's requested rezoning and tentative map. *See* Gov't Code §§ 66473.5 & 66474. In addition, the DEIR for the Project violates the minimum standards of adequacy under CEQA. As a result, the City cannot approve the Project as currently proposed and must, at a minimum, recirculate a revised DEIR that addresses the inadequacies identified in this letter.

<sup>&</sup>lt;sup>1</sup> Public Resources Code § 21000 et seq. (hereinafter "CEQA"); Cal. Code of Regulations, tit. 14, § 15000 et seq. (hereinafter "Guidelines").



# I. Approval of the Project Would Violate California Planning and Zoning Law and the Subdivision Map Act.

The State Planning and Zoning Law (Gov't Code § 65000 et seq.) requires that development decisions be consistent with the jurisdiction's general plan. *See* Gov't Code §§ 65860 (requiring consistency of zoning to general plan), 66473.5 & 66474 (requiring consistency of subdivision maps to general plan), and 65359 and 65454 (requiring consistency of specific plan and other development plan and amendments thereto to general plan). Thus, "[u]nder state law, the propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements." *Resource Defense Fund v. County of Santa Cruz* (1982) 133 Cal.App.3d 800, 806. Accordingly, "[t]he consistency doctrine [is] the linchpin of California's land use and development laws; it is the principle which infuses the concept of planned growth with the force of law." *Families Unafraid to Uphold Rural El Dorado County v. Board of Supervisors* (1998) 62 Cal.App.4th 1332, 1336.

It is an abuse of discretion to approve a project that "frustrate[s] the General Plan's goals and policies." *Napa Citizens for Honest Gov't v. Napa County* (2001) 91 Cal.App.4th 342, 379. The project need not present an "outright conflict" with a general plan provision to be considered inconsistent; the determining question is instead whether the project "is compatible with and will not frustrate the General Plan's goals and policies." *Napa Citizens*, 91 Cal.App.4th at 379.

Here, the proposed Project does more than just frustrate the General Plan's goals. It is directly inconsistent with numerous provisions in the General Plan. Consequently, the Project cannot be approved in its current form.

# A. The Project Is Inconsistent with Numerous General Plan and Municipal Code Provisions.

The City's General Plan and Municipal Code contains several provisions intended to ensure that development occur in an environmentally sensitive manner. As discussed below, the Project is inconsistent with many important Plan and Code provisions.

///

///

///



# 1. General Plan and Code Provisions Relating to the Preservation of Hillsides

The Project site is designated and pre-zoned for Hillside Plan Development. DEIR at 3.0-8. The General Plan requires that development in the hills be sensitive to the natural terrain, minimize cut-and-fill, and incorporate natural features (*e.g.*, topography and creeks) into the design of residential neighborhoods. General Plan Land Use Element Policies 2-P-21, 2-P-23, 2-P-24, 2-P-25, 4-P-9. General Plan Land Use Element Policy 2-P-21. The General Plan also indicates that the City must "ensure that all General Plan policies apply to hillside land irrespective of zoning –whether Planned Development or any other base district." General Plan Land Use Element Policy 2-P-22.

General Plan provisions specific to the Woodlands sub-area where the Project is located are even more protective. For example, the General Plan specifies a goal to support new residential development in locations that do not significantly impact the natural setting." General Plan Goal: Woodlands 2-G-27 and 2-G-28. As discussed below and throughout this letter, the Project proposes mass grading that fills a natural drainage and denudes the site of natural vegetation. Other Woodlands-area specific provisions require that the "natural topography be retained to the *maximum extent feasible*, and large-scale grading discouraged" and that development be minimally visible from Kirker Pass Road. General Plan Policy: Woodlands 2-P-73.

The Municipal Code accordingly establishes regulations for development in hillside areas that establish several goals to protect hillsides. For example, the Code establishes the goal "to protect natural topographic features, aesthetic view, vistas, and prominent ridges." It also calls for the City to "protect adjacent properties from potential adverse impacts of grading and drainage associated with hillside development," and "encourage the use of development techniques and alternatives that will be compatible to the terrain of the hillside areas." Municipal Code § 18.56.02.

The Municipal Code contains provisions requiring topographic maps indicating the steepness of the site's slopes. Municipal Code § 18.56.070.K. The Code also requires landscape plans indicating the location of existing and proposed trees and other plant materials, and before and after grading details. *Id.* But neither the DEIR nor technical appendix actually include these details.

Despite the lack of information in the DEIR, it is clear that the Project would be inconsistent with these provisions. The DEIR concludes that the Project is consistent with the General Plan because the Project proposes to preserve the southernmost portion of the site. DEIR at 4.0-2. However, the development plan



proposed for the remainder of the site would be anything but sensitive to the natural terrain. Rather than follow the natural topography and minimize grading, the Project site's steep slopes would be cut away to create unnaturally "flat" areas for building pads where steep slopes and drainage areas, including wetlands, previously existed. The Project requires a staggering 1.4 million cubic yards of excavation and fill material. DEIR at 3.0-12. Grading involving an estimated this level of excavation would result in the removal of trees and other natural vegetation throughout the development area and would also change much of the site's natural landform. Moreover, as made clear in the DEIR, the development would be very visible from Kirker Pass Road and would stand in stark contrast to the surrounding hillsides. DEIR at Figures 5.1-5 and 5.1-6.

# 2. General Plan Provisions Relating to the Protection of Natural Resources.

The General Plan encourages development that is compatible with the environment and sensitive habitats, "particularly habitats that support special status species" and calls for development that preserves significant ecological resources. Resources Conservation Element Goals 9-G-1 and 9-G-2 and Policies 4-P-14, 4-P-15, 9-P-13. The DEIR again concludes that the Project is consistent with the General Plan because the Project proposes to preserve the southernmost portion of the site and because the site's resources were "considered and documented." DEIR at 4.0-6. However, as discussed below, the DEIR's documentation of natural resources is seriously flawed. See section II.B.3 below. The Project is inconsistent with these provisions because, as discussed below, it will result in significant adverse impacts to sensitive habitats and species on and adjacent to the Project site. The DEIR has failed to provide a complete analysis of these impacts. *Id.* As a result, the Project will result in significant impacts related to direct and indirect impacts to special status species in contravention of the General Plan. *Id.* 

# **3.** General Plan Provisions Relating to the Protection of Drainages

The General Plan includes provisions that protect drainages and prevent erosion. Resources Conservation Element Policies 9-G-4 and 9-G-5. The General Plan also includes provisions to require evaluation and implementation of Best Management Practices to protect against creek bank destabilization and require assessments of downstream drainage impacts. Policies 9-P-15, 9-P-17, and 9-P-21. The DEIR fails to mention these General Plan provisions let alone analyze consistency with them. As discussed further below, and in the attached Baseline Report, the DEIR fails to evaluate these impacts. As a result, the Project is inconsistent with these General Plan provisions.



# 4. General Plan Provisions Relating to the Provision of Public Services.

The DEIR discloses that the Project would add school children to area schools that are already over capacity. DEIR at 5.6-8. The Project is inconsistent with General Plan provisions that specify the City is to "ensure that school facilities maintain adequate capacity to provide for current and projected enrollment." General Plan Policy 8-G-10. The Project is inconsistent with the General Plan in that it would approximately 277 new students to a school system already over-capacity.

The General Plan specifies that the City is to provide 1.8 *sworn officers* per each 1,000 residents. The DEIR discloses that the Project would add to the City's population so that additional police officers would be needed to serve the community. DEIR at 5.6-8. As the DEIR makes clear, there is "no guarantee that the General Fund revenues provided by the new development would fully fund the new positions." DEIR at 5.6-8. Thus, the Project conflicts with the General Plan requirements for police protection.

For all of these reasons, the Project is inconsistent with the General Plan and the Municipal Code. Because of the Project's inconsistencies with these planning documents, approval of this Project would violate State Planning and Zoning Law and the County's Development Code.

# **B.** Approval of this Project Would Violate the Subdivision Map Act.

The proposed Project requires approval of a tentative subdivision map. *See* DEIR at 3.0-13. As a result, the City must comply with the Subdivision Map Act. This statute requires that a tentative map approval be consistent with the local general plan. *See* Gov't Code §§ 66473.5; 66474; *see also Friends of "B" Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 998 (Subdivision Map Act expressly requires consistency with general plan). Approval of a project that is inconsistent with the general plan violates the Subdivision Map Act and may be enjoined on that basis. *See Friends of "B" Street*, 106 Cal.App.3d at 998 ("City approval of a proposed subdivision … may be enjoined for lack of consistency of the subdivision map with the general plan."); *see also* City of Pittsburg Municipal Code § 17.20.060 (to approve a tentative map, the following findings must be made, among others: 1) the proposed map is consistent with the general plan and any applicable specific plan, or other applicable provisions of [the municipal] code; 2) the site is physically suitable for the proposed density of development; and 3) the design of the subdivision or the proposed improvements will not cause substantial



environmental damage or substantially and avoidably injure fish or wildlife or their habitat).

As detailed throughout this letter, the Project is inconsistent with various goals and policies set forth in the City's General Plan. *See e.g.*, Section I(A), *supra*. Because approval of the Project would violate the general plan consistency requirements of the Subdivision Map Act and the City's own municipal code, the Project application must be denied.

# II. The DEIR Is Inadequate Under CEQA.

The environmental impact report is "the heart of CEQA." *Laurel Heights Improvement Ass'n v. Regents of University of California* (1988) 47 Cal.3d 376, 392 (citations omitted) ("*Laurel Heights I*"). It "is an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return. The EIR is also intended 'to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.' Because the EIR must be certified or rejected by public officials, it is a document of accountability." Id. (citations omitted). Where, as here, an EIR fails to fully and accurately inform decision makers, and the public, of the environmental consequences of proposed actions, it does not satisfy the basic goals of the statute. *See* CEQA § 21061("The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect that a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.").

As discussed in detail below and in the attached technical report, the DEIR is replete with serious flaws. *See* Baseline Report. It lacks a legally defensible description of the Project and contains so little information about the Project's potential environmental impacts that, in many instances, it is difficult to evaluate the accuracy of the environmental analysis. Nor does the DEIR provide the necessary evidence or analysis to support its conclusions that environmental impacts would be less than significant. Many of the so-called mitigation measures proposed in the DEIR are nothing more than general assertions that something will be done in the future about the Project's significant environmental impacts. Such deferral is prohibited by CEQA. Consequently, the City must prepare and recirculate a revised EIR if it chooses to proceed with the proposed Project.



#### A. The DEIR Fails to Adequately Describe the Project.

#### 1. The DEIR's Project Description Omits Critical Information.

Under CEQA, the inclusion in the EIR of a clear and comprehensive description of the proposed project is critical to meaningful public review. *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193. The court in *Inyo* explained why a thorough project description is necessary:

"A curtailed or distorted project description may stultify objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance." d. at 192-93. Thus, "[a]n accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR." *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818, 830.

Here, the description of the Project is inadequate. The DEIR fails to identify key components of the Project that have the potential to result in significant environmental impacts. For example, the DEIR entirely omits critical information about the improvements that would be needed to resolve the area's hydraulic and flood risks. *See* Baseline Report at 1 and 2. Additionally, the DEIR fails to adequately describe the Project's stormwater system and fails to include a Stormwater Control Plan. The proposed Project will result in a substantial increase in impermeable surfaces, which will, in turn, increase runoff from the site, yet the document does not include any detail about where drainage features (inlets, piping, culverts, etc.) would be located and how these systems, including the detention basins, would be operated. The DEIR does not appear to include, nor does it reference, any hydrologic or hydraulic engineering that supports the drainage plan. The reader of the DEIR has no idea how the detention basins were sized or how they would be operated. Without detailed information regarding the location and design of the drainage facilities, it is impossible for decision makers and the public to evaluate the accuracy of the DEIR's conclusions.



The DEIR also fails to include the following crucial information about the Project:

- Number and type of trees to be removed;
- Location of the Project staging areas;
- Location of spoils sites and haul routes;
- Construction-related activities (including timeline, location, number of construction employees, types of equipment, etc.);
- Other Project features such as fences, bridges, gates or other proposed improvements.

All of this information must be included in a revised EIR so that the impacts associated with these features and activities can be analyzed.

# 2. The Project Description Avoids Any Meaningful Discussion of the Proposed Development Agreement.

The DEIR notes that the Project will include a development agreement, and states that the agreement's primary purpose is to vest the applicant's entitlements. DEIR at 3.0-12. The DEIR also states that the development agreement will include provisions regarding integration of the project entrance with the future Donlon Boulevard extension, requirements for payment of fees related to open space and compliance with the City's inclusionary housing ordinance. *Id.* However, no information is provided about the conditions, terms, restrictions and requirements for subsequent actions. The text of this development agreement is not included anywhere in the DEIR. And the development agreement was not included among the publicly available environmental documents for the project. Without any more detailed information about the terms of the agreement, key elements of the project description are omitted and cannot be analyzed in the EIR, in direct violation of CEQA. *See, e.g., Laurel Heights Improvement Ass'n v. Regents of the University of California* (1993) 6 Cal.4th 1112, 1123 ("*Laurel Heights II*") (the purpose of CEQA "is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made").

This omission is particularly disturbing as development agreements typically seek to "lock in" development rights – including existing regulations and the density and intensity of development – over an extended period of time. As such, development agreements have the potential to greatly exacerbate the potential impacts of



a project by limiting the lead agency's permitting authority and ability to impose additional mitigation measures or reduce the intensity of development at later discretionary phases of the project. This problem is only compounded where, as here, the development of critical mitigation measures is deferred to the indefinite future.

The DEIR's failure to provide any specifics regarding the development agreement constitutes a fatal shortcoming in the Project Description and the subsequent analysis of Project impacts. To comply with CEQA, the DEIR must be recirculated with a more detailed description of the development agreement or with the draft agreement attached.

# **3.** The DEIR Minimizes the Extent of the Project By Failing to Describe and Analyze Full Build-Out Conditions.

Courts have held that, when analyzing the environmental impacts of a general plan or other planning document, the lead agency must analyze "the future development *permitted* by the [plan]... Only then can the ultimate effect of the [plan] upon the physical environment be addressed." *Christward Ministry v. Superior Court of San Diego County* (1986) 184 Cal.App.3d 180, 194 (emphasis added); *see also City of Redlands v. County of San Bernardino* (2002) 96 Cal.App.4th 398, 409 (quoting same).

Here, the Project proposes rezoning not only for the 77-acre portion of the site designated for residential development but for entire site. DEIR at 3.0-8. Nowhere does the DEIR analyze the impacts of a potential increase in density on the entire site. The DEIR proposes that the 71-acre area proposed for open space will be subject to "recordation of a deed restriction or some other appropriate mechanism, prior to the acceptance of the last Final Map for the site (should it be broken into phases)." DEIR at 2.0-21. This approach is not adequately protective of the open space. First, recording the deed restriction prior to the last Final Map (rather than prior to the *first* Final Map) leaves the open space area vulnerable to damaging uses during construction. Second, deferring recordation of the deed restriction to such a late date leaves the open space vulnerable to future proposals for alteration of the open space area to other uses.

Alternatively, the DEIR could have specified use of a conservation easement on the open space area, conveyed to a land trust capable of managing and enforcing it, to preserve and protect the area in perpetuity. Such an easement should be recorded prior to acceptance of the first Final Map. As proposed, the open space area is vulnerable to future proposals for alteration of the open space area to other uses, and therefore, the DEIR must analyze the potential impacts at full build-out should the City approve the change in zoning.



# **B.** The DEIR Fails to Analyze and Mitigate the Project's Significant Environmental Impacts.

CEQA requires that an EIR be detailed, complete, and reflect a good faith effort at full disclosure. Guidelines § 15151. The document should provide a sufficient degree of analysis to inform the public about the proposed project's adverse environmental impacts and to allow decision-makers to make intelligent judgments. *Id.* Consistent with this requirement, information regarding the project's impacts must be "painstakingly ferreted out." *Environmental Planning & Info. Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 357 (finding an EIR for a general plan amendment inadequate where the document did not make clear the effect on the physical environment).

Meaningful analysis of impacts effectuates one of CEQA's fundamental purposes: to "inform the public and responsible officials of the environmental consequences of their decisions before they are made." *Laurel Heights II*, 6 Cal.4th at 1123. To accomplish this purpose, an EIR must contain facts and analysis, not just an agency's bare conclusions. *Citizens of Goleta Valley*, 52 Cal.3d at 568. Nor may an agency defer its assessment of important environmental impacts until after the project is approved. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 306-07. An EIR's conclusions must be supported by substantial evidence. *Laurel Heights I*, 47 Cal.3d at 409.

As documented below, the DEIR fails to identify, analyze, or support with substantial evidence its conclusions regarding the Project's significant environmental impacts. These deficiencies render the DEIR inadequate under CEQA.

# 1. The DEIR Fails to Analyze and Disclose Significant Aesthetic Impacts of the Project.

The proposed Project will alter and adversely impact the visual landscape of the site and the surrounding area by completely transforming this scenic, hilly area into a dense, residential one. As discussed above, the Project will cut and fill large swaths of hillside and excavate an enormous amount of soil: 1.4 million cubic yards. DEIR at 3.0-12. (Assuming a dump truck holds 10 cubic yards, the proposed excavation equates to 140,000 truckloads of soil.) The DEIR acknowledges that the Project would result in significant and unavoidable impacts relating to a the degradation of the existing visual character of the area. DEIR 2.0-6. Despite this assessment, the DEIR concludes that the Project's other aesthetic impacts will be less than significant because of certain landscaping and design features. However, landscaping and design features cannot reduce



the significant topographic impacts of the Project to a level of insignificance. Furthermore, the DEIR's conclusion that aesthetic impacts will be insignificant flies in the face of established CEQA precedent.

Under CEQA, it is the state's policy to "[t]ake all action necessary to provide the people of this state with . . . enjoyment of *aesthetic*, natural, scenic, and historic environmental qualities." CEQA § 21001(b) (emphasis added). "A substantial negative effect of a project on view and other features of beauty could constitute a significant environmental impact under CEQA." *Ocean View Estates Homeowners Assn., Inc. v. Montecito Water District* (2004) 116 Cal.App.4th 396, 401. No special expertise is required to demonstrate that the Project will result in significant aesthetic impacts. *Ocean View Estates*, 116 Cal.App.4th at 402 ("Opinions that the [project] will not be aesthetically pleasing is not the special purview of experts."); *The Pocket Protectors v. City of Sacramento* (2005) 124 Cal.App.4th 903, 937 ("[N]o special expertise is required on this topic.").

As explained by the court in *Quail Botanical Gardens Foundation, Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1606, it is "self-evident" that replacing open space with a subdivision will have an adverse effect upon "views and the beauty of the setting." Instead of addressing and analyzing the Project's visual effects, the DEIR employs contorted logic to mask its clear impacts. For example, the DEIR acknowledges that the General Plan identifies views of the "rolling, grassy hills to the south," which characterize the site, as important visual resources for the City and that the development will be visible from area parks. DEIR at 5.1-8. The DEIR also acknowledges that the Project site "could be considered an element of broad scenic vistas of hills and open space visible from Kirker Pass Road, a designated scenic route in the General Plan. *Id.* The DEIR even states that the Project could have a substantial adverse effect on a scenic vista. *Id.* Surprisingly, the DEIR then concludes that impacts to scenic vistas would be less than significant because design guidelines included in Mitigation Measure AES-1 would mitigate these significant impacts. DEIR at 5.1-9.

Such a conclusion is misguided and unsupported by evidence. The guidelines and standards that the DEIR relies on address the colors and materials to be used in the development but in reality they do nothing to reduce the height, mass, or location of structures or to ensure that the development is less visible from public viewpoints. The DEIR fails to provide any specific information or analysis, as to how the proposed measure would mitigate significant impacts to existing views from parks and other public viewpoints. A neutral color palette will not camouflage this large subdivision.

Moreover, the DEIR fails to provide evidence to support its conclusion that the Project's impacts to area scenic vistas would be less than significant. Specifically, the EIR fails to evaluate the Project's impacts to views from East Bay Regional Park District ("EBRPD") trails and from open space areas in Stoneman Park to the north. *See* DEIR Figure 5.1-3 indicating visual simulations performed only for views from Kirker Pass Road. The DEIR also fails to evaluate impacts to planned parklands to the south and southwest of the project site. As pointed out by during the scoping process, the EBRPD has acquired the "Thomas North" parcel to the south of the Project site and the "Land Waste Management" and "Affinito" parcels to the southwest. A revised EIR must be prepared to evaluate the Project's impacts to views from these parcels.

The Project will transform an undeveloped, rural area framed by rolling hills into a large residential subdivision. This change substantially degrades not only the existing visual character and quality of the site and its surroundings but the quality of scenic vistas enjoyed from area roadways, parks, and trails. These impacts are considered significant impact under CEQA. Guidelines, Appendix G(I)(c). Thus, the DEIR's conclusion that the Project's impact on scenic vistas would be less than significant cannot be sustained.

### 2. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Hydrology and Water Quantity.

The DEIR includes absolutely no discussion of the potential impacts to hydrology and water quality, having concluded in the Initial Study ("IS") that the Project's impacts in these areas would be less than significant. As explained in the attached Baseline Report, this conclusion is not supported by substantial evidence and, in fact, the Project would substantially alter site drainage and the stream channel that runs through the property. While the IS provides a general discussion of these potential impacts, it contains no supporting studies or data and relies entirely on future preparation of a Storm Water Pollution Prevention Plan ("SWPPP") and compliance with existing regulations to reduce the Projects impacts to a level of insignificance. As discussed in detail below, this approach does not comport with CEQA. In very steep terrain like this, it is virtually impossible for projects to comply with National Pollutant Discharge Elimination System ("NPDES") requirements, which is evidenced by the Project's proposed detention basins. Thus, relying on compliance with existing requirements is particularly unacceptable in this situation. In addition, steep terrain such as this makes remediation of unstable soils very challenging.



### (a) The DEIR Fails to Adequately Describe the Existing Hydrological Setting.

The DEIR/IS provides no information on the hydrology and water quality setting. Without describing the hydrology of the on-site drainage and that of Kirker Creek downstream, the reader of the DEIR/IS has no context within which to evaluate potential project impacts. Perhaps most important, the DEIR/IS does not provide any discussion of the hydrology of Kirker Creek and its susceptibility to flooding. The DEIR must be revised to include a Hydrology and Water Quality section that adequately describes the hydrologic setting.

#### (b) The Project Does Not Comply with Applicable Requirements Under the NPDES

The IS states that the project would treat stormwater runoff "as required by provision C.3 of the Contra Costa County municipal stormwater NPDES permit by directing all site runoff into three detention basins." IS at 59. However, this statement appears to refer to an old (and superseded) NPDES permit. The current NPDES permit that the project would be required to comply with is the Municipal Regional Stormwater NPDES Permit, Order No. R2-2009-0074, NPDES Permit No. CAS612008, adopted October 14, 2009 and revised November 28, 2011 ("MRP"). Not only does the Initial Study refer to the wrong NPDES permit, it wrongly interprets what C.3 provisions would be required. Baseline Report at 3. The C.3 portion of the MRP, which refers to post-construction stormwater management for new development and redevelopment projects, requires Low Impact Development ("LID"). The Project as proposed includes centralized detention basins, which are not LID features.

The goal of LID is to reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and biotreatment through rain gardens, bioretention units, bioswales, and planter/tree boxes. LID also limits disturbance of natural water bodies and drainage systems; minimizes compaction of highly permeable soils; protects slopes and channels; and minimizes impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies. Baseline Report at 3 and 4.

Here, the Project would result in massive grading, moving approximately 1.4 million cubic yards of soil. DEIR at 3.0-12. No LID designs or feathers appear to be

incorporated or required. Instead, several large detention basins are proposed to collect the site's stormwater before discharging it into Kirker Creek. Incorporation of LID designs and features into the project would require extensive modifications to the grading plan and overall site plan. These design changes to the project should be made by the applicant and the revised project evaluated in a recirculated DEIR.

### (c) The Project Would Result in Flooding and Erosion Impacts Downstream

Based on a review of available mapping and aerial photographs, the Baseline Report concludes that Kirker Creek appears to have reaches that are highly incised with oversteepened creek banks. Baseline Report at 4. This indicates that portions of the creek may be unstable. *Id.* There are areas in the City of Pittsburg (e.g., Brush Creek Drive, Canyon Way), where homes are located within 20 to 30 feet of the top of the creek bank. Any change to the hydrology of flows in Kirker Creek could result in hydromodification and cause increased erosion and creek bank failure, which may jeopardize existing structures. *Id.* 

The DEIR/IS fails to provide any explanation as to how the detention basins would be operated to prevent "erosion of existing stream banks and flooding downstream along Kirker Creek," and it is not clear that they can be so operated. IS at 60. Simply delaying flows in detention basins is not an effective approach to preventing downstream hydromodification of Kirker Creek. Baseline Report at 4. The Project would result in a substantial amount of new impervious surfaces conveying increased flows to centralized basins. This would in turn increase total discharge volume to Kirker Creek. *Id.* Even moderate flows to the creek, if sustained for longer periods of time than would occur without the project, could cause significant downstream erosion. *Id.* This is a potentially significant impact that must be fully analyzed under CEQA.

In sum, the DEIR lacks sufficient evidentiary support for its conclusion that the Project's impacts on hydrology and water quality would be less than significant. A revised DEIR that comprehensively evaluates and mitigates the proposed Project's hydrology and water quality impacts must be prepared and recirculated.

# **3.** The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Biological Resources

The DEIR presents an incomplete—and hence inadequate—discussion of the Project's potential impacts to biological resources. As detailed below, the DEIR underestimates Project-related impacts to biological resources as a result of a series of



errors, including: (1) faulty methodology; (2) the failure to describe accurately the environmental setting; (3) the failure to analyze the extent and severity of impacts to sensitive species and habitats; and (4) the failure to analyze the Project's cumulative effects. The DEIR's treatment of biological impacts does not meet CEQA's well established legal standard for impacts analysis. Given that analysis and mitigation of such impacts are at the heart of CEQA, the DEIR will not comply with the Act until these serious deficiencies are remedied.

### (a) The DEIR Appears to Employ Faulty Methodology.

The DEIR employs faulty methodology and incorrect assumptions in its analysis of Project impacts to biological resources. It appears that the DEIR's analysis is not based on focused surveys tailored to determine the likelihood that particular species would be present. In fact, the DEIR never describes the methodology employed for site surveys. Aside from one sentence that indicates the surveys consisted of "driving and walking around the site" (DEIR Appendix 5.3 at pdf page 4), the DEIR provides no description of the survey methods at all. The DEIR should have included focused surveys for all special status with the potential to occur on site. These surveys should have included surveys for grassland birds, rare plant surveys, and, as discussed below, appropriately timed protocol level surveys for species likely to occur on-site.

The survey information as it stands does not provide an adequate basis for determinations about the individual and cumulative impacts of this Project on either special-status species or rare habitats. The DEIR's inadequate analysis of the species and habitats on the site results in an understatement of the Project's biological impacts.

# (b) The DEIR Fails to Adequately Describe the Project's Biological Setting.

An EIR also "must include a description of the environment in the vicinity of the project, as it exists before the commencement of the project, from both a local and a regional perspective." Guidelines § 15125; *see also Environmental Planning and Info. Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354. CEQA requires that special emphasis be placed on environmental resources that are rare or unique to that region and that would be affected by the Project. Guidelines § 15125(c). Here, the DEIR's discussion of environmental setting is sorely deficient.

The DEIR fails to provide a complete description of the Project's biological setting and, in some cases, presents conflicting information. For example, the DEIR states that the Project site does not include alkali soils; an important distinction because some



special status plants occur solely in alkali soils. DEIR at 5.3-7. However, the DEIR also indicates that saltgrass (Distichlis spicata), a plant that is dependent on alkali soils, was observed on site. DEIR at Table 5.3-1.

In other cases, the DEIR simply presents erroneous information. For instance, the DEIR dismisses the potential occurrence of big tarplant stating that "the highly disturbed on-site grasslands do not provide suitable habitat . . . ." DEIR at Table 5.3-2. However, this species is found in annual grasslands, usually on slopes like the ones that characterize the Project site. Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014.

In other instances, the DEIR omits crucial information altogether. The DEIR fails to evaluate grassland birds likely to occur on site and entirely ignores the grasshopper sparrow, a California species of special concern. *Id.* and DEIR Table 5.3-2 (excludes grasshopper sparrow).

The DEIR also fails to analyze the presence and number of other special status species that it acknowledges may be present on the site and in the Project area. For example, although the DEIR acknowledges that California tiger salamander ("CTS"), a species protected by the federal Endangered Species Act, has been documented in the Project vicinity (DEIR at 5.3-18), the DEIR is dismissive of the potential for this species to occur on site. DEIR at 5.3-3 (lists species for which suitable habitat is found on the Project site but excludes CTS). The DEIR states that because there is no suitable breeding habitat for CTS within or near the project site and that the nearest occurrence is 0.5 miles away, the species is not likely to occur on the site. DEIR Table 5.3-2 at page 5.3-13.

However, the DEIR fails to evaluate potential upland habitat on site that may be used by CTS. As explained in the attached report, "Movement Patterns and Migration Distances in An Upland Population of California Tiger Salamander" (Orloff, 2011), CTS disperse over distances far greater than 0.50 miles. Orloff Report, attached as Exhibit 2. Thus, the Project site, which is within a half mile of a known breeding site, is very likely to provide aestivation habitat for CTS. Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014; biography attached as Exhibit 3. Moreover, it appears that other ponds providing potentially suitable habitat may be present in close proximity to the Project site. *See* map attached as Exhibit 4 and Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014. Accordingly, the DEIR's description of the biological setting (and the document's impact analysis) must be revised to include consideration of this species. *Id*.

Similarly, the DEIR acknowledges that burrowing owls are known to occur in the area, but dismisses their potential to occur onsite based on the fact that no owls were observed onsite and that the nearest occurrence of nesting burrowing owls is 2.5 miles west of the site. DEIR at Table 5.3-11. The DEIR's conclusion is not based on any evidence. In fact, burrowing owl have been observed nesting on the Thomas Home Ranch property located to the southwest of the Project site (between Nortonville Road and Kirker Pass Road) within the past year. Personal Communication, Malcolm Sproul, Senior Biologist, Bay Area consulting firm, January 8, 2014. Moreover, burrowing owl do not depend exclusively on ground squirrel burrows for nesting sites, as implied in the DEIR. DEIR at 5.3-11. Burrowing owls have been known to nest in shallow indentations such as those present in the rock outcroppings on site. DEIR at 5.3-1.

Moreover, the DEIR mischaracterizes the role of the Habitat Conservation Plan ("HCP") and its role in relation to environmental documentation for the project. First, the HCP is a conservation mechanism that includes a broad, programmatic review of resources throughout eastern Contra Costa County; it is not a project-specific, impactanalysis document. DEIR at 5.3-24. Thus, the information in the HCP cannot replace properly designed and implemented surveys of the project site to determine the biological resources there. Second, the DEIR states that the HCP's primary goal is to streamline review of development projects. DEIR at 5.3-24. This is incorrect. The HCP is intended to serve as a coordinated process for permitting and mitigating the incidental take of endangered species. It does not excuse the City from requiring site-specific analysis. Finally, the HCP is administered by the East Contra Costa County Habitat Conservancy ("Conservancy"). DEIR at 5.3-25. The Conservancy is not a land use agency and therefore is not tasked with making decisions about the appropriate location for siting land development. That responsibility falls to the City, which has the responsibility of completing site-specific analysis of the Project's significant impacts to special status species and habitat as part of the CEQA process. Therefore, the DEIR must be revised to include a thorough investigation of the site's existing biological setting and the Project's impacts on those resources.

The DEIR's perfunctory description of the sensitive species and habitats present in the Project area results in an incomplete description of the sensitive environmental setting of the Project. This failure to describe the Project setting violates CEQA. *See San Joaquin Raptor*, 27 Cal.App.4th at 724-25 (environmental document violates CEQA where it fails to completely describe wetlands on site and nearby wildlife preserve). The DEIR should have included surveys for these species as part of its assessment of biological resources. Accordingly, the DEIR's description of the biological setting must be revised to include consideration of these and other overlooked species.



(c) The DEIR Fails to Adequately Analyze the Project's Direct Impacts to Sensitive Species.

The DEIR's failure to describe the existing setting severely undermines its analysis of Project impacts. Despite the DEIR's acknowledgement that the Project would adversely affect potential habitat for several special status, the DEIR fails to adequately analyze adverse impacts to these species. For example, the DEIR acknowledges that the Project site includes potential habitat for burrowing owl, a California Species of Special Concern ("CSC"); San Joaquin kit fox, a federally endangered species and a California Threatened species; and vernal pool fairy shrimp, a federally Threatened species. DEIR at 5.3-26 and 27. Yet, rather than conduct appropriate surveys to evaluate the presence/absence of these species and analyze the extent and severity of the Project's impacts, the DEIR simply applies a laundry list of measures required by the Habitat Conservation Plan for the Project area and concludes that all impacts will be mitigated to less than significant levels. See, e.g., DEIR at 5.3-31 and 32. By failing to analyze the extent and severity of impacts to biological resources, the DEIR downplays the effects of the loss of open space on special status species. The end result is a document which is so crippled by its approach that decision makers and the public are left with no real idea as to the severity and extent of environmental impacts. See, e.g., Berkeley Keep Jets Over the Bay Com. v. Bd. of Port Comrs. (2001) 91 Cal.App.4th 1344, 1370-71; Galante Vineyards v. Monterey Peninsula Water management Dist. (1997) 60 Cal.App.4th 1109, 1123; Santiago County Water Dist. v. County of Orange (1981) 118 Cal.App.3d 818, 831 (a lead agency may not simply jump to the conclusion that impacts would be significant without disclosing to the public and decision makers information about how adverse the impacts would be).

Similarly the DEIR's analysis of impacts to raptors such as Swainson's hawk simply asserts that they would be affected by a reduction in nesting resources, ignoring altogether the impacts caused by loss of habitat. DEIR at 5.3-28. Urbanization has a profound effect on raptors because they require large areas to hunt and are disturbed by human activity near their nests. Moreover, the DEIR's sole mitigation proposal for raptors focuses exclusively on avoiding active nests. It ignores perch resources and the role that loss of habitat and urbanization have on raptors. In any event, the DEIR must quantify the Project's effects on raptors, and the efficacy of the proposed mitigation, so that the public and decision makers may reach their own conclusions. *Save Our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 130.

#### (d) Indirect Impacts on Wildlife

The DEIR ignores altogether the Project's indirect impacts on wildlife. Indirect impacts from low density residential development can be as devastating to wildlife as the direct loss of habitat. (*See generally* Exhibit 5 [Hansen, et al., Land Use Change in Rural America: Effects Of Exurban Development On Biodiversity: Patterns, Mechanisms, And Research Needs]). For example, toxic compounds from the residential activities could adversely impact wildlife that rely on Kirker Creek. The use of common fertilizers and pesticides associated with routine yard maintenance and landscaping can generate concentrations of pollutants that degrade water quality and harm wildlife.

It is also well established that noise—and even low ambient noise levels from typical residential activities adversely impacts wildlife species, causing them to flee their habitats and even abandon nests. Wildlife can also be quite sensitive to glare from ambient night lighting. Also, cats, unless they are kept indoors, are skilled predators on wildlife. Cats can radically decrease the potential for bird species and small reptiles to survive in sensitive habitats adjacent to project sites. *See* "Domestic Cat Predation on Birds and Other Wildlife" attached as Exhibit 6. These indirect impacts would be significant and therefore must be analyzed in an EIR.

In short, the DEIR's analysis of impacts to biological resources dramatically understates the Project's potential to significantly affect sensitive species and sensitive habitats. To comply with CEQA, the City must prepare a revised DEIR fully analyzing the Project's potential impacts to these resources and identifying effective mitigation measures. Given the substantial revisions that are necessary, the City must recirculate the revised DEIR. Guidelines 15088.5(a)(4).

### 4. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Cultural and Historic Resources.

The Project is located on the site of a former historic ranch complex considered a significant historic resource under CEQA (*i.e.*, Thomas Ranch complex). *See* DEIR Appendix 1.0; IS at 41. According to a historic resources survey performed in 1995, the complex consisted of a house and a number of small barns in a style typical of the period from the late 1800's through the turn of the century. *Id*. The IS indicates that the historic buildings were demolished and the area leveled, but that the ranch complex was never inventoried as recommended in the 1995 study. IS at 42. It also indicates that historic and/or prehistoric archaeological deposits may be present on the site. *Id*.



Nonetheless, while the DEIR acknowledges the likelihood of significant archaeological resources on the site, it fails to identify the extent of potential cultural resources, adequately analyze potential impacts to those resources, or adequately mitigate the project's potentially significant impacts to cultural resources. Instead, the DEIR relies on the IS analysis and incorporates the mitigation measures proposed in that document. DEIR at 2.0-19. These measures provide for monitoring during construction and data collection and recording should resources be discovered. Based on implementation of these measures, the DEIR concludes that resulting impacts would be less than significant.

However, the assertion that post-approval data collection will mitigate the project's impacts to known resources on the site to a less-than-significant level is not supported by substantial evidence, constitutes an inappropriate deferral of mitigation measures under *Sundstrom v. County of Mendocino*, 202 Cal.App.3d at 296, and is erroneous as a matter of law. In fact, "where a historic resource is to be demolished, documentation of the resources usually falls short of full mitigation."). *See* Discussion following Guidelines § 15126.4. Moreover, courts have explained that the mitigation of the effects of demolition of an historic resource (as defined by CEQA) through documentation of the resource and placement of commemorative markers is not adequate to reduce impacts to a level of insignificance. *League of Protection of Oakland's Architectural and Historic Resources v. City of Oakland* (1997) 52 Cal.App.4th 595.

Moreover, under CEQA, the preferred method of reducing impacts to cultural resources is avoidance. *See Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal.App.4th 48, 86-87. The only feasible way to avoid cultural resources with a development project like this is to conduct surveys before final project design is approved; identify all known historic properties that will be affected by the project; and consider redesigning the project to avoid them.

Here, given that the site includes known significant historical resources, and especially given the fact that known historical resources were destroyed without proper evaluation or documentation, the City should require a third party consultant to perform trenching tests now, as part of the CEQA process, to assess whether the Project would impact significant resources and what Project modifications could be incorporated to avoid the resources. Until such additional investigation and analysis of potential impacts to cultural resources is prepared, the DEIR cannot be certified under CEQA and the Project must not be approved.

Finally, the cultural resources evaluations prepared by Holman and Associates (1995, 1999, and 2000) were not included as appendices to the DEIR. Although it is customary to exclude location maps and specific language related to the



location of resources to protect potential resources on site, the DEIR omitted the studies altogether. Without these studies, it is impossible for the public and decision makers to evaluate the impacts the proposed project would have on cultural resources. Accordingly, for this and the other reasons discussed above, the DEIR's analysis of impacts to cultural resources is inadequate under CEQA.

# 5. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Public Services.

As the DEIR acknowledges, several schools within the Pittsburg Unified School District are currently operating at or near capacity. DEIR at 5.6-3. The Project will generate up to 277 Kindergarten through Twelfth grade students. DEIR at 5.6-8. The DEIR discloses that the Project would generate the need for new school facilities to be constructed. The DEIR concludes that school impacts will be mitigated to a less-thansignificant level, however, by payment of fees established by the school districts. DEIR at 5.6-9 (citing Gov't Code § 65996).

While it may be true that the payment of such fees is deemed mitigation under Government Code section 65996, this provision does not excuse the City from analyzing the impacts to the environment of sending 277 new students to schools that are already at or near capacity. Indeed, the DEIR's threshold of significance states that the Project could have a significant effect on the environment if it would: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios . . . for schools. DEIR at 5.6-7. With several schools already at capacity, the Project will necessarily require the construction of "new or physically altered" school facilities. Construction of these school facilities may have land use and planning impacts and, if sited on undeveloped open space lands, potential biological, agricultural, recreational, and other impacts as well. The DEIR must be revised to analyze these potential environmental impacts.

Moreover, the DEIR failed to consider cumulative impacts of school construction. The DEIR lists five Major Projects (DEIR at 5.0-4), most of which are residential projects, in its cumulative impacts analysis. In addition, the City of Pittsburg's Project Pipeline List includes at least a dozen residential projects. Considering that the Pittsburg Unified School District is already at or near capacity, the DEIR must analyze how this project, along with the related projects, will cumulatively affect school services in the District.

### 6. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Public Safety.

The Project site has an existing high-pressure petroleum pipeline within the area proposed as a buffer. DEIR at 3.0-9. The Project proposes to site residences within 1,000 feet of the pipeline, yet the DEIR provides no analysis of related safety impacts. *Id.* Although leaks, ruptures, and explosions may not be common for underground pipelines, the impacts from pipeline failures when they do occur can be catastrophic. *See* "Pipelines Explained: How Safe are America's 2.5 Million Miles of Pipelines?" attached as Exhibit 7. As explained in that article, pipelines are prone to failure as they age and corrode. Given the Project's proposal to locate housing in close proximity to the pipeline, the DEIR should have provided an analysis of the condition of the pipeline and the likelihood of failure or accidents.

Instead, the DEIR includes a mitigation measure (carried over from the IS) that only requires the developer to disclose the location of the pipeline to prospective homebuyers. DEIR at 2.0-2.0. However, this measure does nothing to minimize risks to homeowners. Indeed, the DEIR fails to provide any evidence to support its conclusion that risks associated with potential rupture of the pipeline would be reduced to a less-than-significant level with implementation of the measure.

# 7. The DEIR's Analysis of Growth Inducing Impacts Is Incomplete and Flawed.

CEQA requires that an EIR include a "detailed statement" setting forth the growth-inducing impacts of a proposed project. CEQA § 21100(b)(5); *City of Antioch v. City Council of Pittsburg* (1986) 187 Cal. App. 3d 1325, 1337. The statement must "[d]iscuss the ways in which the proposed project could foster economic growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Guidelines §15126.2(d). It must also discuss how the project "may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively" or "remove obstacles to population growth." *Id.* 

Here, the DEIR's analysis of growth-inducing impacts is legally inadequate. As with other issues, the document relies on speculation instead of evidence to support its conclusions. The DEIR's conclusion that the Project will have no growthinducing impacts is not supported by substantial evidence.

The DEIR relies on the promise that the required facility upgrades necessary to serve the Project would only serve development on the main Project site to



conclude that there is little chance that the Project will cause adjacent, undeveloped land to be developed, and thus that the Project will not induce significant growth. DEIR at 7.0-5. With a growing population in the Bay Area, extending infrastructure to an area currently outside the City Limit will remove one barrier that currently keeps pressure for development in the area in check.

The City's General Plan specifies a goal of efficient land use patterns which reduce environmental impacts and minimize the potential for residential and commercial sprawl. Approval and development of the Montreux Project would expand development and extend utility infrastructure beyond the City's existing service area, effectively removing an obstacle to future development approvals in the area. That new development has yet to be approved does not excuse the requirement to analyze a project's environmental or growth inducing impacts. Guidelines § 15126.2(d); *City of Davis v. Coleman* (9th Circuit 1975) 521 F.2d 661,675-76.

The DEIR fails to conduct such an analysis. As the *City of Davis* court directed "the purpose of an EIS/EIR is to evaluate the possibilities in light of current and contemplated plans and to produce an informed estimate of the environmental consequences." *Id.* at 676. Accordingly, the DEIR must be revised to identify the extent and location of new development facilitated by removing the obstacle of limited existing infrastructure and to analyze the environmental impacts of the growth.

If the City has contrary data demonstrating that the Project will not induce growth – and there is no indication in the DEIR that it does – it must reference it in the document. However, it may not lawfully rely on unsupported assumptions to summarily conclude that no induced growth will occur. CEQA § 21080(e)(2) ("Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative").

# 8. The DEIR Fails to Provide an Adequate Analysis of the Project's Potentially Significant Cumulative Impacts.

CEQA requires lead agencies to disclose and analyze a project's "cumulative impacts," defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Guidelines § 15355. Cumulative impacts may result from a number of separate projects, and occur when "results from the incremental impact of the project [are] added to other closely related past, present, and reasonably foreseeable probable future projects," even if each project contributes only "individually minor" environmental effects. Guidelines §§ 15355(a)-(b). A lead agency must prepare an EIR if



a project's possible impacts, though "individually limited," prove "cumulatively considerable." CEQA § 21083(b); Guidelines § 15064(i).

Extensive case authority highlights the importance of a thorough cumulative impacts analysis. In *San Bernardino Valley Audubon Society v. Metropolitan Water Dist. of Southern Cal.* (1999) 71 Cal.App.4th 382, 386, 399, for example, the court invalidated a negative declaration and required an EIR for the adoption of a habitat conservation plan and natural community conservation plan. The court specifically held that the negative declaration's "summary discussion of cumulative impacts is inadequate," and that "it is at least potentially possible that there will be incremental impacts. . . that will have a cumulative effect." *See also Kings County Farm Bureau*, 221 Cal.App.3d at 728-729 (EIR's treatment of cumulative impacts on water resources was inadequate where the document contained "no list of the projects considered, no information regarding their expected impacts on groundwater resources and no analysis of the cumulative impacts").

In contravention of the above authorities, the DEIR provides no analysis of the Project's cumulative impacts on biological resources, but simply concludes that, because the applicant will pay permit fees under the Habitat Conservation Plan for the area, cumulative impacts are less than significant. DEIR at 5.3-37. The DEIR thus completely ignores the cumulative effects of recent development approvals and potential future approvals in the City. For example, as discussed earlier in this letter, the City's Project Pipeline List indicates that the City has approved, or is in the process of approving, at least a dozen residential development projects constructing thousands of residential units. See Exhibit 7. The DEIR lists only five projects considered in the cumulative analysis. DEIR at 5.0-4. Other projects that should have been considered in a cumulative analysis include projects that have been approved but not yet constructed (Alves Ranch (364 units); Bancroft Gardens II (28 units); the San Marco Development (1,588 units); and Vista del Mar (518 units). See generally Exhibit 8. These development projects, together with the present subdivision, would have a cumulatively significant impact on open space and natural resources in the Project area. Notwithstanding such evidence, the DEIR fails to provide any analysis of this potentially significant impact.

In another particularly glaring omission, the DEIR also neglects to analyze cumulative impacts on hydrological resources. Specifically, the DEIR contains no analysis of the Project's impacts together with the effects of other development projects proposed within the Project area that may contribute to changes in hydrology in Kirker Creek. Another major project, the James Donlon Boulevard Extension, which is currently under review by the City and would include massive grading and alteration of local drainage patterns and hydrology within the Kirker Creek watershed, is not considered in



the DEIR's hydrology analysis. The effects on water quality, flooding, and hydromofication from these two major projects, and others, on Kirker Creek must be analyzed in a revised DEIR.

# 9. The DEIR Fails to Adequately Analyze and Mitigate Alternatives to the Project.

The alternatives section, along with the mitigation section, is the core of an EIR. *Citizens of Goleta Valley*, 52 Cal.3d at 564. Every EIR must describe a range of alternatives to a proposed project, and to its location, that would feasibly attain the project's basic objectives while avoiding or substantially lessening the project's significant impacts. CEQA § 21100(b)(4); Guidelines § 15126(d). In preparing an EIR, the lead agency must ensure "that all reasonable alternatives to proposed projects are thoroughly assessed." *San Joaquin Raptor*, 27 Cal.App.4th at 717. An EIR's alternatives discussion must focus on alternatives that avoid or substantially lessen significant effects of the project. Guidelines § 15126.6(b); *Citizens of Goleta Valley*, 52 Cal.3d at 556 (EIR must consider alternatives that offer "substantial environmental advantages."). The range must be sufficient "to permit a reasonable choice of alternatives so far as environmental aspects are concerned." *San Bernardino Valley Audubon Soc'y v. County of San Bernardino* (1984) 155 Cal.App.3d 738, 750. The DEIR's discussion of alternatives fails to meet these standards.

Sound planning principles dictate that the City carefully consider alternatives in the present case because the proposed Project would require annexation of the Project site into the City limits and into service areas for water and sanitation districts and would result in admittedly significant impacts to air quality, visual resources, and public services. DEIR at 2.0-6, 2.0-8, 2.0-10, and 2.0-16. This DEIR's analysis of alternatives is insufficient under CEQA because the document fails to consider feasible alternatives that would reduce Project impacts. Guidelines § 15126.6(c); *Citizens of Goleta Valley*, 52 Cal.3d at 566.

As a preliminary matter, the DEIR's failure to disclose the extent and severity of the Project's broad-ranging impacts necessarily distorts the document's analysis of Project alternatives. As a result, the alternatives are evaluated against an inaccurate representation of the Project's impacts. Proper identification and analysis of alternatives is impossible until Project impacts are fully disclosed. Moreover, as discussed above, the document's analysis is incomplete and/or inaccurate so that it is simply not possible to conduct a comparative evaluation of the Project's and the alternatives' impacts.

The DEIR also fails to describe an alternative location for the Project, stating that because neither the developer nor the City owns or controls any other property in the vicinity of the site that is of sufficient size to accommodate the project, the ability of the developer to find and purchase an alternative site to develop the project is considered speculative. DEIR at 6.0-3. The DEIR goes on to state that "... the development of the same number of residential uses at a different location would result in similar visual character and construction air quality impacts. Thus, placing the proposed development at an alternative site would not avoid the significant impacts of the proposed project." *Id.* 

This approach fails to meet CEQA's requirements for the analysis of alternatives. It provides no information on the alternative sites that might be available or event the criteria for such a site search. Without this information and, if possible, a further identification of alternative sites, the DEIR is inadequate and cannot be certified under CEQA. Moreover, even if it is true that no alternative sites exist that could accommodate all of the Project in one location, a feasible alternative could break the Project up into two or more locations. Such an alternative could involve in-fill sites and would likely disperse some of the significant project impacts associated with the proposed Project. An alternative that examines dividing the Project among two or more locations should be included in a revised DEIR.

Contrary to CEQA, the DEIR also fails to explain why the proposed Project was selected over alternatives that are identified as environmentally superior. CEQA requires that the EIR explain why environmentally superior alternatives were rejected. Guidelines § 15126.6(d). As the California Supreme Court held in *Laurel Heights I*, 47 Cal.3d at 405, "[i]f the [lead agency] considered various alternatives and found them to be infeasible . . . those alternatives and the reasons they were rejected . . . must be discussed in the EIR with sufficient detail to enable meaningful participation and criticism by the public." The DEIR fails to include this analysis.

### **III. CONCLUSION**

To cure the many defects identified in this letter, the DEIR must be revised and recirculated. These steps are necessary to provide the public and decision makers with an opportunity to gauge the true impacts of this significant, proposed development. Moreover, the Project itself must be revised to comply with the City's general plan. Only then could the City make the findings necessary to approve this subdivision.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Winter King

tic 1. Bong  $\bigcirc$ 

Carmen J. Borg, AICP Urban Planner

#### **List of Exhibits**

Exhibit 1:	Bruce Abelli-Amen, Comments on Draft Environmental Impact Report and Initial Study, Baseline Environmental Consulting, Jan. 8, 2014.
Exhibit 2:	Susan Orloff, Movement Patters and Migration Distances in an Upland Population of California Tiger Salamander ( <i>Ambystoma Californiense</i> ), Ibis Environmental Inc., Apr. 1, 2011.
Exhibit 3:	Malcolm Sproul Biography, Retrieved Jan. 8, 2014.
Exhibit 4:	Potential Pond Site Image and Location, Retrieved on Jan. 8, 2014 from <u>http://earth.google.com</u>
Exhibit 5:	Andrew J. Hansen, et al, Effects of Exurban Development on Biodiversity: Patterns, Mechanisms, and Research Needs, Ecological Society of America, Dec. 1, 2005.
Exhibit 6:	Domestic Cat Predation on Birds and Other Wildlife, Cats Indoors and American Bird Conservancy.
Exhibit 7:	Lena Groeger, Pipelines Explained: How Safe are America's 2.5 Million Miles of Pipelines?, ProPublica, Nov. 15, 2012.

City of Pittsburg, Project Pipeline List- Updated September 2013, Retrieved Jan. Exhibit 8: 8, 2014. 555789.3



# EXHIBIT 1



8 January 2014 13316-00

Ms. Carmen Borg Shute, Mihaly, and Weinberger 396 Hayes Street San Francisco, CA 94102

#### Subject: Montreux Residential Subdivision Draft Environmental Impact Report

Dear Ms. Borg:

At your request, BASELINE Environmental Consulting ("BASELINE") has reviewed the CEQA analysis of the hydrology and water quality issues included in the November 2013 Montreux Residential Subdivision Draft Environmental Impact Report ("DEIR") and appended March 2013 Montreux Residential Subdivision Project Initial Study ("Initial Study"). Specifically, we reviewed the Hydrology and Water Quality section of the Initial Study only, because the DEIR does not include any analysis of hydrology or water quality (this topic was scoped out of the DEIR). In order to provide a meaningful context, we also reviewed the Project Descriptions included in the Initial Study and DEIR. Our comments are presented below.

#### COMMENTS ON DEIR AND INITIAL STUDY

#### **Project Description**

The Project Description does not include adequate details of the design and function of the stormwater drainage system to allow the reader of the DEIR to understand this important project element. The description of the stormwater drainage features is limited to the location of the detention basins and a mention that the stormwater system would use inlets and piping. As stated in the Project Description (DEIR page 3.0-9), the project would include grading to construct stormwater detention basins:

Three stormwater detention basins are included in the preliminary grading plan, with two large basins located on the east side of the main project site (Parcels C and D) along Kirker Pass Road, and a third small basin with a 12 foot access road located on the offsite parcel to the northwest of the main project site. Construction of these basins would require grading to re-contour the eastern end of the southern ridgeline on the main project site, and the north-facing slope above the proposed off-site basin located on the off-site parcel. While the entire off-site parcel totals approximately 72 acres, only 16.8 acres would be graded in order to accommodate the new off-site basin (which has an actual footprint of 0.83 acre).

Based on information included on Figure 3.0-6 (DEIR page 3.0-10) the parcels containing the large detention basins would be 5.91 and 3.75 acres. The off-site detention basin would have a



bottom area of 0.83 acres and approximately 16.8 acres of grading would be required to construct the off-site basin. In total, more than 26 acres of land would be graded to construct these three basins.

The project would convey runoff to the detention basins using drainage inlets and piping (DEIR page 3.0-9):

New storm drainage infrastructure, including drainage inlets and piping, would be installed in the proposed roadways on the main project site to connect developed areas to the stormwater detention basins.

The Project Description fails completely to describe where drainage features (inlets, piping, culverts, etc.) would be located and how these systems, including the detention basins, would be operated. The DEIR does not appear to include, nor does it reference, any hydrologic or hydraulic engineering that supports the drainage plan. The reader of the DEIR has no idea how the detention basins were sized or how they would be operated. The DEIR Project Description should be revised to include this information and appropriate hydrologic/hydraulic studies should be appended to the DEIR.

#### Hydrology and Water Quality Analysis

**Hydrologic Setting.** The DEIR/Initial Study provides no information on the hydrology and water quality setting. Without describing the hydrology of the on-site drainage and that of Kirker Creek downstream, the reader of the DEIR has no context within which to evaluate potential project impacts. The DEIR should be revised to include a Hydrology and Water Quality section that includes a detailed hydrologic setting.

*Stormwater Quality and NPDES Compliance.* The Hydrology and Water Quality section of the Initial Study indicates that (Initial Study page 59):

Postconstruction, the project would treat stormwater runoff from the new impervious surfaces created onsite, as required by provision C.3 of the Contra Costa County municipal stormwater NPDES permit by directing all site runoff into three detention basins where the runoff would be detained and released at a rate that does not exceed the current rate at which site runoff is discharged into receiving waters. The detention and slow release would allow pollutants, especially sediment to settle in the detention basins and not be discharged into the receiving waters. Therefore the site runoff would not exceed any water quality standards. This impact is considered less than significant.

The paragraph above represents the sum total of the Initial Study/DEIR analysis and discussion of post-construction stormwater management issues. This paragraph not only fails to convey the scope of post-construction stormwater management issues and potential impacts related to the proposed project, it misrepresents NPDES requirements.



The Initial Study states that the project would treat stormwater runoff "as required by provision C.3 of the Contra Costa County municipal stormwater NPDES permit by directing all site runoff into three detention basins." The actual NPDES permit that the project would be required to comply with is the Municipal Regional Stormwater NPDES Permit, Order No. R2-2009-0074, NPDES Permit No. CAS612008, adopted October 14, 2009 and revised November 28, 2011 ("MRP"). Not only does the Initial Study refer to the wrong NPDES permit, it wrongly interprets what C.3 provisions would be required. The C.3 portion of the MRP, which refers to post-construction stormwater management for new development and redevelopment projects, <u>requires</u> Low Impact Development ("LID").<sup>1</sup>

The goal of LID is to reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and biotreatment through rain gardens, bioretention units, bioswales, and planter/tree boxes. LID also limits disturbance of natural water bodies and drainage systems; minimizes compaction of highly permeable soils; protects slopes and channels; and minimizes impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies. The project would include the following (Initial Study page 60):

The project includes alteration of site drainage and the alteration of the unnamed intermittent and ephemeral stream channel that runs through the project site.

Under the project, the existing "unnamed intermittent and ephemeral stream channel" would be eliminated and placed in an underground pipe (contrary to LID principles and MRP requirements).

The basic design of the project, which includes mass grading, destruction of natural drainages, extensive new impervious surfaces, no small-scale distributed stormwater treatment features, conventional gutter and pipe collections systems, and centralized detentions basins is completely contrary to LID principles and therefore would be in violation of the MRP. The Initial Study/DEIR fails completely to identify and mitigate the flaws in project design related to post-construction stormwater management.

Incorporation of LID designs and features into the project would require extensive modifications to the grading plan and overall site plan. These design changes to the project

<sup>&</sup>lt;sup>1</sup> A stormwater management strategy aimed at maintaining or restoring the natural hydrologic functions of a site. LID design detains, treats, and infiltrates runoff by minimizing impervious area, using pervious pavements and green roofs, dispersing runoff to landscaped areas, and routing runoff to rain gardens, cisterns, swales, and other small-scale facilities distributed throughout a site (source: Contra Costa County C.3 Guidebook).



should be made by the applicant and the revised project should be subject to CEQA review (which should include an EIR-level analysis of Hydrology and Water Quality).

Centralized detention basins are not LID features and should be eliminated from the stormwater quality management plan for the project. However, it is possible that some sort of detention may be required to mitigate the potential for downstream flooding of Kirker Creek.

**Downstream Flooding and Erosion.** The following paragraph is the only Initial Study/DEIR discussion provided related to potential downstream flooding (Initial Study page 60):

A majority of stormwater runoff on the site would be channeled to two detentions basins located along Kirker Pass Road, which would delay the flow of water downstream in the event of a storm, thus preventing erosion of existing stream banks and flooding downstream along Kirker Creek.

The Initial Study/DEIR does not provide any discussion of the hydrology of Kirker Creek and its susceptibility to flooding, and therefore it is impossible for the reader to know if downstream flooding is an important issue. Based on review of available mapping and aerial photographs, Kirker Creek appears to have reaches that are highly incised with oversteepened creek banks. This indicates that portions of the creek may be unstable. There are areas in the City of Pittsburg (e.g., Brush Creek Drive, Canyon Way), where homes are located within 20 to 30 feet of the top of the creek bank. Any change to the hydrology of flows in Kirker Creek could cause increased erosion and creek bank failure, which may jeopardize existing structures. This is a potentially significant impact which must be fully analyzed under CEQA.

The Initial Study fails to provide any explanation as to how the detention basins would be operated so that "erosion of existing stream banks and flooding downstream along Kirker Creek" would be prevented. The concept of "hydromodification"<sup>2</sup> is not even mentioned in the Initial Study/DEIR. Simply delaying flows in detention basins is not an effective approach to preventing downstream hydromodification of Kirker Creek. By introducing widespread new impervious surfaces and conveying the increased flows to centralized basins (which tend to become sealed and do not infiltrate much water), the project would increase total discharge volume to Kirker Creek (i.e., with an increased volume of runoff, the detention basins may be able to limit increases in peak discharges, but the duration of flows would almost certainly increase). Even moderate flows to the creek, if sustained for longer periods of time than would occur without the project, could cause significant downstream erosion. The Initial Study/DEIR fails completely to analyze and mitigate this potential impact.

In summary, the project proposes mass grading, elimination of existing natural drainage channels, and drastic changes to site hydrology and flow discharge characteristics. The Initial

<sup>&</sup>lt;sup>2</sup> Hydromodification is generally defined as changes in channel form associated with alterations in flow and sediment due to past or proposed future land use alteration.



Study/DEIR includes no description of the hydrologic setting, provides no substantive analysis of the hydrology or water quality effects of the project, and provides no substantial evidence for the findings of less than significant for all hydrology and water quality impacts. For a project of this magnitude, located just upstream from a potentially unstable creek system, a full EIR-level analysis of hydrology and water quality issues must be completed.

*Cumulative Impacts.* The Initial Study/DEIR completely fails to evaluate (or even mention) cumulative impacts related to hydrology and water quality. For example, another major project, the James Donlon Boulevard Extension, which would include massive grading and alteration of local drainage patterns and hydrology within the Kirker Creek watershed is not mentioned in the DEIR analysis. The effects and water quality, flooding, and hydromofication of these two major projects on Kirker Creek should be analyzed in the DEIR.

Should you have any questions or comments, please contact us at your convenience.

Sincerely,

ulle

Bruce Abelli-Amen Senior Hydrogeologist Cert. Hydrogeologist No. 96

BAA:km

556803.1

# EXHIBIT 2

### MOVEMENT PATTERNS AND MIGRATION DISTANCES IN AN UPLAND POPULATION OF CALIFORNIA TIGER SALAMANDER (AMBYSTOMA CALIFORNIENSE)

#### SUSAN G. ORLOFF

Ibis Environmental Inc., 340 Coleman Dr. San Rafael, California 94901, USA, email: Sue@ibisenvironmental.com

Abstract.—During five winter breeding seasons (October-April, 2000–2005), I investigated the migratory movements of an upland population of California Tiger Salamander (*Ambystoma californiense*) in Contra Costa County, California. I used a drift fence and pitfall trap array to partially enclose a proposed 27 ha housing project and capture migrating adult and juvenile salamanders. The study objective was to assess movement patterns and migration distances for upland life stages during an effort to translocate all captured salamanders and reduce their mortality from future development at the study site. I recorded substantial numbers of adult and juvenile *A. californiense* (90–417 annually) farther from breeding ponds than previously reported. The majority of salamanders were captured at least 800 m from the nearest breeding pond while a smaller number of salamanders were captured as far as 2.2 km from the nearest breeding pond. The study indicates that recent recommendations to protect 630 m of upland habitat adjacent to breeding ponds may leave large portions of upland life stages at risk. Adults appeared to exhibit fidelity to upland habitat, returning close to the initial point of capture. In situations where translocation is used to remove salamanders from upland habitats subject to development, results suggest it may take several years to successfully relocate a high proportion of individuals in the population.

Key Words.—Ambystoma californiense; buffer zones; California Tiger Salamander; conservation; pitfall trap; migration distance; terrestrial movements; upland ecology.

#### INTRODUCTION

Conserving terrestrial habitat surrounding wetlands is essential for maintaining populations of many pondbreeding amphibians (Semlitsch and Jensen 2001; Semlitsch 2002; Semlitsch and Bodie 2003). Upland habitat is critical for feeding, refuge, and migratory movements of juvenile and adult life stages (Semlitsch 1998; Semlitsch and Jensen 2001). Recent studies emphasize that amphibian population viability can be extremely sensitive to survivorship of upland life stages (Biek et al. 2002; Trenham and Shaffer 2005). Further, the importance of specific areas of upland habitat and preferences for a particular migratory route have been reported for several species of ambystomatid salamanders (Shoop 1968; Stenhouse 1985; Trenham and Cook 2008).

Despite research documenting the biological importance of terrestrial habitat for amphibians, the extent and location of appropriate areas required to sustain viable populations are poorly understood. Several recent studies estimated the area of terrestrial habitat needed to adequately protect amphibian populations, based on migration distances from multiple studies and species. Semlitsch (1998) estimated that a 164 m "buffer zone" would encompass 95% of most ambystomatid salamander populations (based on six species). Semlitsch and Bodie (2003) estimated that "core terrestrial habitat" for 13 species of salamanders

ranged from 117 to 218 m from the wetland. Rittenhouse and Semlitsch (2007) found that 95% of the adult breeding population for six species of salamanders occurs within 245 m of the wetland boundaries. However, because these studies were primarily of eastern species that typically inhabit forest or woodlands, the resulting recommendations may not be well suited to western *Ambystoma* species associated with grasslands. Although much remains to be learned regarding the appropriate size of buffer zones, it is clear that identifying and protecting upland habitat should be a management priority, especially for rare and endangered species (Marsh and Trenham 2001; Semlitsch 2007; Harper et al. 2008).

The California Tiger Salamander, Ambystoma californiense, is listed as a threatened species by the U.S. Fish and Wildlife Service (2004) and the state of California (California Fish and Game Commission 2010). The range of this species is restricted to grasslands and foothills of central California (Storer 1925). Adults spend the majority of their life cycle in small-mammal burrows in upland habitat (Loredo et al. 1996). With the onset of winter rains, adults emerge from underground terrestrial retreats and migrate to ponds for reproduction (Loredo and Van Vuren 1996). The importance of maintaining upland habitat adjacent to breeding ponds for A. californiense has only recently been emphasized (Trenham 2001; Trenham and Shaffer 2005). A more detailed under-

Copyright © 2011. Susan Orloff. All Rights Reserved.

Herpetological Conservation and Biology

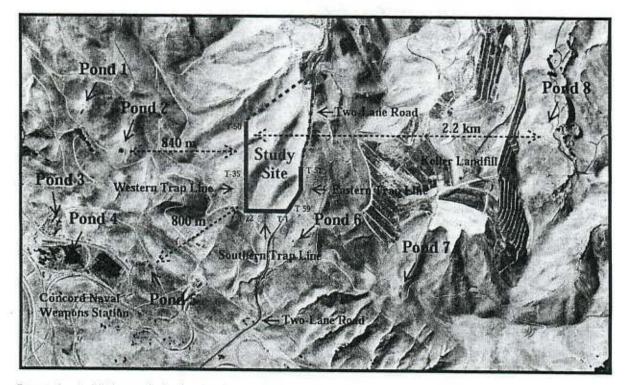


FIGURE 1. Aerial photograph showing the closest breeding ponds to the study site in Contra Costa County, California, USA (from <a href="http://www.ternaserver.com">http://www.ternaserver.com</a>; [Accessed 1 August 2002]). Bold red solid lines indicate trap line segments (western, southern, and eastern) along boundaries of the study site, T represents trap number, and dashed lines with arrows at both ends indicate distances from the western trap line to nearest breeding ponds. Ponds 1–5 are located on Concord Naval Weapons Station (CNWS) and Ponds 6–8 are located on a landfill adjacent to the study site

standing of migratory movements and activity patterns in upland habitats is fundamental to managing this species (Trenham and Shaffer 2005).

This paper presents findings of a five-year study investigating the migratory movements of upland life stages of a population of A. californiense at a proposed housing development. The primary objectives of the study were (1) to characterize movement patterns and timing of movements during the breeding season, (2) to measure distances from capture locations to closest known breeding ponds, and (3) to test for relationships between the timing of migratory movements and environmental parameters. An additional objective of the study was to reduce direct mortality from future development at the study site by translocating all captured salamanders outside the study site and restricting reentry. Conservation strategies involving translocations are a common wildlife management tool (Griffith et al. 1989; Fischer and Lindenmayer 2000; Dodd 2005). Although the effectiveness of translocation strategies has been subject to controversy (e.g., Dodd and Seigel 1991; Seigel and Dodd 2002; Trenham and Marsh 2002), a recent review has shown improved success rates for some species of amphibians when a critical minimum number of individuals are translocated (Germano and

Bishop 2008). Relatively few translocation studies have been conducted on amphibians (Germano and Bishop 2008) or addressed human and wildlife conflicts (e.g., Cooke and Oldham 1995; Rathbun and Schneider 2001), and none have assessed the efficacy of translocating adult amphibians within upland habitat.

#### MATERIALS AND METHODS

Study site.—The proposed housing development is located on the northern edge of the San Joaquin Valley in northeastern Contra Costa County, California. The 27-ha area consists of grazed annual grasslands on rolling to steep hills (elevation range = 213–274 m; Fig. 1). Two primary drainages traverse the site but amphibian breeding ponds are not present. Lands surrounding the site are primarily grazed grasslands. The Concord Naval Weapons Station (CNWS) is located to the west and south of the site and a privately owned, active landfill is located to the east and southeast.

Eight breeding ponds are known to occur near the study site (Fig. 1). To the west and southwest, the closest ponds are on CNWS (Ponds 1-5) and are the primary breeding ponds on CNWS lands (Stitt and Downard 2000; Shawn Smallwood, pers. comm.). To

### Orloff.-Movement patterns and migration distances of California Tiger Salamander.

the east and southeast, the closest ponds are located on the adjacent landfill (Ponds 6-8). To the north, no known breeding ponds occur within 2.5 km. I examined aerial photographs from several years (1999, 2000, 2004, and 2005) and USGS topographic maps, and found no other potential breeding ponds closer to the study site. Before the trapping study began, I conducted four night surveys during winter rain events to determine if A. californiense was present at the study site. During these initial surveys, I observed four adults at burrow entrances of California Ground Squirrels (Spermophilus beecheyi) and thus commenced an intensive translocation effort.

Trapping techniques .- My field team and I (hereafter we) installed a drift fence and pitfall trap array along a partial perimeter (1.3 km) of the study site. The drift fence bordered the boundaries most likely to be used as movement corridors, and included the western, southern, and a portion of the eastern border of the study site (Fig. 1). We installed 118 pitfall traps (59 pairs of 7.5 L plastic buckets) located every 15 to 30 m along the inside and outside of the drift fence. We used a 0.9 m tall commercial quality silt fence buried 0.3 m underground, stretched taut, and secured by both wooden and steel fence posts. We placed elevated covers over the traps to provide shading and minimize predation, and placed a damp non-cellulose sponge in each trap to maintain moisture for captured salamanders. We replaced the drift fence and pitfall traps (i.e., trap line) each year of the study and repaired the fence line as needed to maintain its integrity as a barrier to movement.

Our surveys encompassed five winter breeding seasons, from October 2000 to April 2005 (hereafter, years 2000 to 2004). In 2001 and 2002, we increased the length of the trap line by installing nine pairs of pitfall traps along the eastern border of the study site. While the trap line encompassed over half the total perimeter of the proposed development, the entire area was not completely enclosed due to the large area of the site. We opened all traps at dusk on nights when the chance of rain was predicted to be 40% or greater and checked at dawn the following morning. Because amphibians are often active on the night after a heavy rain (Gibbons and Bennett 1974), we left the traps open on nights after a rain event that exceeded 0.6 cm, even when no rain was predicted for that night. At all other times the traps were closed. We immediately translocated individuals captured inside the trap line to small mammal burrows 15 to 100 m outside the development. We kept individuals captured outside the trap line outside and translocated them in the same manner.

For each capture, we recorded date, trap number, trap line side (inside or outside), sex (adults only), reproductive condition (reproductive or nonreproductive), snout-vent length (SVL), total length, and age class (adult or juvenile). We identified individuals

as adults if they had at least one of the following characteristics: keeled tail, swollen vent (reproductive males), gravid condition (reproductive females), or large body length (≥ 75 mm SVL; Trenham et al. 2000). We identified juveniles based on small body length (usually < 75 mm SVL; Loredo and Van Vuren 1996) and the absence of adult characteristics. Males were distinguished from females by the presence of a keeled tail, swollen vent, or proportionally longer tail (Petranka 1998; Searcy and Shaffer 2008). We recorded adultwithout other sized salamanders distinguishing characteristics as adults; these salamanders may have been subadults (≥ 1 year of age but not sexually mature) or salamanders returning from the ponds post breeding (i.e., non-reproductive). Because juvenile body lengths vary considerably (46-114 mm; Loredo and Van Vuren 1996) and can overlap adult sizes, we may have mistakenly classified some larger juveniles as adults in non-reproductive condition. In addition, we acquired two photographs of the dorsal surfaces of each captured salamander for individual identification.

*Environmental variables.*—In 2000 and 2001, 1 measured precipitation using a manual rain gauge located on site; the gauge was read and emptied when traps were opened at dusk and checked again at dawn the next morning. For the remainder of the study years, I used an automatic rain gauge (Hobo event logger, Onset Inc., Pocasset, MA., USA) to record hourly rain events (2.5 mm intervals). Air temperature was manually recorded on each morning traps were checked. I used additional data on hourly and yearly rainfall near the study site from California Department of Water Resources, California Data Exchange Center (available from <u>http://www.cdec.water.ca.gov</u> [last accessed 21 September 2006]).

Analyses.—I pooled daily capture data by week, year, sex, age class, and location (inside/outside trap line and trap line segment) as measures of salamander activity. I used the location of captures to infer likely movement patterns (i.e., attempting to leave or enter the study site, and directionality). To evaluate movement patterns within a breeding season, I divided capture data into early season (presumably migrating to breed) and late season (presumably returning from breeding) based on the temporal distribution of captures for all five study years combined.

To standardize for the variability in trapping effort (i.e., different number of traps per line segment and nights of trapping each year), I calculated capture rates (number of captures per 100 trap nights) for analyses. Distance calculations were measured as presumed straight line travel. Within each study year, I compared dorsal patterns in photographs to determine the number of intra-annual recaptures. Individual identification using photography has been employed successfully with amphibians that have unique patterns of coloration; unlike invasive marking techniques, this causes no harm to the animal (e.g., Donnelly et al. 1994; Doody 1995; Bailey 2004).

I used parametric statistics when data were normally distributed and non-parametric tests when data were not. To determine if recaptured individuals returned to a similar point from which they were initially trapped, the observed mean number of traps between initial and returning trap locations was compared with the expected mean number of traps under a uniformly random scenario (Shoop and Doty 1972). For this analysis, I pooled data from all five study years to obtain an adequate sample size and used only those individuals that were initially trapped early in the breeding season on the inside of the western trap line and then recaptured later in the season outside that same trap line segment (i.e., presumably returning to the study site after breeding). I used the western trap line data because it had the majority of returns and traps along this segment were evenly spaced providing the most accurate distance measurements between initial and returning trap locations.

I tested for annual and seasonal variation in capture numbers among all five study years. I used chi-square tests to determine if annual sex ratios differed significantly from an expected 1:1 ratio. I evaluated the association between seasonal rainfall (both early and late season) and the proportion of males and females captured both inside and outside the trap line using Pearson's correlation coefficient. I used the sign test to compare annual adult capture rates early in the season on the inside of the western trap line and capture rates later in the season outside that same trap line segment, and to compare annual rainfall between early and late seasons. I used Pearson's correlation coefficient to assess whether there was a negative association between translocation efforts and annual capture rates over time based on the proportions of inside versus outside captures, and to test for a relationship between annual on-site rainfall and annual capture rates.

I also analyzed within-year associations between environmental parameters and the number of *A. californiense* captured. To assess the influence of precipitation and temperature prior to capture, I used Spearman's rank correlation. This analysis used rainfall amounts 12 h prior to opening traps (i.e., day prior to capture), 12 h prior to checking traps (i.e., night of capture), and within 24 h prior to checking traps (total of day and night). In addition, I used Wilcoxon two-sample rank sum test to assess if rain at dusk on the night of capture or the night prior to opening the traps was associated with the number of captures. Precise measurements of rain using the automatic rain recorder (which allowed for analysis of rain amounts in intervals less than a 24-h period) were available only in 2002, 2003 and 2004. Of these three

TABLE 1. Adult and juvenile Ambystoma californiense captured inside and outside the trap line during five winter breeding seasons at the study site in Contra Costa County, California. Totals include recaptured individuals. Unique captures exclude recaptured individuals and are shown in parentheses.

Year	Adult Total No. (Unique No.)		Juvenile Total No. (Unique No.)		Adult & Juvenile Total No. (Unique No.)	
2000 - 2001						
Inside trap line	59	(58)	3	(3)	62	(61)
Outside trap line	76	(37)	62	(47)	138	(84)
Totals 2001-2002	135	(95)	65	(50)	200	(145)
Inside trap line	184	(182)	4	(3)	188	(185)
Outside trap line	215	(158)	14	(13)		(171)
Totals 2002-2003	399	(340)	18	(16)		(356)
Inside trap line	63	(61)	3	(3)	66	(64)
Outside trap line	120	(96)	34	(33)		(129)
Totals 2003-2004	183	(157)	37	(36)		(193)
Inside trap line	37	(36)	0	(0)	37	(36)
Outside trap line	52	(37)	1	(1)	53	(38)
Totals 2004-2005	89	(73)	1	(1)	90	(74)
Inside trap line	23	(22)	0	(0)	23	(22)
Outside trap line	72	(61)	86	(81)		(142)
Totals	95	(83)	86	(81)		(164)

years, I chose 2002 for analysis because it was least affected by translocation efforts and barrier fencing.

l excluded recaptures from the analysis of some data sets (i.e., capture distribution, movement patterns, sex ratios, and annual reductions). However, except for sex ratios, these analyses did include those individuals first captured during the early season inside the trap line and then later recaptured outside the same trap line during the late season. For annual comparisons of capture numbers, I deleted data on additional traps installed in 2001 and 2002 from the analyses. For all statistical tests, results were considered significant at  $\alpha = 0.05$ .

#### RESULTS

Capture numbers and movement patterns.—The annual number of A. californiense captured varied from 90 to 417 salamanders over the five year study period (Table 1). Recaptured individuals represented between 9-28% of annual totals, with 96% of these individuals captured on the outside of the trap line. Eight recaptured individuals were captured on or translocated to the outside of the trap line and then later captured on the inside, but these eight represented less than 1% of the total captures. Adult recaptures returning to the study site (presumably after breeding) were found Orloff.-Movement patterns and migration distances of California Tiger Salamander.

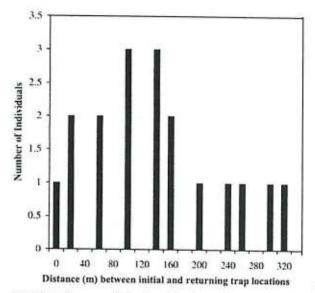


FIGURE 2. Frequency distribution of the distance between initial and returning trap locations for individual *Ambystoma californiense* for all five study years combined (2000–2005). Results include only those salamanders first trapped early during the breeding season inside the trap line and then recaptured outside the same trap line later in the season. Early season = late October to December 31; Late season = January 1 to end of March. Zero on the x-axis represents individuals that returned to the same trap location where they were initially captured.

significantly closer to where they were initially captured inside the trap line than would be expected by random (Z = -2.92, P = 0.003). Forty-four percent of adult recapture locations were within five traps ( $\leq 100$  m) of the initial inside trap location (Fig. 2). Several individuals were recaptured more than once outside the western trap line, presumably attempting to reenter the site. One male returned to the site five times.

Capture rates from all five study years combined indicate that males and females migrated to the breeding ponds from late October to the end of December (early season) and returned to their upland habitat from the beginning of January to the end of March (late season) (Fig. 3). Annual sex ratios differed significantly from 1:1 in 2002, with females outnumbering males by 2:1 ( $\chi^2$ = 20.46, df = 1, P < 0.001). By contrast males outnumbered females by 1.5:1 in 2000 ( $\chi^2 = 3.80$ , df = 1, P = 0.051). Sex ratios were near 1:1 in the other three study years (2001:  $\chi^2 = 0.02$ ; 2003:  $\chi^2 = 0.00$ ; and 2004:  $\chi^2 = 0.11$ ; all df = 1, all P > 0.70). Among all study years, the proportion of each sex in the population captured early in the season on the inside of the trap line (Table 2) was associated with early season rainfall (negatively associated for males: r = -0.808; positively associated for females: r = 0.808; P = 0.049 for both). However, there was no significant association between the proportion of each sex captured early in the season outside the trap line and early rainfall (males: r = -0.340;

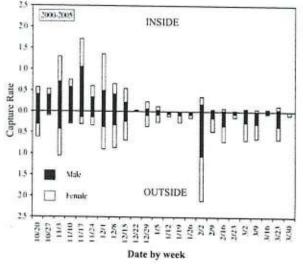


FIGURE 3. Weekly capture rates (no. per 100 trap nights) of male and female *Ambystoma californiense* inside and outside the trap line for all five study years combined (2000–2005). Early season = late October to December 31; Late season = January 1 to end of March. Dates on x-axis represent the beginning of each week. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then recaptured outside the same trap line later in the season.

females: r = 0.340; P = 0.288 for both) or captured late in the season outside the trap line and late rainfall (males: r = -0.494; females: r = 0.494; P = 0.198 for both).

Within each survey year, the capture rates of adults and juveniles were generally highest along the western trap line (Fig. 4). Analysis of early season capture data, when most salamanders presumably migrated to the ponds, indicated highest adult capture rates on the inside of the western trap line (Table 3). By contrast, analysis of late season data, presumably when most salamanders returned from the ponds, indicated highest adult capture rates outside the western trap line (Table 3). Capture rates for juveniles were highest outside the western trap line primarily in the early season (Table 4). Among all study years, more adults were captured early in the season inside the western trap line than were captured later in the season outside that same trap line segment (sign test, P = 0.031). Early and late rainfall was not significantly different among years (sign test, P = 0.50).

Migration distances.—The shortest distances from inside the western trap line, where the majority of adults were captured in the early season, to the closest breeding ponds to the west were 800 to 840 m (Ponds 5 and 2 on CNWS, respectively; Fig. 1). A smaller number of adults captured early in the season on the outside of the western trap line may be migrating east (Table 3). The closest breeding pond from the western trap line to the east is Pond 8 at 2.2 km. A few adults captured early in TABLE 2. Proportions of male and female Ambystoma californiense captured during the early and late winter breeding seasons on the inside and outside of the trap line. Parentheses indicate the number of each sex captured and N = the total number of adults captured. Early season = late October to December 31; Late season = January 1 to end of March. Results exclude all recaptured individuals.

Season/ Trap Line Sid	2000- le 2001	2001- 2002	2002 2003	2003- 2004	2004- 2005
Early/Inside					
Male	0.76 (41)	0.50 (86)	0.39 (23)	0.68 (23)	0.52 (11)
Female	0.24 (13)	0.50 (87)	0.61 (36)	0.32 (11)	0.48 (10)
N =	54	173	59	34	21
Early/Outsid	e				
Male	0.42 (8)	0.55 (46)	0.28 (23)	0.43 (13)	0.41 (15)
Female	0.58 (11)	0.45 (38)	0.72 (58)	0.57 (17)	0.59 (22)
N =	19	84	81	30	37
Late/Outside	8				
Male	0.33 (6)	0.45 (52)	0.33 (11)	0.36 (5)	0.43 (12)
Female	0.66 (12)	0.55 (64)	0.66 (22)	0.64 (9)	0.57 (16)
N=	18	116	33	14	28

TABLE 3. Capture rates of adult Ambystoma californiense (no. per 100 trap nights) along the western, southern, and eastern trap lines during the early and late winter breeding seasons of the five study years. Early season = late October to December 31; Late season = January 1 to end of March. Data represent captures inside/outside each trap line. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then later recaptured outside the same trap line during the late season. Total number of adults captured is indicated by N.

Season/Trap Line	2000– 2001	2001- 2002	2002- 2003	2003 2004	2004- 2005
Early Season, N =	71	251	136	65	59
Western	8.6/2.5	28.4/6.7	9.8/12.3	4.4/2.1	3.5/4.5
Southern	1.0/1.0	4.8/5.9	1.9/3.4	1.0/3.1	0.5/2.7
Eastern		4.2/22.7	1.4/6.3	2.9/3.5	1.3/2.6
Late Season, N =	34	146	46	21	29
Western	0.8/4.8	1.9/19.7	0.5/4.6	1.5/3.3	0.4/3.2
Southern	0.0/1.9	0.7/2.6	0.7/2.2	0.4/1.7	0.0/0.6
Eastern		5.3/1.5	0.0/2.9	0.0/0.0	0.0/0.0

the season along the inside of the eastern trap line may have been traveling east as well. The closest known breeding pond is only 225 m from the southeast corner the study site (Pond 6). I captured relatively few adults along the inside of either the southern or eastern segments of the trap line in the early season.

Migratory movements and environmental parameters .- Based on trapping data adults began moving with the first night of substantial rain of the season (≥ 1 cm). Smaller amounts of nightly rain (≤ 0.5 cm) at the beginning of the breeding season did not appear to initiate movement. In all survey years, the earliest dates adults were captured ranged from 20 October (2004) to 11 November (2001). Most adult captures occurred between early November and mid-December with fewer more temporally dispersed captures later in the season. Juveniles began arriving at the boundaries of the study site each year within six nights of measurable rain. The earliest dates juveniles were captured ranged from 29 October (2000) to 22 November (2001).

Both the amount of rain within 12 h (night of capture) and 24 h prior to checking traps were positively correlated with number of *A. californiense* captured (r =0.626 for night rain; r = 0.603 for 24 h; P < 0.001 for both). Rain 12 h prior to opening traps was also correlated with captures (r = 0.375, P = 0.012). In addition, rain at dusk (Wilcoxon Z = 2.66, P < 0.005) and temperature (r = 0.363, P < 0.015) were positively associated with number of captures. Rain the night prior to opening traps was not associated with number of captures (Wilcoxon Z = 0.31, P = 0.378).

Annual reduction in captures.—Over the five study years, the proportion of adults captured inside the trap line decreased (r = -0.845, P = 0.036) and adult capture rates were not associated with on-site rainfall for those five years (Fig. 5, r = -0.753, P = 0.071). In 2000 and 2001, the capture rate of adults was higher inside than outside the trap line (Fig. 5). However, during 2002–2004 the capture rate was higher outside than inside. By 2004 the ratio of adult captures inside the trap line (versus outside) was much lower (0.35) than in previous years (0.62–1.2).

#### DISCUSSION

Successful conservation for Ambystoma californiense requires protection of both breeding sites and adequate surrounding uplands (Petranka 1998; Semlitsch 1998). Knowledge of terrestrial movement patterns and migration distances is essential to establishing appropriate upland protection zones adjacent to breeding ponds. My study expands the current understanding of upland habitat use for A. californiense and should better inform management for this species. The most important findings of my study are that A. californiense appeared to exhibit fidelity to upland habitat locations and occurred in relatively large numbers farther from breeding ponds than previously reported.

Study limitations.—The present study has certain limitations that should be taken into account when interpreting my findings. The partial drift fence may have affected my results in the following ways: 1) capture rates may have over- or under-estimated the actual number of salamanders entering or leaving the study site, 2) distribution of captures was limited to Orloff.--Movement patterns and migration distances of California Tiger Salamander.

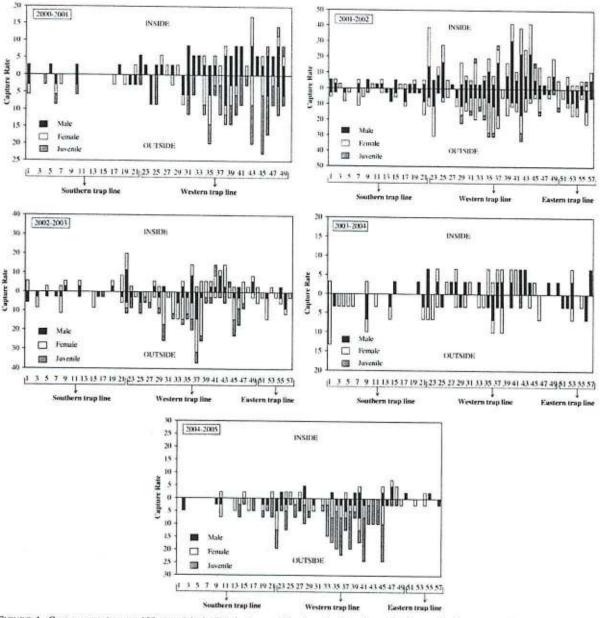


FIGURE 4. Capture rates (no. per 100 trap nights) of Ambystoma californiense inside and outside the trap line by sex, age class, and trap line for each of the five study years. Trap number for each trap line segment is indicated on the x-axis. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then recaptured outside the same trap line later in the season.

certain sections of the study site, and 3) trespass rates for the study site could not be determined (i.e., when a salamander exits or enters a site without being captured). These limitations may have influenced my analysis of patterns of movement, sex ratios/proportions, and annual reductions in number of individuals captured.

In addition, translocating salamanders and restricting their entry into the study site may have altered the age class distribution for those remaining within the site. Studies of *A. californiense* and other *Ambystoma* species

have shown that age classes may differ in their use of habitat (Rothermel 2004; Trenham and Shaffer 2005) and vary in activity in response to environmental cues (Semlitsch 1983). This may have influenced my analysis of patterns of movement, and migratory movements with applicable data sets. Lastly, my findings are also limited by having only one study location. Although my results are directly applicable to this site, it may not be representative of other grassland areas that support *A. californiense*.

TABLE 4. Capture rates of juvenile A. californiense (no. per 100 trap nights) along the western, southern, and eastern trap lines during the early and late winter breeding seasons of the five study years. Early season = late October to December 31; Late season = January 1 to end of March. Data represent captures inside/outside the trap lines. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then later recaptured outside the same trap line during the late season. Total number of adults captured is indicated by N.

Season/Trap Line	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005
Early Season, N =	36	14	29	1	45
Western	0.5/5.3	0.2/2.4	0.6/5.2	0.2/0.0	0.0/8.0
Southern	0.0/0.7	0.0/0.0	0.0/0.3	0.0/0.0	0.0/1.1
Eastern	-	0.8/0.0	0.0/0.0	0.0/0.0	0.0/0.0
Late Season, N =	14	2	7	0	36
Western	0.0/2.7	0.2/0.0	0.0/1.1	0.0/0.0	0.0/3.8
Southern	0.0/0.3	0.0/0.2	0.0/0.2	0.0/0.0	0.0/1.7
Eastern	-	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0

Capture numbers and movement patterns.—Adults tended to return to a location close to where they were initially captured, which suggests fidelity to specific areas of upland habitat. Although several other studies have indicated Ambystoma species tend to follow the same nonrandom pathways as they move toward and away from breeding ponds (Stenhouse 1985; Phillips and Sexton 1989; Trenham and Cook 2008), these results were typically inferred from the distribution of captures around ponds, not from distant upland habitat capture data.

In all study years more adults were captured early in the season (presumably going to breed) than were captured later in the season along the same trap line segment (presumably returning from breeding). Rainfall amounts during the early and late seasons did not appear to account for this decrease in captures. The lower number of returning animals may be partly due to mortality, or salamanders straying off path when returning from their natal ponds or dispersing to different ponds (Trenham et al. 2001; Trenham and Cook 2008).

A higher proportion of migrating males than females has been correlated with low rainfall years in other studies of *A. californiense* (Loredo and Van Vuren 1996; Cook et al. 2006). My findings are consistent with this pattern. Apparently more females forego breeding in dry years than males (Loredo and Van Vuren 1996; Trenham et al. 2000). My results contrast with previous studies of *A. californiense* and other *Ambystoma* species that suggest a female bias at greater distances from breeding ponds (Regosin et al. 2003; Trenham and Cook 2008). The distances from the nearest breeding ponds in my study were considerably greater than these previous studies, yet my annual sex ratios were only female biased in one of the five study years.

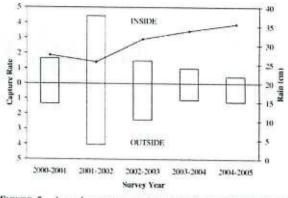


FIGURE 5. Annual capture rates (no. per 100 trap nights) of adult Ambystoma californiense inside and outside the trap line (bars) and onsite rainfall amounts (October-April; solid line) for the five study years. Recaptured individuals were excluded except for salamanders first captured during the early season inside the trap line and then recaptured outside the same trap line later in the season.

Migration distances.--- I captured large numbers of A. californiense farther from breeding ponds than has been previously documented. In early studies of migration distances, maximum distance ranged from 130 m during one night of visually tracking (Loredo et al. 1996) to 248 m using radio tracking (Trenham 2001). However, these studies only examined movements during initial dispersal into the terrestrial habitat and thus may not be representative of the total distance adults may travel (Trenham and Shaffer 2005). In a more recent study using variable trap line distances from a pond, Trenham and Shaffer (2005) found that 50-95% of adults were trapped between 150 to 620 m from the pond, respectively. Continuing work at this site has documented a few individuals moving up to 1000 m from the most likely breeding pond (Peter Trenham, pers. comm.). Ambystoma californiense has also been observed up to 2.1 km from breeding ponds (U.S. Fish and Wildlife Service 2004); however, this was thought to be only a small number of individuals. Even in light of these studies showing a few individuals making longer distance movements, the large numbers of adults and juveniles I captured at least 800 m from the closest breeding ponds is noteworthy.

Current estimates that 95% of adult *A. californiense* occur within 620 m of the breeding pond (Trenham and Shaffer 2005) do not appear applicable to my study site. If this estimate were applied to my study site, which is greater than 620 m from the closest breeding ponds on CNWS, the large number of captures would represent less than 5% of the adult upland population. This would result in an exceedingly high extrapolated number of adults using the ponds on CNWS (~5,000 to 10,000 adults). However, Loredo and Van Vuren (1996) found an average of only 141 adults at their study pond on CNWS (Pond 5, Fig. 1), which is typical for other sites (Trenham et al. 2001; Cook et al. 2006). It is more likely that a greater percentage of the breeding population at

CNWS is moving farther away from the breeding ponds than previous research would have predicted.

Migratory movements and environmental parameters.—Movement patterns in my study area were influenced by the distribution of rainfall within the 24-h period prior to capture, with both rain at dusk and on the night of capture (12-h prior) strongly correlated to captures. Although several studies of *A. californiense* or other *Ambystoma* species also found adult migration to be positively associated with rainfall (Semlitsch 1983; Beneski et al. 1986; Trenham et al. 2000), these studies measured daily (24-h periods) or weekly rainfall, not rainfall within less than a 24-h period.

The majority of *A. californiense* adults were captured from early November to mid-December, which is earlier than other study sites where peak migration occurred in January in Monterey County (Trenham et al. 2000) or December and January in Sonoma and Contra Costa counties (Loredo and Van Vuren 1996; Cook et al. 2006). Unlike these other studies, which were conducted at study ponds and recorded only the date of arrival at those ponds, my data presumably represent the actual initiation of migration from upland emergence. Therefore, the discrepancy in peak migration periods may be because my study site was at least 800 m away from the closest probable breeding ponds, and it may have taken several rainy nights to reach the ponds.

Reduction in numbers .- My findings suggest that it takes multiple years of trapping and translocating animals to substantially reduce the number of adults within a project site. This is consistent with other research that has shown A. californiense typically spend up to four to five years in their upland burrows before they reach sexual maturity and migrate to breeding ponds for the first time (Trenham et al. 2000). The reduction in annual captures found over my five study years could have been affected by variables other than removal trapping. For example, rainfall has been shown to affect both the number of migrating adults and reproductive success among ambystomatids (e.g., Semlitsch 1983). However, my annual capture numbers were not correlated with on-site rainfall. In addition, I examined local annual rainfall data for the five years prior to my study and found no patterns that might have affected past reproductive success and subsequently influenced capture numbers during my study. It is important to note that because the drift fence was not a closed system, it was not possible to determine whether individuals captured inside or outside the trap line were resident to those sides of the study site.

The costs and benefits of amphibian translocation strategies have been debated and establishing criteria for success is difficult (Seigel and Dodd 2002; Trenham and Marsh 2002). Because my study only involved moving animals to adjacent grassland habitat a short distance from the capture point ( $\leq 100$  m), some of the more critical problems typically associated with translocation projects were not applicable, including the availability of suitable habitats, disease transmission, and genetic considerations (Dodd and Seigel 1991). However, because a portion of my translocated animals were recaptured presumably trying to return to the study site, they could have been subject to additional stress which reduced their survival (Matthews 2003; Germano and Bishop 2008). In addition, I do not know if the resources of the adjacent area were adequate to sustain an increase in population size (Petranka 1989).

Other options for managers to reduce the number of salamanders in a proposed construction area include passive relocation using wooden ramps with barrier fencing or excavating salamanders from their burrows. Although I have observed *A. californiense* using ramps to exit a project site, there are no published reports on the success of this passive relocation technique. Excavation is time consuming (Pittman 2005), difficult due to the complexity of burrow systems, and potentially hazardous to the salamanders.

Management implications .- My findings have several implications for future conservation and management of this species. First, the current suggested buffer zone of 630 m around breeding ponds for longterm preservation of individual A. californiense populations (Trenham and Shaffer 2005) may not protect a substantial portion of some upland populations. Second, the method proposed by Searcy and Shaffer (2008) for calculating mitigation value for A. californiense, which is based on the exponential decrease in salamander density with increased distance from breeding ponds, may not be applicable in all cases. Other factors could be influencing the density distribution around ponds, such as uneven distribution of resources and presence of other species (Rittenhouse and Semlitsch 2007; Searcy and Shaffer 2008). The results of my study underscore the need to consider other relevant biological factors in establishing buffer zones or mitigation credits. Third, trapping may be the most reliable means of predicting habitat value or detecting occurrence in uplands. I found that the number of salamanders observed during winter night surveys was not a reliable indication of population size. The limited number of salamanders I observed was probably due to few being above ground at the burrow entrances during the night surveys. Fourth, efforts to remove A. californiense, via trapping or passive relocation, from a proposed project site for only one year (to reduce impacts from development) may miss a large portion of the population. My findings suggest that multiple years are required to substantially reduce the abundance of adult life stages in upland habitat.

Herpetological Conservation and Biology

Acknowledgments.—1 am grateful for the biologists who assisted in the field work for this study, including Kathy Willet, Derek Jansen, and Jill Bennett. I appreciate Mark Allaback of Biosearch (Santa Cruz, CA) for helping to develop and design this study. I thank Dr. Pete Trenham and Mark Allaback who reviewed and improved the original manuscript. I also thank the U.S. Fish and Wildlife Service and California Department of Fish and Game for authorizing this study through issuance of a 10(a)(1)(A) permit (TE-075898–1) and Scientific Collectors Permit (801083–05).

# LITERATURE CITED

- Bailey, L.L. 2004. Evaluating elastomer marking and photo identification methods for terrestrial salamanders: marking effects and observer bias. Herpetological Review 35:38–41.
- Beneski J.T., Jr., E.J. Zalisko, and J.H. Larsen Jr. 1986. Demography and migratory patterns of the Eastern Long-toed Salamander, *Ambystoma marcrodactylum* columbianum. Copeia 1986:398–408.
- Biek, R., W.C. Funk, B.A. Maxell, and L.S. Mills. 2002. What is missing in amphibian decline research: insights from ecological sensitivity analysis. Conservation Biology 16:728–734.
- California Fish and Game Commission. 2010. List California Tiger Salamander as a threatened species. California Regulatory Notice Register. Title 14, Vol. No. 12–Z:425–427.
- Cook, D.G., P.C. Trenham, and P.T. Northen. 2006. Demography and breeding phenology of the California Tiger Salamander (*Ambystoma californiense*) in an urban landscape. Northwestern Naturalist 87:215–224.
- Cooke, A.S., and R.S. Oldham. 1995. Establishment of populations of the Common Frog, *Rana temporaria*, and the Common Toad, *Bufo bufo*, in a newly created reserve following translocation. Herpetological Review 5:173–180.
- Dodd, C.K., Jr. 2005. Population manipulations. Pp. 265– 270 In Amphibian Declines: The Conservation Status of United States Species. Lannoo, M. (Ed.). University of California Press, Berkeley, California, USA.
- Dodd, C.K., Jr., and R.A. Seigel. 1991. Relocation, repatriation, and translocation of amphibians and reptiles: are they conservation strategies that work? Herpetologica 47:336–350.
- Donnelly, M.A., C. Guyer, J.E. Juterbock, and R.A. Alford. 1994. Techniques for marking amphibians. Pp. 277–284 In Measuring and Monitoring Biological Diversity: Standard Methods for Amphibians. Heyer, W. R., M.A. Connelly, R.W. McDiarmid, L.C. Hayek, M.S. Foster (Eds.). Smithsonian Institution Press, Washington D.C., USA.
- Doody, J.S. 1995. A photographic mark-recapture method for patterned amphibians. Herpetological Review 26:19-21.

- Fischer, J., and D.B. Lindenmayer. 2000. An assessment of the published results of animal relocations. Biological Conservation 96:1–11.
- Germano, J.M., and P.J. Bishop. 2008. Suitability of amphibians and reptiles for translocation. Conservation Biology 23:7–15.
- Gibbons, J.W., and D.H. Bennett. 1974. Determination of anuran terrestrial activity patterns by a drift fence method. Copeia 1974:236–243.
- Griffith, B., J.M. Scott, J.W. Carpenter, and C. Reed. 1989. Translocation as a species conservation tool: status and strategy. Science 245:477–480.
- Harper, E.B., T.A.G. Rittenhouse, and R.D. Semlitsch. 2008. Demographic consequences of terrestrial habitat loss for pool-breeding amphibians: predicting extinction risks associated with inadequate size of buffer zones. Conservation Biology 22:1205–1215.
- Loredo, I., and D. Van Vuren. 1996. Reproductive ecology of a population of the California Tiger Salamander. Copeia 1996:895-901.
- Loredo, I., D. Van Vuren, and M.L. Morrison. 1996. Habitat use and migration behavior of the California Tiger Salamander. Journal of Herpetology 30:282–282.
- Marsh, D.M., and P.T. Trenham. 2001. Metapopulation dynamics and amphibian conservation. Conservation Biology 15:40–49.
- Matthews, K.R. 2003. Response of Mountain Yellowlegged Frogs, Rana muscosa, to short distance translocation. Journal of Herpetology 37:621-626.
- Petranka, J.W. 1989. Density-dependent growth and survival of larval *Ambystoma*: evidence from wholepond manipulations. Ecology 70:1752–1767.
- Petranka, J.W. 1998. Salamanders of the United States and Canada. Smithsonian Institution Press, Washington, D.C., USA.
- Phillips, C.A., and O.J. Sexton. 1989. Orientation and sexual differences during breeding migrations of the Spotted Salamander, *Ambystoma maculatum*. Copeia 1989:17–22.
- Pittman, B.T. 2005. Observations of upland habitat use by California Tiger Salamanders based on burrow excavations. Transactions of the Western Section of the Wildlife Society 41:26–30.
- Rathbun, G.B., and J. Schneider. 2001. Translocation of California Red-legged Frogs (*Rana aurora draytonii*). Wildlife Society Bulletin 29:1300–1303.
- Regosin, J.V., B.S. Windmiller, and J.M. Reed. 2003. Influence of abundance of small-mammal burrows and conspecifics on the density and distribution of Spotted Salamanders (*Ambystoma maculatum*) in terrestrial habitats. Canadian Journal of Zoology 81:596–605.
- Rittenhouse, T.A.G., and R.D. Semlitsch. 2007. Distribution of amphibians in terrestrial habitat surrounding wetlands. Wetlands 27:153–161.
- Rothermel, B.B. 2004. Migratory success of juveniles: a potential constraint on connectivity for pond-breeding amphibians. Ecological Applications 14:1535–1546.

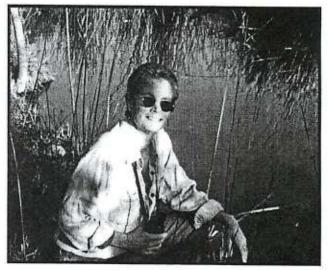
Orloff.-Movement patterns and migration distances of California Tiger Salamander.

- Searcy, C.A., and H.B. Shaffer. 2008. Calculating biologically accurate mitigation credits: insights from the California Tiger Salamander. Conservation Biology 22:997–1005.
- Seigel, R.A., and C.K. Dodd, Jr. 2002. Translocations of amphibians: proven management method or experimental technique? Conservation Biology 16:552–554.
- Semlitsch, R.D. 1983. Structure and dynamics of two breeding populations of the Eastern Tiger Salamander, *Ambystoma tigrinum*. Copeia 1983:608–616.
- Semlitsch, R.D. 1998. Biological delineation of terrestrial buffer zones for pond-breeding salamanders. Conservation Biology 12:1113–1119.
- Semlitsch, R.D. 2002. Critical elements for biologically based recovery plans of aquatic-breeding amphibians. Conservation Biology 16:619–629.
- Semlitsch, R.D. 2007. Differentiating migration and dispersal processes for pond-breeding amphibians. Journal of Wildlife Management 72:260–267.
- Semlitsch, R.D., and J.R. Bodie. 2003. Biological criteria for buffer zones around wetlands and riparian habitats for amphibians and reptiles. Conservation Biology 17:1219–1228.
- Semlitsch, R.D., and J.B. Jensen. 2001. Core habitat, not buffer zone. National Wetlands Newsletter 23:5-7.
- Shoop, C.R. 1968. Migratory orientation of *Ambystoma maculatum*: movements near breeding ponds and displacements of migrating individuals. Biological Bulletin 135:230-238.
- Shoop, C.R., and T.L. Doty. 1972. Migratory orientation by Marbled Salamanders (*Ambystoma opacum*) near a breeding area. Behavioral Biology 7:131–136.
- Stenhouse S.L. 1985. Migratory orientation and homing in Ambystoma maculatum and Ambystoma opacum. Copeia 1985:631–637.
- Stitt, E.W., and G.T. Downard. 2000. Status of the California Red-legged Frog and California Tiger

Salamander at Concord Naval Weapons Station, California. Transactions of the Western Section of the Wildlife Society 36:32–39.

- Storer, T.I. 1925. A synopsis of the amphibia of California. University of California Publications in Zoology 27:1–342.
- Trenham, P.C. 2001. Terrestrial habitat use by adult California Tiger Salamanders. Journal of Herpetology 35:343–346.
- Trenham, P.C., and D.G. Cook. 2008. Distribution of migrating adults related to the location of remnant grassland around an urban California Tiger Salamander (*Ambystoma californiense*) breeding pool. Pp. 9–16 In Urban Herpetology, Herpetological Conservation. Mitchell, J.C., and R.E. Jung Brown (Eds.). Society for the Study of Amphibians and Reptiles, Salt Lake City, Utah, USA.
- Trenham, P.C., and D.M. Marsh. 2002. Amphibian translocation programs: reply to Seigel and Dodd. Conservation Biology 16:555–556.
- Trenham, P.C., and H.B. Shaffer. 2005. Amphibian upland habitat use and its consequences for population viability. Ecological Applications 15:1158–1168.
- Trenham, P.C., W.D. Koenig, and H.B. Shaffer. 2001. Spatially autocorrelated demography and interpond dispersal in the salamander, *Ambystoma californiense*. Ecology 82:3519–3530.
- Trenham, P.C., H.B. Shaffer, W.D. Koenig, and M.R. Stromberg. 2000. Life history and demographic variation in the California Tiger Salamander (*Ambystoma californiense*). Copeia 2000:365–377.
- U. S. Fish and Wildlife Service. 2004. Determination of threatened status for the California Tiger Salamander; and special rule exemption for existing routine ranching activities; final rule. Federal Register 69:47212–47248

SUSAN ORLOFF is a Wildlife Biologist and principal of a consulting firm in the San Francisco Bay Area. She has degrees from San Francisco State University (B.A.) and Sonoma State University (M.A.). During the last 25 years, she has worked on a diversity of projects involving the status and conservation of sensitive wildlife species. Her early career focused on species of the Central Valley in California and she has authored several papers on the endangered San Joaquin Kit Fox (Vulpes macrotis mutica). Sue also has extensive experience assessing the impacts of windfarm development on raptor populations, which resulted in several publications. Her more recent research emphasizes sensitive amphibians and reptiles of California. This research includes a long-term population monitoring program for California Red-legged Frogs (Rana draytonii) and San Francisco Garter Snakes (Thamnophis sirtalis tetrataenia), a study on the impacts of variations in creek flow releases on California Redlegged Frogs, and a multiyear study on the effects of hydroelectric operations on the Foothill Yellow-legged Frog (Rana boylii). (Photographed by C.K. Cole)



# EXHIBIT 3

# SAVE MOUNT DIABLO



MALCOM SPROUL, Board Member, Chair of the Land Committee, Member of the Land and Nominating Committees

Malcolm received his B.A. and M.L.S. in Environmental Planning, from UC Berkeley, and then worked for the Marin County Planning Dept. for four years. In 1979, he joined LSA Associates and is now a principal in natural resources management and environmental planning, managing their Point Richmond office. An avid outdoorsman, Malcolm feels that Mount Diablo is a wonderful visual resource, and that the open space we are protecting is not just for people, but is essential to the protection and stability of the greatest possible diversity of biological resources in the central California region.

557081.1

# EXHIBIT 4



# Potential Pond Site - Image taken from Google Earth 2014

# EXHIBIT 5

Ecological Applications, 15(6), 2005, pp. 1893–1905  $\ensuremath{\mathbb{C}}$  2005 by the Ecological Society of America

# EFFECTS OF EXURBAN DEVELOPMENT ON BIODIVERSITY: PATTERNS, MECHANISMS, AND RESEARCH NEEDS

ANDREW J. HANSEN,<sup>1,4</sup> RICHARD L. KNIGHT,<sup>2</sup> JOHN M. MARZLUFF,<sup>3</sup> SCOTT POWELL,<sup>1,5</sup> KATHRYN BROWN,<sup>1,6</sup> PATRICIA H. GUDE,<sup>1,7</sup> AND KINGSFORD JONES<sup>1</sup>

> <sup>1</sup>Ecology Department, Montana State University, Bozeman, Montana 59717 USA <sup>2</sup>Department of Forest, Rangeland, and Watershed Stewardship, Colorado State University, Fort Collins, Colorado 80523 USA <sup>3</sup>Collage of Forest Pasourage, University of Washington, Seattle, Washington, 08105 USA

<sup>3</sup>College of Forest Resources, University of Washington, Seattle, Washington 98195 USA

Abstract. Low-density rural home development is the fastest-growing form of land use in the United States since 1950. This "exurban" development (~6-25 homes/km<sup>2</sup>) includes urban fringe development (UFD) on the periphery of cities and rural residential development (RRD) in rural areas attractive in natural amenities. This paper synthesizes current knowledge on the effects of UFD and RRD. We present two case studies and examine the patterns of biodiversity response and the ecological mechanisms that may underlie these responses. We found that many native species have reduced survival and reproduction near homes, and native species richness often drops with increased exurban densities. Exotic species, some human-adapted native species, and species from early successional stages often increase with exurban development. These relationships are sometimes nonlinear, with sharp thresholds in biodiversity response. These effects may be manifest for several decades following exurban development, so that biodiversity is likely still responding to the wave of exurban expansion that has occurred since 1950. The location of exurban development is often nonrandom relative to biodiversity because both are influenced by biophysical factors. Consequently, the effects on biodiversity may be disproportionately large relative to the area of exurban development. RRD is more likely than UFD to occur near public lands; hence it may have a larger influence on nature reserves and wilderness species. The ecological mechanisms that may underlie these responses involve alteration of habitat, ecological processes, biotic interactions, and increased human disturbance. Research on the patterns and mechanisms of biodiversity remains underdeveloped, and comparative and experimental studies are needed. Knowledge resulting from such studies will increase our ability to understand, manage, and mitigate negative impacts on biodiversity.

Key words: biodiversity; biotic interactions; ecological mechanisms; fire; habitat fragmentation; landscape management; land cover; land use; rural residential development; urban fringe development; weeds.

# INTRODUCTION

Rural America is undergoing a dramatic transition. For the first time in more than a century, more people are moving to rural areas than from rural lands (Johnson 1998). Fleeing the cities, many retirees, entrepreneurs, and others are seeking the small-town lifestyles and natural amenities of rural landscapes (Rudzitis 1999).

Manuscript received 21 July 2003; revised 10 September 2004; accepted 8 November 2004; final version received 10 December 2004. Corresponding Editor: M. G. Turner. For reprints of this Invited Feature, see footnote 1, p. 1849.

<sup>4</sup> E-mail: hansen@montana.edu

<sup>5</sup> Present address: USDA Forest Service, Pacific Northwest Research Station, 3200 SW Jefferson Way, Corvallis, Oregon 97331.

<sup>6</sup> Present address: 14445 Buffalo St., Anchorage, Alaska 99516.

<sup>7</sup> Present address: P.O. Box 283, King Salmon, Alaska 99613.

This rural in-migration is driving large changes in land use. The typical trajectory of land use change across the United States prior to 1950 was from wild land and resource extraction uses to agriculture and to suburban and urban uses. An entirely new land use has become prevalent in many parts of the United States since 1950. Many people are choosing to live "out of town" on small "ranchettes" and in rural subdivisions. Termed exurban development, low-density housing (~6-25 homes/km<sup>2</sup>) within a landscape dominated by native vegetation is now the fastest growing form of land use in the United States (Brown et al. 2005). Land long used for forestry or ranching is now being converted to home sites. The effects of exurban development on native species and ecological communities have only recently been the topic of ecological studies.

Since 1950, there has been a five-fold increase in the area within the conterminous United States that is occupied at exurban densities (Brown et al. 2005). The



PLATE 1. Rural residential development in the Greater Yellowstone Ecosystem near Red Lodge, Montana, USA. The rural homes are placed near low-elevation riparian forests that are especially important for biodiversity. Photo by A. Hansen.

exurban land use type currently covers nearly 25% of the area of the lower 48 states. The most rapid gains were in the eastern deciduous forest, the southwest, the western seaboard, the Rocky Mountains, and the upper Midwest.

This exurban development is manifest in two forms. Urban fringe development is the expansion of exurban densities on the periphery of cities. This urban fringe development (UFD) is largely driven by urban dwellers seeking more rural lifestyles while still having access to urban jobs and services (Ulmann 1954, Healy and Short 1987, Raish et al. 1997). Exurban development in counties adjacent to metropolitan counties increased six fold since 1950 (Brown et al. 2005). Over time, these exurban developments often transition to suburban and urban land uses.

A second form of exurban development is occurring distant from cities. It is focused on rural areas attractive in scenery, climate, outdoor recreation and other "natural amenities" (Rasker and Hansen 2000). Rural counties not adjacent to metropolitan counties increased fivefold in exurban area since 1950 (Brown et al. 2005). This rural residential development (RRD) is common in the rural counties of the Rocky Mountain West, the Pacific Northwest, the upper Midwest, and the southeastern United States (Gersh 1996). Rather than being randomly distributed, this development is often associated with the borders of national parks and other public lands; rivers, lakes, or coastal areas; areas of moderate climate and good outdoor recreational opportunities; and towns and small cities that offer national airports, high-speed internet access, and cultural amenities (Cromartie and Wardwell 1999, McGranahan 1999, Nelson 1999; see Plate 1).

The effects of both forms of exurban development on wildlife and biodiversity are poorly known. Relative to other types of land use, exurban development is substantially understudied. Miller and Hobbs (2002) found that only 6% of the papers on human landscapes published in *Conservation Biology* dealt with exurban and urban places. The majority of these consider the general gradient from rural to urban in and around cities. While these studies typically do not cleanly separate biodiversity in exurban places relative to suburban and urban places, they do provide a context for assessing general trends in biodiversity under land use intensification. RRD has been examined in only a few recent studies, with most of them being in the Rocky Mountain West.

Understanding the effects of exurban development on biodiversity is important to public policy. With a quarter of the nation's land area in this land use type, policies on exurban development may have a substantial effect on biodiversity nationwide. The general view among conservationists and the public is that exurban development alters ecological processes and biodiversity to a greater extent than forestry and agriculture (Marzluff and Ewing 2001). Hence, many initiatives have emerged to protect "open space" from exurban development through conservation easements and other approaches. There is also the view that the effects of exurban development are proportional to home density. Thus, zoning for lower density housing is often used to protect ecological resources.

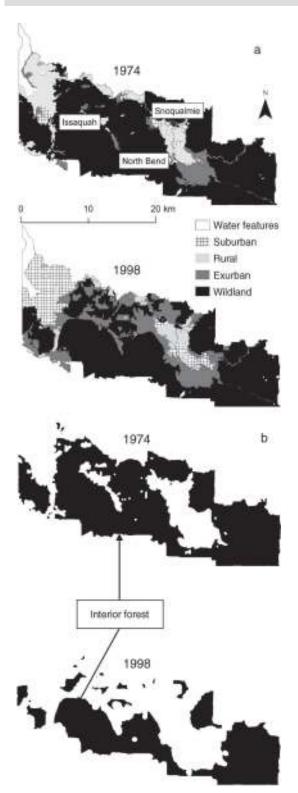


FIG. 1. (a) Change in land use in the urban fringe east of Seattle, Washington, USA. (b) Decline in interior forest resulting from changes in land use. The figure is from Robinson et al. (2005).

Several questions arise. How does exurban development change habitat and landscape patterns from those typical of lower intensity land uses? How do ecosystem, community, and population-level patterns vary as more natural habitats are converted to exurban? Are there thresholds in home density and spatial pattern where biodiversity is disproportionately affected? What ecological mechanisms underlie the response of biodiversity to exurban development? Can exurban development on private lands have consequences on adjacent or distant public lands? How do the effects of UFD and RRD compare?

In this paper, we synthesize current knowledge and attempt to answer these questions. We do so by first examining UFD and RRD and offer a case study of each. We then consider the ecological mechanisms linking both forms of exurban development to biodiversity. Where current research is insufficient to address the questions, we offer hypotheses in an effort to stimulate future research.

### URBAN FRINGE DEVELOPMENT AND BIODIVERSITY

# Case study: Seattle, Washington

The city of Seattle, in King County, Washington, lies between the Puget Sound and the Cascades Mountains. Like many metropolitan counties on the west coast, King County has been growing rapidly. The population size increased by 44% during 1970–2000 and the number of households grew by 72%. In an attempt to control sprawl around the city, the county instituted an urban growth policy aimed at confining high density development within urban growth boundaries while maintaining low-density housing in the surrounding rural lands. Robinson et al. (2005) quantified change in land use during 1974–1998 in a 474-km<sup>2</sup> study area extending east from Seattle towards the Cascade Mountains. The study area was a matrix of forest lands with dispersed agricultural, suburban, and urban, land uses.

The authors found that the primary trajectories of change were from wildlands to exurban and from exurban and agricultural to suburban. The area of exurban increased by 193%. Exurban and suburban covered 8% of the study area in 1974 and 33% in 1998 (Fig. 1a). The reduction of wildland and agricultural lands represents the conversion of 23% of the study area to development. These changes fragmented once contiguous forest and reduced interior forest area (>200 m from forest edge) by 60% (Fig. 1b). This land use change was largely driven by single-family housing. Despite the effort to concentrate growth within the urban growth boundary, 60% of the land committed to new residential development was outside urban growth boundaries.

This land conversion on Seattle's fringe changed plant, bird, and small mammal diversity. Native forb and tree diversity declined with loss of forest (Fig. 2a). A similar, but nonsignificant trend, was found for

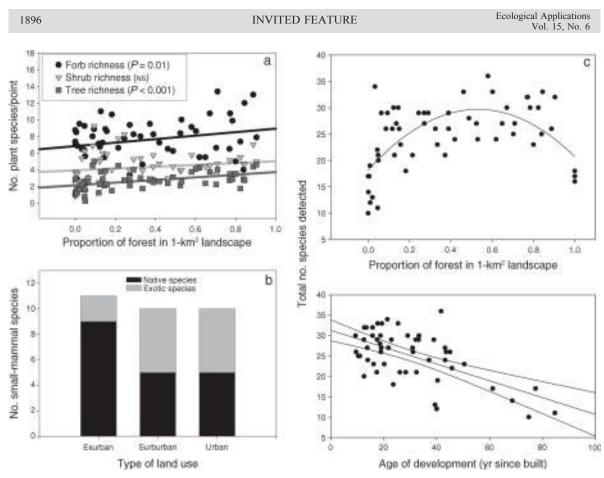


FIG. 2. Changes in biodiversity in response to urban sprawl in the Seattle metropolitan area. (a) Increases in plant species richness with increasing forest land cover. (b) Shifting composition of small mammal communities. (c) Correlation of bird species richness with amount of forest (upper panel) and age of development (lower panel). Bird data are from Donnelly (2002), Donnelly and Marzluff (2004), and Marzluff (*in press*).

shrubs. Alternatively, exotic ground cover increased significantly with development, especially with the interaction between age of development and interspersion of settled and forested remnants. The trends for plants were relatively linear. Small mammal communities changed abruptly from primarily native to mixtures of natives and exotics as landscapes were converted from exurban to suburban or urban (Fig. 2b). Bird species richness in combined samples of forest fragments and settled areas peaked at levels of settlement found in most single-family housing subdivisions (Fig. 2c). It dropped dramatically when development reached a threshold of approximately 80% developed, and when mature, second growth, coniferous forest cover occupied the entire 1-km<sup>2</sup> landscape (i.e., in relatively large forested reserves; Marzluff, in press). The peak in landscapes where forest and settlement are both abundant in the landscape occurs primarily because of colonization of early successional and deciduous forest species (Marzluff, in press). Native forest birds are predictably and linearly lost with increasing urbanization (Donnelly 2002, Donnelly and Marzluff 2004). Synanthropic birds, those ecologically associated with humans, predictably colonize landscapes as urban land cover increases. Species richness was also related to age of development, with bird species richness continuing to decrease more than 60 years after development. Average bird species richness dropped from about 35 at the time of development to below 15 by 80 years after development. This drop is accentuated by concomitant loss of forest cover with subdivision age in the sample, but additional research of similarly forested, but variously aged subdivisions confirms a general, but less extensive loss of species (Ianni 2004). Species diversity declines as subdivisions age because of losses in native mature forest birds and native birds not typically found in mature forests that colonized the openings, grasslands, ponds, and deciduous forest characteristic of new subdivisions. The loss of bird species was not explained by poor reproductive success. Nest success remained relatively high in developed study plots for all the bird guilds studied, but the numbers of active nests were greatly reduced in densely settled areas (Donnelly and Marzluff 2004). The authors concluded that the reduction in richness was primarily due to the loss of species dependent upon forest habitats,

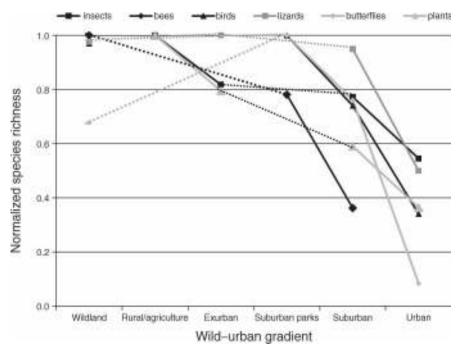


FIG. 3. Distribution of species richness across a gradient in land use for studies of various organisms. Normalized species richness is calculated as a function of the maximum number of recorded species at a point on the development gradient. Dashed lines represent unsampled portions of the gradient. Sources: insects, Denys and Schmidt (1998); bees, McIntyre and Hostetler (2001); birds, Blair (1996); lizards, Germaine et al. (1998); butterflies, Blair (1999); plants, Denys and Schmidt (1998).

rather than to increased predation levels. Reduced survival of adults and newly fledged birds is a potential factor currently being studied.

# General biodiversity responses to land use intensification on the urban fringe

The results above are consistent with the growing body of literature finding that the quantity and pattern of urban fringe development strongly influence both native and nonnative flora and fauna. The responses at the community level are a function of species response patterns, which are in turn a function of the demographic responses of individual organisms (Marzluff and Ewing 2001).

*Community patterns.*—For many plant and animal communities, species richness decreases as housing density increases along the rural–urban gradient. The literature abounds with examples for arthropods (Miyashita 1998), insects (Denys and Schmidt 1998), and amphibians (Lehtinen et al. 1999) (Fig. 3). Along a gradient from wild and undeveloped parks around the outskirts of Phoenix, Arizona, to residential sites in the city, both richness and abundance of pollinator bees (*Hymenoptera: Apoidea*) decreased markedly (McIntyre and Hostetler 2001). Similar results were documented in Tucson, Arizona, for native bird guilds, as housing density best explained the decrease in species richness along the rural–urban gradient (Germaine et

al.1998). For native rodents in protected grasslands in Boulder, Colorado, the capture rate exhibited a strong negative relationship with the percentage of surrounding suburbanization (Bock et al. 2002).

While native species often decrease in diversity and abundance along the rural–urban gradient, the opposite is often true for nonnative guilds. In the Tucson study, housing density best explained the increase in species richness for nonnative birds (Germaine et al. 1998). Within plant communities in Ohio, the percentage of nonnative species increased along the rural–urban gradient (Whitney 1985).

Because of these contrasting biodiversity response patterns along the rural-urban gradient, community richness sometimes exhibits a non-linear response in which richness peaks at intermediate levels of development (McKinney 2002). Avian and butterfly richness and diversity were both higher at moderate levels of development than in natural reserves in various sites in California and Ohio (Blair 1996, 1999). Lizard abundance, richness, and evenness all peaked at intermediate levels of development in Tucson, Arizona (Germaine and Wakeling 2001). In shoreline cottage development in central Ontario, moderate levels of development supported the highest levels of small mammal diversity (Racey and Euler 1982).

A recent meta-analysis of avian community response patterns to increasing urbanization (Marzluff 2001) confirmed the patterns emerging from the individual studies summarized above. He found that richness decreased in 61% and evenness decreased in 56% of the studies (Marzluff 2001). Over 90% of the surveyed studies documented either an increase in exotic species or a decrease in interior habitat nesters with increasing settlement.

An important conclusion from the Seattle case study is that the biodiversity response to urbanization may continue to intensify for several decades after development (Donnelly 2002, Ianni 2004). Thus in the rapidly growing cities of the United States, the full effects of recent development are likely not yet fully manifest and native biodiversity will continue to erode for decades to come.

Species patterns.-The response patterns of individual species to the rural-urban gradient are complex and account for the variety of responses at the community level. Many species decline in abundance with increased intensity of land use. Of 21 species recorded at a nature reserve in Santa Clara County, California, only 14 of these species also occurred at a nearby recreation area, and only three of these species were also found at the most urbanized site (Blair 1996). The species found only in the nature reserves were all natives including Western Wood-pewee (Contopus sordidulus), Hutton's Vireo (Vireo huttoni), and Ash-throated Flycatcher (Myiarchus cinerascens). Other examples of species that are negatively correlated with development levels come from central Ontario where the masked shrew (Sorex cinereus), deer mouse (Peromyscus maniculatus), red-backed vole (Clethrionomys gapperi), and woodland jumping mouse (Napeozapus insignis) all decreased in abundance with increasing shoreline cottage development (Racey and Euler 1981).

Other species are able to tolerate and even increase under higher levels of development (Hoffman and Gottschang 1997). Higher densities of nesting Cooper's Hawks (Accipiter cooperii) were recorded in urban settings compared to rural settings in and around Tucson, Arizona (Boal and Mannan 1998). Schneider and Wasel (2000) found that the density of moose (Alces alces) in northern Alberta, Canada, increased near human settlement. Similarly, Racey and Euler (1982) observed increased capture success with increasing development level for eastern chipmunk (Tamias striatus), red squirrel (Tamiasciurus hudsonicus), and meadow vole (Microtus pennsylvanicus). Several other studies have documented a suite of common bird and mammal species that increase in abundance along the rural to urban gradient. Examples include the House Sparrow (Passer domesticus), European Starling (Sturnus vulgaris), American Crow (Corvus brachyrhyncos), Brown-headed Cowbird (Molothrus ater), skunk (Mephitis mephitus), raccoon (Procyon lotor), and opossum (Didelphis virginiana) (Odell and Knight 2001).

The relationship between species abundance and urbanization is often not linear; many species are most abundant at intermediate levels of development, as demonstrated by Blair (1996). Gray foxes (*Urocyon cinereoargenteus*) in several rural communities in New Mexico were found to be tolerant of RRD up to a threshold of 50–125 homes/km<sup>2</sup> (Harrison 1997). A similar nonlinear response was also documented for abundance of mule deer (*Odocoileus* spp.) in an urbanizing valley in southwest Montana (Vogel 1989). Short-tailed shrews (*Blarina brevicauda*) were documented to peak at intermediate lakeshore cottage development levels in central Ontario (Racey and Euler 1982).

The life history attributes of species that avoid or expand with urbanization are not well studied. Mc-Kinney (2002) suggested that many human-sensitive species include large mammals with low reproductive rates, birds specializing on natural habitats, and late successional plants. Species most abundant in suburbs may be edge-adapted generalists able to exploit the wider variety of habitat configurations and resources available at intermediate levels of development. Species associated with urban areas may be preadapated to human structures or able to use human-derived food or water supplies (McKinney 2002). However, more study is needed to evaluate these hypotheses.

Demographic patterns.—Patterns of reproduction, survival, and dispersal are drivers for species and community responses to exurban development, yet relatively few studies have quantified population vitality rates across the development gradient. Marzluff (2001) reviewed the literature for results of urbanization on avian breeding success. He found that most studies dealt with species that were most abundant in cities. For these species, breeding success improved with increased settlement. For other species however, research on bird nesting success indicated a negative relationship with increasing development. The abundance of human development was found to be the strongest predictor of brood parasitism by brown-headed cowbirds and reduced nest success of several species such as Yellow Warbler (Dendroica petchia) (Tewksbury et al. 1998).

In sum, three general patterns of species abundances emerge along the gradient from rural to urban: decreases, increases, and nonlinear responses (McKinney 2002). Species that decrease in abundance along the development gradient are termed "human sensitive" (Odell and Knight 2001) or "urban avoiders" (Mc-Kinney 2002). Species that increase are termed "human adapted" (Odell and Knight 2001) or "urban adapted" and "urban exploiters" (McKinney 2002). "Suburban adaptables" (Blair 1996) reach peak abundance at intermediate levels of development. At the community level, richness for native species generally decreases with increasing development while richness for nonnative species generally increases with increasing development. As a result, total community diversity often peaks at intermediate levels of development, because both native and nonnative species are present in the community (Marzluff, *in press*). The life history traits of individual species, native and nonnative, likely contribute to the variety of responses at the population and community levels.

# RURAL RESIDENTIAL DEVELOPMENT AND BIODIVERSITY

# Case study: Colorado

Colorado is representative of much of the new West. Growing at three times the nation's average, it was the sixth-fastest growing state in the United States in the 1990s (Knight 1998). Importantly, this population growth is occurring on rural landscapes as well as within urban areas. Indeed, from 1990 to 1998, population in rural areas grew faster than in urban areas in over 60% of the counties in the Rocky Mountain states (Theobald 2001, Odell et al. 2003).

In much of the Mountain West, there are three principal land uses beyond city limits: protected areas, ranches, and ranchettes. Maestas et al. (2003) examined songbirds, carnivores, and plant communities on these three land uses in Larimer County, Colorado. Importantly, their data came from sites that were similar in elevation, soil type, and plant community type. They found that the density of songbirds and carnivores were more similar between ranches and protected areas (without livestock grazing) than on the ranchettes. The songbirds and carnivores that were most abundant on the ranchettes included dogs, cats, Black-billed Magpies, European Starlings, and other human-adapted species. Songbirds and carnivores that occurred on ranches and protected areas were uncommon or did not occur on land in ranchettes. Importantly, many of these songbirds are of conservation concern, whereas the birds that did best on ranchettes are common and increasing across the West (Maestas et al. 2003).

The plant communities across these three land uses were even more distinct. Native plant species were more prevalent and nonnative species were less prevalent on ranches than in either protected areas or ranchettes (Maestas et al. 2002). The greatest number of nonnative species was found on the ranchettes, with eight of 23 nonnative species being found only on the ranchette developments. In addition, percent cover of nonnative plants was highest on the ranchettes and protected areas and was significantly lower on ranches.

The effects of RRD are often manifest as a function of distance from home site and roads. In Pitkin County, Colorado, the biodiversity responses to ranchettes extended out as far as 330 m into undeveloped areas, although most effects diminished at approximately 100 m from the homes (Odell and Knight 2001). Humanadapted species, such as Brown-headed Cowbirds,

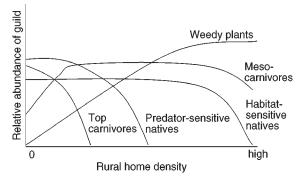


FIG. 4. Hypothesized responses of various guilds of species to rural home density.

Black-billed Magpies (*Pica pica*), and American Robins (*Turdus migratorius*), all occurred at higher densities near homes and at lower densities away from homes. Similarly, domestic dogs (*Canis familiaris*) and house cats (*Felis domesticus*) were more likely to be detected near homes than away from homes, while coyotes (*Canis latrans*) and red foxes (*Vulpes vulpes*) showed the reverse pattern (Odell and Knight 2001).

Such findings help elucidate the true ecological costs associated with RRD. Rather than simply acknowledging that rural residences perforate the landscape, one can begin to calculate the magnitude of land affected beyond the building site (Theobald et al. 1997). Assuming the depth of the house-edge effect is 100 m, and including a similar depth of road-effect (Forman 2000), Odell and Knight (2001) found that approximately one-fifth of the land area of the subdivided ranches they studied was affected by houses and roads.

# General effects of RRD on biodiversity

Compared with the urban fringe, development in rural areas distant from cities generally involves the lower intensity land uses of exurban home development. The Colorado case study suggests that this low-density housing can have effects on biodiversity that are more extreme than traditional rural land uses such as such as protected areas or ranching. The relative impacts of RRD on biodiversity compared to other rural land uses such as logging, grazing, crop agriculture, and backcountry recreation, however, are little studied. We can speculate that each has unique influences on biodiversity that are related to the nature of the land use. The plowing associated with crop agriculture likely alters soil communities to a greater extent than does RRD, but has fewer impacts associated with roads or with human disturbance. Similarly, logging may more greatly change forest structure and composition and disrupt soil layers. There may sometimes also be considerable overlap in impacts among these land use types. A study in south western Montana found that density of cowbirds and parasitism of native bird species were significantly associated with density of homes, area in

crops, and livestock densities within 6 km of riparian habitats (Hansen et al. 1999). Presumably this results because all three of these land use types provide supplemental foods that attract cowbirds. One way that RRD differs from the other rural land uses is its longevity. While logging and recovery typically occur in cycles, and livestock grazing and crop agriculture often have rest rotations, RRD is permanent on the order of decades or longer and its effects may intensify over this time.

The effect of land use is a function not only of land use type but also its intensity. In the case of RRD, home density is likely an important measure of intensity. A common perception is that homes scattered at low densities have little influence on biodiversity, while dense subdivisions have a large effect. Again, however, little research has examined how impacts on biodiversity vary with rural home density and development pattern.

As is the case with development intensity under UFD, we speculate that the relationship with rural home density under RRD varies among the different elements of biodiversity (Fig. 4). Top carnivores may be reduced even at low home densities as the expanding network of roads allows increased human access, hunting, and human disturbance. This may allow for an expansion of native or exotic meso predators and brood parasites. Consequently, native species vulnerable to predation and nest parasitism may undergo reduced survival and reproduction at low to medium densities of homes. Weedy plant diversity may increase at low home densities in association with roads, increase somewhat linearly with home density, then drop at high home densities as most of the land area is converted to lawns and ornamental plants. Suburban adaptables that benefit from human food sources and habitats may increase in proportion to home density. Finally, species richness of native species that require native habitats may decline only at higher home densities as the area of remaining habitat fall below key thresholds. Future research is needed to test these hypotheses and to identify key thresholds.

The effects of rural home density undoubtedly interact with the spatial distribution of homes and the behaviors of home owners. If homes are clustered, total road density is reduced and the ecological effects of each home overlap, allowing a larger proportion of the landscape to be free of these effects. Consequently, local planners often recommend clustered development to reduce ecological impacts and to reduce costs of government services (Daniels 1999). Also, home owners may reduce impacts on biodiversity by controlling weeds along roads, landscaping with native plant species, confining pets, covering compost, and managing livestock, pet foods, trash, and other artificial food sources including bird feeders to prevent access to wildlife.

A unique aspect of RRD compared with UFD is that rural homes are more likely to be placed in landscapes that include public lands with natural habitats and wilderness conditions. Typically, the sites productive for agriculture were claimed for private ownership, while less-productive mountain and desert settings remained under public control (Huston 2005). This has resulted in a high level of interspersion among private and public lands (Theobald 2000). An increasing number of people are now building homes on the edges of public lands for increased access to outdoor recreation, scenery, and solitude (Knight and Clark 1998). Consequently, the aura of impacts radiating from each home may extend hundreds of meters to kilometers within the public land boundary and alter biodiversity within this zone. Homes on the periphery of public lands may also attract wilderness species such as bears from the public lands, leading to increased mortality and declines in population sizes within the public lands (Mace and Waller 2002).

In the Greater Yellowstone Ecosystem, for example, national parks, national forests, and other public lands cover the majority (71.6%) of the land area. The private lands are largely in river valleys. These private lands have a longer growing season, better soils, and higher primary productivity than the public lands (Hansen et al. 2000). These same attributes make these settings attractive for native species. Consequently, the distribution of rural homes overlaps significantly with hotspots for birds (Hansen et al. 2002). The rural homes, livestock, and agriculture near the bird hotspots attract nest parasites and predators and result in reduced nest success of several native species (Hansen and Rotella 2002). P. H. Gude, A. J. Hansen, and D. A. Jones (unpublished manuscript) found that 49% of deciduous woodlands (the richest bird habitat in the area) across Greater Yellowstone are within 1 km of a home. Hence, even in this large, wilderness system, which is dominated by public lands, the effects of rural homes may extend over a substantial portion of key habitats.

We conclude that like exurban development on the urban fringe, exurban expansion in rural landscapes may have substantial negative impacts on native biodiversity. Considerable research is needed to better understand the effects of rural home density, spatial distribution, and homeowner behavior on biodiversity impacts. A particular concern about exurban development in rural areas is that it is more likely to be in close proximity to public lands and associated wilderness species.

# MECHANISMS LINKING EXURBAN DEVELOPMENT AND BIODIVERSITY

The mechanisms underlying these responses to land use are generally less well studied than the patterns described above. Case studies provide insights for some mechanisms, but adequate comparative study and experimentation is generally not available to allow for derivation of general predictive principles. Below we describe the suite of factors that have been suggested to explain biodiversity responses to exurban and urban development. These involve changes in habitats, ecological processes, interactions among species, and human-related disturbance of native species. Our goal is to encourage additional research on these mechanisms. Beyond improving scientific understanding, knowledge of these mechanisms may provide the basis for management strategies to reduce the effects of exurban development on biodiversity.

# Habitat alteration

As human settlement progresses, conversion of native habitat to roads, yards, and structures tend to fragment the landscape (Soulé et al. 1998, Marzluff and Ewing 2001). Fragmentation influences biodiversity through reduction of habitat area, creation of dispersal barriers (Trombulak and Frissell 2000, Marzluff and Ewing 2001), disruption of nutrient cycling, and increases in predation, parasitism, and competition (Marzluff and Ewing 2001). In the Seattle case study, reduction in the area of forest patches was thought to explain the loss of forest-dwelling bird species. Isolation of small canyons in California by subdivisions lessened the dispersal capabilities of and resulted in decreased species diversity for chaparral-requiring birds (Soulé et al. 1988).

In addition to habitat fragmentation, residential development may change microhabitat features. For example, decreasing abundance of native plant cover with increasing urbanization was correlated with decreasing bee, bird, and lizard species richness in Arizona (Germaine et al. 1998, Germaine and Wakeling 2001, McIntyre and Hostetler 2001). In Illinois, replacement of natural sandy patches with grassy patches in a residential area resulted in decreased snapping turtle (Chelydra serpentina) nesting success (Kolbe and Janzen 2002). Reduced course woody debris input (Christensen et al. 1996) tied to exurban development in Wisconsin and Michigan lakes reduced growth rates of bluegill sunfish (Lepomis macrohirus) but did not significantly affect largemouth bass (Micropterus salmoides) (Schindler et al. 2000).

The nonrandom location of land use relative to biophysical gradients and biodiversity may cause the resulting habitat fragmentation resulting from human settlement to have disproportionately large effects. We described above the concentration of rural residences in productive valley bottoms in mountainous landscapes (Riebsame et al. 1996, Theobald et al. 1996, Soulé et al. 1998, Hansen et al. 2002, Seabloom et al. 2002). Other favored settings for RRD include lakeshores in the upper Midwest (Beale and Johnson 1998), coastal areas (Seabloom et al. 2002), and wetlands in the coastal states (Brady and Flather 1994). Because both humans and native species tend to concentrate in such locations (Hansen et al. 2002, Seabloom et al. 2002), the impacts of exurban development may be focused on the most critical habitats (see also Huston 2005).

# Alteration of ecological processes

Less visible than habitat destruction, ecological processes such as disturbance regimes may be altered by exurban development and in turn influence habitats and biotic assemblages. In many parts of the arid west, humans have excluded fires from urbanizing landscapes to protect human property and lives. In Oklahoma, for example, such fire exclusion has led to increased juniper (Juniperus spp.) encroachment in suburban and rural habitats since 1950, as human population density increased (Coppedge et al. 2001). Correlated with the increase in juniper, the passerine community has also been altered. American Robin and Eastern Bluebird (Sialia sialis) abundance showed a unimodal trend with highest abundance at intermediate levels of juniper encroachment. Three species of potential juniper-feeders, Cedar Waxwing (Bombycilla cedrorum), Ruby-crowned Kinglet (Regulus celendula), and Yellow-rumped Warbler (Dendroica coronata), increased with juniper encroachment levels. Four species, Song Sparrow (Melospiza melodia), Whitecrowned Sparrow (Zonotricha querula), House Sparrow, and American Goldfinch (Carduelis tristis), declined with increased levels of juniper encroachment. In other urbanizing environments, in contrast, increased human ignitions have accelerated fire frequency and decreased later seral habitats (Keeley 2002).

Flood regimes may also be altered with urbanization with consequences for riparian communities. For example, plains cottonwood (*Populus deltoides*) establishment on the floodplain and terrace of Boulder Creek in Boulder, Colorado declined from 1937 to 1992 as stream diversion, straightening, stabilization, and clearing led to decreased channel movement, decreased peak flow and a decreased flooding frequency in the floodplain. Concurrently, species less tolerant to flooding events—including the exotics crack willow (*Salix rubens*) and Russian-olive (*Elaeagnus angustifolia*)— have encroached upon the floodplain (Auble et al. 1997).

Changes to nutrient cycles are also likely with conversion to exurban land uses. Along an urban-rural gradient in New York, nitrogen and phosphorous levels in oak forest soils increased with increasing urbanization (Pouyet et al. 1995). Increased nitrogen availability tends to simplify biotic communities and favor exotic species (Vitousek et al. 1997). Nutrient effects may be particularly manifest in aquatic systems. Natural-amenity exurban development around four Wisconsin lakes has affected water quality and altered diatom communities (Garrison and Wakeman 2000). As once-seasonal homes along these lakeshores were converted to year-long use, the amount of impervious surface increased and consequently run-off and sediment load to the lakes also increased. Increased levels of phosphorous, iron, and aluminum were tied to a shift from benthic to mainly planktonic diatoms and an increase in diatom taxa indicative of eutrophic conditions. Water quality in the higher alkalinity lakes showed improvement as construction slowed, but the lower alkalinity lakes appeared to be more sensitive to shoreline development, and water quality did not improve in these lower alkalinity lakes.

# Alteration of biotic interactions

As human settlement alters species distributions, interactions among species may be changed with consequences for species viability and ecosystem function (Daszak et al. 2000, Marzluff 2001). Best studied among these changes in biotic interactions are predator-prey relationships. As illustrated by the Colorado case study, both native and nonnative predators may become abundant near human development and inflict heavy prey heavily upon other native species. Similarly, Wilcove (1985) found that suburban woodlots in Maryland experienced significantly higher rates of nest predation than did rural woodlots, likely as a result of higher densities of nest predators such as the Blue Jay (Cyanocitta cristata), Common Grackle (Quiscalus quiscula), gray squirrel (Sciurus carolinensis), and raccoon. Some predators may become abundant near human dwellings due to human subsidized food supplies (Marzluff 2001). This may also result from the loss of large carnivores that are intolerant to urbanizing landscapes, and the consequential release of mesopredators that are tolerant to human influences (Soulé et al. 1988, Crooks and Soulé 1999). Herbivores are also released by the elimination of large predators in developed areas, and the increased herbivory by deer and rabbits can have a major effect on plant diversity, both in urban parks and the surrounding landscapes.

Because predator occurrence and tolerance vary geographically, biodiversity response to urbanization may vary among regions of the United States. As described above, native songbird nest success declined in Montana as cowbird density in creased with rural home density (Tewksbury et al. 1998, Hansen and Rotella 2002). In contrast, the absence of Brown-headed Cowbirds in King County, Washington, may be a factor in the lack of nest parasitism in the Seattle case study (Donnelly and Marzluff 2004).

Changes in competitive interactions induced by development are well illustrated by invasive plant interactions with native species. English Ivy (*Hedera helix*) was introduced as an ornamental plant and kills native trees through competition for light (Reichard 2000) in much of the continental United States. Similarly, Norway maple (*Acer platanoides*), a shade tree introduced to eastern deciduous forests, out-competes native maples and beeches (Webb et al. 2001).

Many examples of the spread of infectious diseases related to human settlement exist. These can be classified as (1) human facilitated dispersal or translocation of hosts and parasites, (2) supplemental feeding, and (3) disease "spill-over" from domestic to wild populations (Daszak et al. 2000). Supplemental feeding of white-tailed deer at rural home sites was found to be directly related to the maintenance of bovine tuberculosis in Michigan deer populations (Michigan Department of Natural Resources 1999). Similarly, birdfeeders were found to increase the concentration of House Finches (Carpdacus mexicanus) and other bird species, enhancing the spread of mycoplasmal conjunctivitis (Fisher et al. 1997, Nolan et al. 1998). Last, many examples of "spill-over" of infectious diseases to wildlife involve domestic dogs. Canine distemper virus, canine parvovirus, and sarcoptic mange (Sarcoptes scabiei) are three pathogens known to have spread due to domestic dog-wildlife interactions, and are suspected to have caused population declines in the endangered gray wolf (Canis lupus) and black-footed ferret (Mustela nigripes) (Daszak et al. 2000).

## Human disturbance

Finally, the presence of humans and their pets around home sites can directly influence biodiversity. Human presence in yards or on trails near homes may displace some species of wildlife. Bald Eagles (*Haliaeetus leucocephalus*), for example, may decline in number in areas with increasing human recreation (Brown and Stevens 1997, Stalmaster and Kaiser 1998). Pronghorn antelope (*Antilocapra Americana*) on Antelope Island State Park in Utah retreated further from trails once they were opened for recreational use (Fairbanks and Tullous 2002). Likewise, elk (*Cervus Canadensis*) approached by humans during calving season, were repeatedly displaced resulting in elevated calf mortality (Phillips and Alldredge 2000).

Pets may also displace, injure, or kill wildlife. Pet cats are responsible for the deaths of millions of birds in the United States every year, and in Wisconsin alone, an estimated 39 million birds per year are lost to domestic cats (Coleman and Temple 1996). Pet dogs also act as predators in many ecosystems. In Florida, pet dogs have effected the distribution of the endangered key deer (O. virginianus clavium), and are suspected to have eliminated them from several islands in the Florida Keys. In Colorado, the flushing distance of ungulates to human hikers was increased if a pet dog was present (Miller et al. 2001). Because rural pets kill more than their suburban and urban counterparts, adverse effects on native species are potentially greatest in the undisturbed habitat near new rural residential developments (Barratt 1998).

# December 2005

Another direct consequence of suburban and exurban residential growth in the United States has been an increase in vehicle miles traveled per person and per household, escalating the potential for roadkill. Between 1980 and 2000, overall per capita vehicular travel in the United States increased by 48.7%, of which the fastest growing component was "home-based" travel, including shopping, recreation, and driving to school. Although mortality of animals from collision with vehicles is best documented in large mammals, few terrestrial species are immune (Trombulak and Frissell 2000). Roadkill has affected the demographics and migrations of birds, snakes, invertebrates, and amphibians, and is a major cause of mortality for moose, lynx (Felis pardina), wolves, and American crocodile (Crocodilus acutus) in various regions of the United States (Trombulak and Frissell 2000).

### CONCLUSION

Our major conclusion is that exurban development is a pervasive and fast-growing form of land use that is substantially understudied by ecologists and has large potential to alter biodiversity. Covering about 25% of the land area of the conterminous United States in 2000 (Brown et al. 2005), area in exurban land use increased since 1974 at rates in excess of area in urban or agricultural land uses. Ecologists have traditionally focused research on wild or semi-wild lands (Miller and Hobbs 2002). The relatively few studies on exurban development are mostly done as contrasts to urban land use. Consequently, knowledge of the effects of exurban density, spatial configuration, and homeowner behavior on biodiversity, and specific mechanisms for response is poorly developed.

The relatively few studies on exurban development suggest that its impacts on biodiversity may be substantial, both in the immediate vicinity of homes and even on adjacent or even distant public lands. These impacts are summarized as follows.

1) Many native species incur reduced survival and reproduction near homes and consequently native species richness generally drops with increased exurban densities. At the same time, some exotic species and some human-adapted native species generally increase with intensity of exurban development.

2) The relationship between these elements of biodiversity and intensity of exurban development are sometimes nonlinear, with sharp thresholds were biodiversity changes abruptly with incremental increases in exurban intensity. Knowledge of these thresholds is important for managing exurban development to achieve biodiversity objectives.

3) These affects may be manifest for several decades following exurban development, so that biodiversity is likely still responding to the wave of exurban expansion that has occurred since 1950.

4) The location of exurban development is often nonrandom relative to biodiversity because both are influenced by biophysical factors such that they are concentrated in more equitable landscape settings. Consequently, the effects on biodiversity may be disproportionately large relative to the area of exurban development.

5) The effects of exurban development on biodiversity likely differ among ecosystem types. Additional research is needed to derive generalities on the types of ecosystems that are relatively vulnerable to exurban development.

6) An identifiable set of ecological mechanisms link exurban development and biodiversity. More research is needed on these mechanisms and the resulting knowledge can help with understanding, managing, and mitigating these impacts.

7) In addition to local effects, exurban development may alter ecological processes and biodiversity on adjacent and distant public lands. Consequently, exurban development in rural areas may have even more important impacts than in the urban fringe because of the elevated influence on lands dedicated to conservation and on wilderness species that are rare in human-dominated landscapes.

It is our hope that this review inspires the additional research that is needed to better understand and manage the impacts of this important type of land use.

## ACKNOWLEDGMENTS

We thank the NASA Land Cover Land Use Program, the EPA Regional Sustainability Programs, and the National Science Foundation (DEB-9875041, BCS-0120024, IGERT-0114351) for financial support. Josh Newell drafted Fig. 1. Michael Huston, two anonymous reviewers, and editor Monica Turner provided helpful comments on the manuscript.

# LITERATURE CITED

- Auble, G. T., M. L. Scott, J. M. Friedman, J. Back, and V. J. Lee. 1997. Constraints on establishment of plains cottonwood in an urban riparian preserve. Society of Wetland Scientists 17:138–148.
- Barratt, D. G. 1998. Predation by house cats (*Felis catus*) in Canberra II: factors affecting the amount of prey caught and estimates of the impact. Wildlife Research 25:475–487.
- Beale, C. L., and K. M. Johnson. 1998. The identification of recreational counties in nonmetropolitan areas of the USA. Population Research and Policy Review 17:37–53.
- Blair, R. B. 1996. Land use and avian species along an urban gradient. Ecological Applications 6:506–519.
- Blair, R. B. 1999. Birds and butterflies along an urban gradient: surrogate taxa for assessing biodiversity? Ecological Applications 9:164–170.
- Boal, C. W., and R. W. Mannan. 1998. Nest-site selection by Cooper's Hawks in an urban environment. Journal of Wildlife Management 62:864–871.
- Bock, C. E., K. T. Vierling, S. L. Haire, J. D. Boone, and W. W. William. 2002. Patterns of rodent abundance on openspace grasslands in relation to suburban edges. Conservation Biology 16:1653–1658.
- Brady, S. J., and C. H. Flather. 1994. Changes in wetlands on nonfederal rural land of the conterminous United States from 1982 to 1987. Environmental Management 18:693– 705.

- Brown, B. T., and L. E. Stevens. 1997. Wintering Bald Eagle distribution is inversely correlated with human activity along the Colorado River, Arizona. Journal of Raptor Research 31:7–10.
- Brown, D. G., K. M. Johnson, T. R. Loveland, and D. M. Theobald. 2005. Rural land-use trends in the conterminous United States, 1950–2000. Ecological Applications 15: 1851–1863.
- Christensen, D. L., B. R. Herwig, D. E. Schindler, and S. R. Carpenter. 1996. Impacts of lakeshore residential development on coarse woody debris in north temperate lakes. Ecological Applications 6:1143–1149.
- Coleman, J. S., and S. A. Temple. 1996. On the prowl. Wisconsin Natural Resources 20:4–8.
- Coppedge, B. R., D. M. Engle, S. D. Fuhlendorf, R. E. Masters, and M. S. Gregory. 2001. Urban sprawl and juniper encroachment effects on abundance of wintering passerines in Oklahoma. Pages 225–242 *in* J. M. Marzluff, R. Bowman, and R. Donnelly, editors. Avian ecology and conservation in an urbanizing world. Kluwer Academic Publishers, Boston, Massachusetts, USA.
- Cromartie, J. B., and J. M. Wardwell. 1999. Migrants settling far and wide in the rural West. Rural Development Perspectives. 14:2–8.
- Crooks, K. R, and M. E. Soulé. 1999. Mesopredator release and avifaunal extinctions in a fragmented system. Nature 400:563–566.
- Daniels, T. 1999. When city and country collide: managing growth in the metropolitan fringe. Island Press, Washington, D.C., USA.
- Daszak, P., A. A. Cunningham, and A. D. Hyatt. 2000. Wildlife ecology—emerging infectious diseases of wildlife threats to biodiversity and human health. Science **287**:443– 449.
- Denys, C., and H. Schmidt. 1998. Insect communities on experimental mugwort (*Artemesia vulgaris* L.) plots along an urban gradient. Oecologia 113:269–277.
- Donnelly, R. 2002. Design of habitat reserves and settlements for bird conservation in the Seattle metropolitan area. Dissertation. University of Washington, Seattle, Washington, USA.
- Donnelly, R., and J. M. Marzluff. 2004. Importance of reserve size and landscape context to urban bird conservation. Conservation Biology 18:733–745.
- Fairbanks, W. S., and R. Tullous. 2002. Distribution of pronghorn (*Antilocapra americana* Ord) on Antelope Island State Park, Utah, USA, before and after establishment of recreational trails. Natural Areas Journal 22:277–282.
- Fischer, J. R., D. E. Stallknecht, M. P. Luttrell, A. A. Dhondt, and K. A. Converse. 1997. Mycoplasmal conjuctivistis in wild songbirds: the spread of a new contagious disease in a mobile host population. Emerging Infectious Disease 3: 69–72.
- Forman, R. T. T. 2000. Estimate of the area affected ecologically by the road system in the United States. Conservation Biology **14**:31–35.
- Garrison, P. J., and R. S. Wakeman. 2000. Use of paleolimnology to document the effect of shoreland development on water quality. Journal of Paleolimnology 24:369–393.
- Germaine, S. S., S. S. Rosenstock, R. E. Schweinsburg, and W. S. Richardson. 1998. Relationships among breeding birds, habitat, and residential development in greater Tucson, Arizona. Ecological Applications 8:680–691.
- Germaine, S. S., and B. F. Wakeling. 2001. Lizard species distributions and habitat occupation along an urban gradient in Tucson, AZ, U.S.A. Biological Conservation 97: 229–237.
- Gersh, J. 1996. Subdivide and conquer: concrete, condos, and the second conquest of the American West. Amicus Journal **18**:14–20.

- Hansen, A. J., R. Rasker, B. Maxwell, J. J. Rotella, A. Wright, U. Langner, W. Cohen, R. Lawrence, and J. Johnson. 2002. Ecology and socioeconomics in the New West: a case study from Greater Yellowstone. BioScience 52:151–168.
- Hansen, A. J., and J. J. Rotella. 2002. Biophysical factors, land use, and species viability in and around nature reserves. Conservation Biology 16:1112–1122.
- Hansen, A. J., J. J. Rotella, and M. L. Kraska. 1999. Dynamic habitat and population analysis: a filtering approach to resolve the biodiversity manager's dilemma. Ecological Applications 9:1459–1476.
- Hansen, A. J., J. J. Rotella, M. L. Kraska, and D. Brown. 2000. Spatial patterns of primary productivity in the Greater Yellowstone Ecosystem. Landscape Ecology 15:505– 522.
- Harrison, R. L. 1997. A comparison of gray fox ecology between residential and undeveloped rural landscapes. Journal of Wildlife Management **61**:112–122.
- Healy, R. G., and J. L. Short. 1981. The market for rural land: trends, issues and policies. Conservation Foundation, Washington, D.C., USA.
- Hoffmann, C. O., and J. L. Gottschang. 1997. Numbers, distribution, and movements of a raccoon population in a suburban residential community. Journal of Mammology 58: 623–636.
- Huston, M. A. 2005. The three phases of land-use change: implications for biodiversity. Ecological Applications 15: 1864–1878.
- Ianni, C. 2004. Birds on loan: measuring the extinction debt of urbanization. Thesis. University of Washington, Seattle, Washington, USA.
- Johnson, K. M. 1998. Renewed population growth in rural America. Research in Rural Sociology and Development 7:23–45.
- Keeley, J. E. 2002. Fire management of California shrubland landscapes. Environmental Management 29:395–408.
- Knight, R. L. 1998. A field report from the New West. Pages 181–200 in C. Meine, editor. Wallace Stegner and the continental vision. Island Press, Washington, D.C., USA.
- Knight, R. L., and T. W. Clark. 1998. Boundaries between public and private lands: defining obstacles, finding solutions. Pages 175–191 *in* R. L. Knight and P. B. Landres, editors. Stewardship across boundaries. Island Press, Washington, D.C., USA.
- Kolbe, J. J., and F. J. Janzen. 2002. Impact of nest-site selection on nest success and nest temperature in natural and disturbed habitats. Ecology **83**:269–281.
- Lehtinen, R. M., S. M. Galatowitsch, and J. R. Tester. 1999. Consequences of habitat loss and fragmentation for wetland amphibian assemblages. Wetlands 9:1–12.
- Mace, R. D., and J. S. Waller. 2002. Population trend of grizzly bears in the Swan Mountains, Montana. Conservation Biology 12:1005–1016.
- Maestas, J. D., R. L. Knight, and W. C. Gilgert. 2002. Cows, condos, or neither: what's best for rangeland ecosystems? Rangelands 24:36–42.
- Maestas, J. D., R. L. Knight, and W. C. Gilgert. 2003. Biodiversity across a rural land-use gradient. Conservation Biology 17:1425–1434.
- Marzluff, J. M. 2001. Worldwide urbanization and its effects on birds. Pages 19–48 in J. M. Marzluff, R. Bowman, and R. Donnelly, editors. Avian ecology and conservation in an urbanizing world. Kluwer Academic Publishers, Boston, Massachusetts, USA.
- Marzluff, J. M. *In press*. Island biogeography for an urbanizing world: how extinction and colonization may determine biological diversity in human dominated landscapes. Urban Ecosystems.
- Marzluff, J. M., and K. Ewing. 2001. Restoration of fragmented landscapes for the conservation of birds: a general

framework and specific recommendations for urbanizing landscapes. Restoration Ecology **9**:280–292.

- McGranahan, D. A. 1999. Natural amenities drive population change. Pages 1–24*in* Report 781. Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture, Washington, D.C., USA.
- McIntyre, N. E., and M. E. Hostetler. 2001. Effects of urban land use on pollinator (Hymenoptera: Apoidea) communities in a desert metropolis. Basic and Applied Ecology 2:209–218.
- McKinney, M. L. 2002. Urbanization, biodiversity, and conservation. BioScience 52:883–890.
- Miller, J. R., J. M. Fraterrigo, N. T. Hobbs, D. M. Theobald, and J. A. Wiens. 2001. Urbanization, avian communities, and landscape ecology. Pages 117–136 *in* J. M. Marzluff, R. Bowman, R. McGowan, and R. Donnelly, editors. Avian ecology in an urbanizing world. Kluwer, Boston, Massachusetts, USA.
- Miller, J. R., and R. J. Hobbs. 2002. Conservation where people live and work. Conservation Biology 16:330–337.
- Miyashita, T., A. Shinaki, and T. Chida. 1998. The effects of forest fragmentation on web spider communities in urban areas. Biological Conservation **86**:357–364.
- Nelson, P. B. 1999. Quality of life, nontraditional income, and economic growth: new development opportunities for the rural West. Rural Development Perspectives. 14:32–37.
- Nolan, P. M., G. E. Hill, and A. M. Stroehr. 1998. Sex, size, and plumage redness predict house finch survival in an epidemic. Proceedings of the Royal Society of London, Series B, Biological Sciences 256:961–965.
- Odell, E. A., and R. L. Knight. 2001. Songbird and mediumsized mammal communities associated with exurban development in Pitkin County, Colorado. Conservation Biology 15:1143–1150.
- Odell, E. A., D. M. Theobald, and R. L. Knight. 2003. Incorporating ecology into land use planning: the songbirds' case for clustered development. Journal of the American Planning Association 69:72–82.
- Phillips, G. E., and A. W. Alldredge. 2000. Reproductive success of elk following disturbance by humans during calving season. Journal of Wildlife Management 64:521– 530.
- Pouyet, J. L., M. J. McDonnell, and S. T. A. Pickett. 1995. Soil characteristics of oak stands along an urban-rural gradient. Journal of Environmental Quality 24:516–526.
- Racey, G. D., and D. L. Euler. 1982. Small mammal and habitat response to shoreline cottage development in central Ontario. Canadian Journal of Zoology 60:865–880.
- Raish, C., W. Yong, and J. M. Marzluff. 1997. Contemporary human use of southwestern ponderosa pine forests. Pages 28–42 *in* D. M. Finch and W. M. Block, editors. Songbird ecology in southwestern ponderosa pine forests. General technical report RM-292. USDA Forest Service, Fort Collins, Colorado, USA.
- Rasker, R., and A. J. Hansen. 2000. Natural amenities and population growth in the Greater Yellowstone region. Human Ecology Review 7:30–40.
- Reichard, S. 2000. *Hedera helix*. Pages 212–216 in J. M. Randall, C. Bossard, and M. C. Hoshovesky, editors. Invasive plants of California wildlands. University of California Press, Berkeley, California, USA.
- Riebsame, W. E., H. Gosnell, and D. M. Theobald. 1996. Land use and landscape change in the Colorado mountains

I: theory, scale and pattern. Mountain Research and Development **16**:395–405.

- Robinson, L., J. P. Newell, and J. M. Marzluff. 2005. Twentyfive years of sprawl in the Seattle region: growth management responses and implications for conservation. Landscape and Urban Planning 71:51–72.
- Rudzitis, G. 1999. Amenities increasingly draw people to the rural West. Rural Development Perspectives. **14**:9–13.
- Schindler, D. E., S. I. Geib, and M. R. Williams. 2000. Patterns of fish growth along a residential development gradient in north temperate lakes. Ecosystems 3:229–237.
- Schneider, R. R., and S. Wasel. 2000. The effect of human settlement on the density of moose in northern Alberta. Journal of Wildlife Management 64:513–520.
- Seabloom, E. W., A. P. Dobson, and D. M. Stoms. 2002. Extinction rates under nonrandom patterns of habitat loss. Proceedings of the National Academy of Science (USA) 99:11 229–11 234.
- Soulé, M. E., D. T. Bolger, A. C. Alberts, J. Wright, M. Sorice, and S. Hill. 1988. Reconstructed dynamics of rapid extinctions of chapparal-requiring birds in urban habitat islands. Conservation Biology 2:75–92.
- Stalmaster, M. V., and J. L. Kaiser. 1998. Effects of recreational activity on wintering bald eagles. Wildlife Monographs 137:5.
- Tewksbury, J. J., S. J. Hejl, and T. E. Martin. 1998. Breeding productivity does not decline with increasing fragmentation in a western landscape. Ecology **79**:2890–2903.
- Theobald, D. M. 2000. Fragmentation by inholdings and exurban development. Pages 155–174 in R. L. Knight, F. W. Smith, S. W. Buskirk, W. H. Romme, and W. L. Baker, editors. Forest fragmentation in the southern Rocky Mountains. University of Colorado Press, Fort Collins, Colorado, USA.
- Theobald, D. M. 2001. Land-use dynamics beyond the American urban fringe. Geographical Review **91**:544–564.
- Theobald, D. M., H. Gosnell, and W. E. Riebsame. 1996. Land use and landscape change in the Colorado Mountains II: a case study of the East River Valley. Mountain Research and Development 16:407–418.
- Theobald, D. M., J. R. Miller, and N. T. Hobbs. 1997. Estimating the cumulative effects of development on wildlife habitat. Landscape and Urban Planning 39:25–36.
- Trombulak, S. C., and C. A. Frissell. 2000. Review of ecological effects of roads on terrestrial and aquatic communities. Conservation Biology 14:18–30.
- Ullman, E. 1954. Amenities as a factor in regional growth. Geographic Review 44:119–132.
- Vitousek, P. M., J. D. Aber, R. H. Howarth, G. E. Likens, P. A. Matson, D. W. Schindler, W. H. Schlesinger, and D. G. Tilman. 1997. Human alteration of the global nitrogen cycle: source and consequences. Ecological Applications 7: 737-750.
- Vogel, W. O. 1989. Response of deer to density and distribution of housing in Montana. Wildlife Society Bulletin 17:406-413.
- Webb, S. L., T. H. Pendergast, and M. E. Dwyer. 2001. Response of native and exotic maple seedling banks to removal of the exotic, invasive Norway maple (*Acer platanoides*). Journal of the Torrey Botanical Society **128**:141– 149.
- Whitney, G. G. 1985. A quantitative analysis of the flora and plant communities of a representative midwestern U.S. town. Urban Ecology **9**:143–160.
- Wilcove, D. S. 1985. Nest predation in forest tracts and the decline of migratory songbirds. Ecology 66:1211–1214.

# EXHIBIT 6



# DOMESTIC CAT PREDATION ON BIRDS AND OTHER WILDLIFE



# How many birds and other wildlife do domestic cats kill each year in the U.S.?

Exact numbers are unknown, but scientists estimate that nationwide, cats kill hundreds of millions of birds, and more than a billion small mammals, such as rabbits, squirrels, and chipmunks, each year. Cats kill common species such as Cardinal, Blue Jay, and House Wren, as well as rare and endangered species such as Piping Plover, Florida Scrub-Jay, and California Least Tern.

There are more than 77 million pet cats in the United States. A 1997 nationwide poll showed that only 35% are kept exclusively indoors, leaving the majority of owned cats free to kill birds and other wildlife at least some of the time. In addition, millions of stray and feral cats roam our cities, suburbs, farmlands and natural areas. Abandoned by their owners or lost (stray), or descendants of strays and living in the wild (feral), these cats are victims of human irresponsibility due to abandonment and failure to spay or neuter pets. No one knows how many homeless cats there are in the U.S., but estimates range from 60 to 100 million. These cats lead short, miserable lives.

Loss of wildlife habitat and fragmentation due to human development are the leading causes of declining bird populations. However, scientists now list invasive species, including cats, as the second most serious threat to bird populations worldwide. Habitat fragmentation provides cats and other predators easier access to wildlife forced to live on smaller tracts of land. Rather than havens for wildlife, these areas can be death traps.

# Cats Are Not a Natural Part of Ecosystems

The domestic cat, *Felis catus*, is a descendant of the European and African wild cats. Domesticated in Egypt more than 4,000 years ago, cats may be the most widespread predator in the world. In the U.S., cats were not abundant until the late 1800s when they were brought to help control burgeoning rodent populations associated with agriculture. Some people view cat predation of rodents as beneficial, but native small mammals are important to maintaining biologically diverse ecosystems. Field mice and shrews are also important prey for birds such as Great Horned Owl and Red-tailed Hawk.



Great Horned Owl

# **Cats Compete With Native Predators**

Owned cats have huge advantages over native predators. They receive protection from disease, predation, competition, and starvation—factors which control native predators such as owls, bobcats, and foxes. Cats with dependable food sources are not as vulnerable to changes in prey populations. Unlike many native predators, cats are not strictly territorial. As a result, cats can exist at much higher densities and may out-compete native predators for food. Unaltered cats are also prolific breeders. In warmer climates, a female cat can have 3 litters per year, with 4 to 6 kittens per litter.

# Cats Transmit Disease to Wildlife

Unvaccinated cats can transmit diseases, such as rabies, to other cats, native wildlife and humans. Cats are the domestic animal most frequently reported to be rabid to the Centers for Disease Control and Prevention. Cats are also suspected of spreading fatal feline diseases to native wild cats such as mountain lion, the endangered Florida panther, and bobcat. For more information, see the fact sheet, **The Great Outdoors Is No Place For Cats at** <u>www.abcbirds.org/cats</u>.

# **Cat Predation Studies**

Extensive studies of the feeding habits of free-roaming domestic cats have been conducted over the last 55 years in Europe,



North America, Australia, Africa, and on many islands. These studies show that the number and types of animals killed by cats varies greatly, depending on the individual

California Quail

cats, the time of year, and availability of prey. Roughly 60% to 70% of the wildlife cats kill are small mammals; 20% to 30% are birds; and up to 10 are amphibians, reptiles, and insects. However, birds can be up to 100% of a cat's prey on some islands.

Some free-roaming domestic cats kill more than 100 animals each year. One well-fed cat that roamed a wildlife experiment station was recorded to have killed more than 1,600 animals (mostly small mammals) over 18 months. Rural cats take more prey than suburban or urban cats. Birds that nest or feed on the ground, such as California Quail, are the most susceptible to cat predation, as are nestlings and fledglings of many other bird species.

# The following are summaries of specific studies:

East Bay Regional Park District, CA: A two-year study was conducted in two parks with grassland habitat. One park had no cats, but more than 25 cats were being fed daily in the other park. There were almost twice as many birds seen in the park with no cats as in the park with cats. California Thrasher and California Quail, both ground-nesting birds, were seen during surveys in the no-cat area, whereas they were *never* seen in the cat area. In addition, more than 85% of the native deer mice and harvest mice trapped were in the no-cat area, whereas 79% of the house mice, an exotic pest species, were trapped in the cat area. The researchers concluded, "Cats at artificially high densities, sustained by supplemental feeding, reduce abundance of native rodent and bird populations, change the rodent species composition, and may facilitate the expansion of the house mouse into new areas." (Hawkins, C.C., W.E. Grant, and M.T. Longnecker. 1999. Effect of subsidized house cats on California birds and rodents. Transactions of the Western Section of The Wildlife Society 35:29-33).

**San Diego, CA**: In a study of the relationships between coyote, mid-sized predators such as cats, and scrub-dwelling birds, cat owners living along the rims of canyons collected the prey their cats brought home. These canyons are isolated pockets of habitat with species that may not occur elsewhere. On average, each outdoor cat that hunted returned 24 rodents, 15 birds, and 17 lizards to the residence per year. Birds were 26.7% of the prey killed by

cats. The researchers estimated that cats surrounding mid-sized canyons return 840 rodents, 525 birds, and 595 lizards to residences each year. This level of predation appears to be unsustainable. The study



Cat catching Yellow-rumped Warbler

also found that in small canyons where the coyote was absent, there was an increase in mid-sized predators such as cats, and a drastic decline in diversity or elimination of scrub-breeding birds. But in the larger canyons where coyotes were still present, the scrub-breeding birds were also present. (Crooks, K.R. and M.E. Soule. 1999. Mesopredator release and avifaunal extinctions in a fragmented system. *Nature* 400:563-566).

**England**: The Mammal Society conducted a survey of animals brought home by domestic cats. During a five-month period in 1997, 964 cats killed more than 14,000 animals. The mean number of catches or kills per cat was 16.7, and birds were 24% of the prey. The mean kill rates for belled cats was 19 and for no-bells 15. In other words, cats wearing bells killed more. Only 162 rats were killed by the cats, making them very poor ratters. The researchers concluded, "Although it is unlikely that cats alone will cause any species to become endangered in Britain, for those which are already under pressure for other reasons, such as thrushes, harvest mice, grass snakes, and slow worms, cats could become significant."(The Mammal Society. 1998. Look what the cat's brought in! www.abdn.ac.uk/mammal/catkills).

Wichita, KS: In a study of cat predation in an urban area, 83% of the 41 study cats killed birds. In all but one case, when feathers were found in scat, the owner was unaware that their cat had ingested a bird. In fact, the majority of cat owners reported their cats did not bring prey to them. Instead, the owners observed the cats with the bird or found remains in the house or in other locations. A declawed cat killed more animals than any other cat in the study. (Fiore, C. and K. B. Sullivan. Domestic cat (*Felis catus*) predation of birds in an urban environment. <u>www.geocities.com/the\_srco/Article.html</u>).

**Wisconsin:** Researchers at the University of Wisconsin coupled their four-year cat predation study with data from other studies, and estimated that *rural* free-roaming cats kill at least 7.8 million and perhaps as many as 217 million birds a year in Wisconsin. Suburban and urban cats add to that toll. In some parts of the state, free-roaming cat densities reach 114 cats per square mile, outnumbering all similar-sized native predators. (Coleman, J.S., S.A. Temple, and S.R. Craven. 1997. Cats and Wildlife: A

Conservation Dilemma. 6 pp. <u>www.wisc.edu/extension/</u> <u>catfly3.htm</u>). In an ongoing, but unpublished, study of cat prey items including stomach contents, scat analysis, observations of kills, and prey remains, birds were 19.6% of 1,976 prey captured by 78 outdoor cats (Temple, S.A, Univ. of WI, personal communication, 1/22/04).

**Virginia**: Researchers compared a free-roaming domestic pet cat in a rural area with 4 urban cats. The rural cat captured a total of 27 native species (8 bird, 2 amphibian, 9 reptile, and 8 mammal, including the star-nosed mole, a species of special state concern). The 4 urban cats captured 21 native species (6 bird, 7 reptile, and 8 mammal). Between January and November 1990 each cat caught, on average, 26 native individuals in the urban area, and 83 in the rural area. The study did not count prey killed and completely consumed, prey killed and left elsewhere, prey that escaped but died later from infection or injury, or non-native prey. (Mitchell, J. and R.A.Beck. 1992. Free-ranging domestic cat predation on native vertebrates in rural and urban Virginia. *Virginia Journal of Science* 43:197-206).

**Cats on Islands**: Because some island bird populations evolved in the absence of mammalian predators, they have no defense mechanisms against them. When cats are introduced or abandoned

on an island, elimination

populations can result.

Domestic cats are

considered primarily

responsible for the

extinction of 8 island

bird species, including

Stephens Island Wren,

bird

entire

of



Wedge-tailed Shearwater

Chatham Island Fernbird, and Auckland Island Merganser, and the eradication of 41 bird species from New Zealand islands alone. On Marion Island in the Sub-Antarctic Indian Ocean, cats were estimated to kill 450,000 seabirds annually prior to cat eradication efforts. (Veitch, C.R. 1985. Methods of eradicating feral cats from offshore islands in New Zealand. *ICBP Technical Publication* 3: 125-141).

**Cats in Habitat Islands:** Cats can have significant impacts on local wildlife populations, especially in habitat "islands" such as suburban and urban parks, wildlife refuges, and other areas surrounded by human development. The loss of bird species from habitat islands is well documented, and nest predation is an important cause of the decline of neotropical migrants. (Wilcove, D.S. 1985. Nest predation in forest tracts and the decline of migratory songbirds. *Ecology* 66: 1211-1214). The endangered Point Arena mountain beaver, Stephen's kangaroo rat, and Pacific pocket mouse now live on habitat islands created by destruction and fragmentation of their habitat in California. Predation by pet and

feral cats on these species is a serious threat to their future existence. (Thelander, C.G. and M. Crabtree. 1994. Life on the Edge. A Guide to California's Endangered Natural Resources: Wildlife. BioSystems Books, Santa Cruz, California).

# Cat Predation of Federally-Protected Wildlife

The Migratory Bird Treaty Act (MBTA) prohibits the hunting, taking, capturing, or killing of any migratory bird. In seeming violation of this landmark law, owners of free-roaming cats permit their pets to kill birds protected by the MBTA. As noted above, domestic cats are also killing birds and other wildlife protected under the Endangered Species Act (ESA).



Cat with Blackpoll Warbler

Through the ESA, the federal government protects and restores wildlife at risk of extinction. Although cats may not be responsible for the perilous status of endangered wildlife, the loss of even a single animal can be a setback to the survival of some species.

# The Truth About Cats and Birds:

**Well-fed Cats** <u>Do</u> **Kill Birds.** Well-fed cats kill birds and other wildlife because the hunting instinct is independent of the urge to eat. In one study, six cats were presented with a live small rat while eating their preferred food. All six cats stopped eating the food, killed the rat, and then resumed eating the food. (Adamec, R.E. 1976. The interaction of hunger and preying in the domestic cat (*Felis catus*): an adaptive hierarchy? *Behavioral Biology* 18: 263-272).

**Cats With Bells on Their Collars Do Kill Birds.** Studies have shown that bells on collars are not effective in preventing cats from killing birds or other wildlife. Birds do not necessarily associate the sound of a bell with danger, and cats with bells can learn to silently stalk their prey. Even if the bell on the collar rings, it may ring too late, and bells offer no protection for helpless nestlings and fledglings.

Most BirdsThat Seem to Escape Don't Survive Wildlife rehabilitation centers report that most small animals injured by cats die. Cats carry many types of bacteria and viruses in their mouths, some of which can be transmitted to their victims. Even if treatment is administered immediately, only about 20% of these patients survive the ordeal. A victim that looks perfectly healthy may die from internal hemorrhaging or injury to vital organs. A large percentage of patients at wildlife rehabilitation centers are cat attack victims and animals orphaned by cats. At Wildlife Rescue, Inc. in Palo Alto, California, approximately 25% of



their patients between May and June 1994 were native cat-caught birds, and almost half were fledglings. Thirty percent of birds, and 20% of mammals at the

Cat attacked Western Scrub-Jay

Lindsay Wildlife Museum in California were caught by cats. Cat predation of wildlife is especially frustrating to wildlife rehabilitators. These losses are totally unnecessary because unlike other predators, pet cats do not need to kill these animals to survive.

**Cat Colonies** <u>Are</u> a Problem for Birds and Other Wildlife: Domestic cats are solitary animals, but groups often form around an artificial feeding source, such as garbage dumps or food specifically put out for them. These populations can grow very quickly, can have significant impacts on wildlife populations, and can cause significant health risks to other cats, wildlife, and humans. Feeding these cats does not prevent the predation of birds and other wildlife.

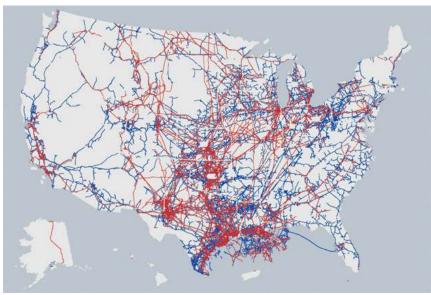
**Conclusion**: Cats are not ultimately responsible for killing our native wildlife—people are. <u>The only way to prevent domestic cat</u> predation on wildlife is for owners to keep their cats indoors!

For more information, contact: **AMERICAN BIRD CONSERVANCY** CATS INDOORS! THE CAMPAIGN FOR SAFER BIRDS AND CATS 1731 Connecticut Avenue, NW, 3rd Floor Washington, DC 20009 Phone: 202/234-7181; Fax: 202/234-7182; E-mail: abc@abcbirds.org; Web site: www.abcbirds.org

# EXHIBIT 7



# Pipelines Explained: How Safe are America's 2.5 Million Miles of Pipelines?



Map of major natural gas and oil pipelines in the United States. Hazardous liquid lines in red, gas transmission lines in blue. Source: Pipeline and Hazardous Materials Safety Administration.

### by Lena Groeger ProPublica, Nov. 15, 2012, 1:27 p.m

At 6:11 p.m. on September 6, 2010, San Bruno, Calif. 911 received an urgent call. A gas station had just exploded and a fire with flames reaching 300 feet was raging through the neighborhood. The explosion was so large that residents suspected an airplane crash. But the real culprit was found underground: a ruptured pipeline spewing natural gas caused a blast that left behind a 72 foot long crater, killed eight people, and injured more than fifty.

Over 2,000 miles away in Michigan, workers were still cleaning up another pipeline accident, which spilled 840,000 gallons of crude oil into the Kalamazoo River in 2010. Estimated to cost \$800 million, the accident is the most expensive pipeline spill in U.S. history.

Over the last few years a series of incidents have brought pipeline safety to national – and presidential – attention. As Obama begins his second term he will likely make a key decision on the controversial Keystone XL pipeline [1], a proposed pipeline extension to transport crude from Canada to the Gulf of Mexico.

The administration first delayed the permit for the pipeline on environmental grounds [2], but has left the door open to future proposals for Keystone's northern route. Construction on the southern route is already underway [3], sparking fierce opposition [4] from some landowners and environmentalists.

The problem, protesters say, is that any route will pose hazards to the public. While pipeline operator TransCanada has declared that Keystone will be the safest pipeline ever built [5] in North America, critics are skeptical.

"It's inevitable that as pipelines age, as they are exposed to the elements, eventually they are going to spill," said Tony Iallonardo of the National Wildlife Federation. [6] "They're ticking time bombs."

Critics of the Keystone proposal point to the hundreds of pipeline accidents that occur every year. They charge that system wide, antiquated pipes, minimal oversight and inadequate precautions put the public and the environment at increasing risk. Pipeline operators point to billions of dollars spent on new technologies and a gradual improvement over the last two decades as proof of their commitment to safety.

Pipelines are generally regarded as a safe way to transport fuel, a far better alternative to tanker trucks or freight trains. The risks inherent in transporting fuel through pipelines are analogous to the risks inherent in traveling by airplane. Airplanes are safer than cars, which kill

about 70 times as many people a year (highway accidents killed about 33,000 people in 2010 [7], while aviation accidents killed 472). But when an airplane crashes, it is much more deadly than any single car accident, demands much more attention, and initiates large investigations to determine precisely what went wrong.

The same holds true for pipelines. Based on fatality statistics from 2005 through 2009 [8], oil pipelines are roughly 70 times as safe as trucks, which killed four times as many people during those years, despite transporting only a tiny fraction of fuel shipments. But when a pipeline does fail, the consequences can be catastrophic (though typically less so than airplane accidents), with the very deadliest accidents garnering media attention and sometimes leading to a federal investigation.

While both air travel and pipelines are safer than their road alternatives, the analogy only extends so far. Airplanes are replaced routinely and older equipment is monitored regularly for airworthiness and replaced when it reaches its safety limits. Pipelines, on the other hand, can stay underground, carrying highly pressurized gas and oil for decades – even up to a century and beyond. And while airplanes have strict and uniform regulations and safety protocols put forth by the Federal Aviation Administration, such a uniform set of standards does not exist for pipelines.

Critics maintain that while they're relatively safe, pipelines should be safer. In many cases, critics argue, pipeline accidents could have been prevented with proper regulation from the government and increased safety measures by the industry. The 2.5 million miles of America's pipelines suffer hundreds of leaks and ruptures every year, costing lives and money. As existing lines grow older, critics warn that the risk of accidents on those lines will only increase.

While states with the most pipeline mileage – like Texas, California, and Louisiana – also have the most incidents, breaks occur throughout the far-flung network of pipelines. Winding under city streets and countryside, these lines stay invisible most of the time. Until they fail.

Since 1986, pipeline accidents have killed more than 500 people, injured over 4,000, and cost nearly seven billion dollars in property damages. Using government data, ProPublica has mapped thousands of these incidents in a new interactive news application [9], which provides detailed information about the cause and costs of reported incidents going back nearly three decades.

Pipelines break for many reasons – from the slow deterioration of corrosion to equipment or weld failures to construction workers hitting pipes [10] with their excavation equipment. Unforeseen natural disasters also lead to dozens of incidents a year. This year Hurricane Sandy wreaked havoc [11] on the natural gas pipelines on New Jersey's barrier islands. From Bay Head to Long Beach Island, falling trees, dislodged homes and flooding caused more than 1,600 pipeline leaks. All leaks have been brought under control [12] and no one was harmed, according to a New Jersey Natural Gas spokeswoman. But the company was forced to shut down service to the region, leaving 28,000 people without gas, and it may be months before they get it back.

One of the biggest problems contributing to leaks and ruptures is pretty simple: pipelines are getting older. More than half of the nation's pipelines are at least 50 years old [13]. Last year in Allentown Pa., a natural gas pipeline exploded underneath a city street, killing five people who lived in the houses above and igniting a fire that damaged 50 buildings. The pipeline – made of cast iron – had been installed in 1928.



Feb. 2011

A fire rages through Allentown, PA, after a gas line explosion in

Not all old pipelines are doomed to fail, but time is a big contributor to corrosion, a leading cause of pipeline failure. Corrosion has caused between 15 and 20 percent of all reported "significant incidents" [14], which is bureaucratic parlance for an incident that resulted in a death, injury or extensive property damage. That's over 1,400 incidents since 1986.

Corrosion is also cited as a chief concern of opponents of the Keystone XL extension. The new pipeline would transport a type of crude called diluted bitumen [15], or "dilbit." Keystone's critics make the case [16]that the chemical makeup of this heavier type of oil is much more corrosive than conventional oil, and over time could weaken the pipeline.

Operator TransCanada says that the Keystone XL pipeline will transport crude similar [15] to what's been piped into the U.S. for more than a decade, and that the new section of pipeline will be built and tested to meet all federal safety requirements. And in fact, none of the 14 spills that happened in the existing Keystone pipeline since 2010 were caused by corrosion, according to an investigation by the U.S. Department of State [17].

The specific effects of dilbit on pipelines – and whether the heavy crude would actually lead to more accidents – is not definitively understood by scientists. The National Academies of Science is currently in the middle of study on dilbit and pipeline corrosion [18], due out by next year. In the meantime, TransCanada has already begun construction of the southern portion of the line, but has no assurance it will get a permit from the Obama administration to build the northern section. (NPR has a detailed map of the existing and proposed routes [1].)

# Little Government Regulation for Thousands of Miles

While a slew of federal and state agencies oversee some aspect of America's pipelines, the bulk of government monitoring and enforcement falls to a small agency within the Department of Transportation called the Pipeline and Hazardous Materials Safety Administration – [19] pronounced "FIM-sa" by insiders. The agency only requires that seven percent of natural gas lines and 44 percent of all hazardous liquid lines be subject to their rigorous inspection criteria and inspected regularly. The rest of the regulated pipelines are still inspected, according to a PHMSA official, but less often.

The inconsistent rules and inspection regime come in part from a historical accident. In the 60's and 70's, two laws established a federal role in pipeline safety [20] and set national rules for new pipelines. For example, operators were required to conduct more stringent testing to see whether pipes could withstand high pressures, and had to meet new specifications for how deep underground pipelines must be installed.

But the then-new rules mostly didn't apply to pipelines already built – such as the pipeline that exploded in San Bruno. That pipeline, which burst open along a defective seam weld, would never have passed modern high-pressure requirements according to a federal investigation [21]. But because it was installed in 1956, it was never required to.

"No one wanted all the companies to dig up and retest their pipelines," explained Carl Weimer, executive director of the Pipeline Safety Trust [22], a public charity that promotes fuel transportation safety. So older pipes were essentially grandfathered into less testing, he said.



A burned out car and charred remains of a home in San Bruno,

C.A. after a pipeline explosion in Sept. 2010

Later reforms in the 1990's mandated more testing for oil pipelines, and today PHMSA requires operators to test pipelines in "high consequence" areas, which include population centers or areas near drinking water. But many old pipelines in rural areas aren't covered by the same strict regulations.

Some types of pipelines – such as the "gathering" lines that connect wells to process facilities or larger transmission lines – lack any PHMSA regulation at all. A GAO report [23] estimates that of the roughly 230,000 miles of gathering lines, only 24,000 are federally

regulated. Because many of these lines operate at lower pressures and generally go through remote areas, says the GAO, the government collects no data on ruptures or spills, and has no enforced standards for pipeline strength, welds, or underground depth on the vast majority of these pipes.

The problem, critics argue [24], is that today's gathering lines no longer match their old description. Driven in part by the rising demands of hydraulic fracturing, operators have built thousands of miles of new lines to transport gas from fracked wells. Despite the fact that these lines are often just as wide as transmission lines (some up to 2 feet in diameter) and can operate under the same high pressures, they receive little oversight.

Operators use a risk-based system to maintain their pipelines – instead of treating all pipelines equally, they focus safety efforts on the lines deemed most risky, and those that would cause the most harm if they failed. The problem is that each company use different criteria, so "it's a nightmare for regulators," Weimer said.

However, Andrew Black, the president of the Association of Oil Pipe Lines, a trade group whose members include pipeline operators, said that a one-size-fits-all approach would actually make pipelines less safe, because operators (not to mention pipelines) differ so widely.

"Different operators use different pipe components, using different construction techniques, carrying different materials over different terrains," he said. Allowing operators to develop their own strategies for each pipeline is critical to properly maintaining its safety, he contended.

# Limited Resources Leave Inspections to Industry

Critics say that PHMSA lacks the resources to adequately monitor [25] the millions of miles of pipelines over which it *does* have authority. The agency has funding for only 137 inspectors, and often employs even less than that (in 2010 the agency had 110 inspectors on staff). A Congressional Research Service report [26] found a "long-term pattern of understaffing" in the agency's pipeline safety program. According to the report, between 2001 and 2009 the agency reported a staffing shortfall of an average of 24 employees a year.

A New York Times investigation last year found that the agency is chronically short of inspectors because it just doesn't have enough money to hire more [27], possibly due to competition from the pipeline companies themselves, who often hire away PHMSA inspectors for their corporate safety programs, according to the CRS.

Given the limitations of government money and personnel, it is often the industry that inspects its own pipelines. Although federal and state inspectors review paperwork and conduct audits, most on-site pipeline inspections are done by inspectors on the company's dime.

The industry's relationship with PHMSA may go further than inspections, critics say. The agency has adopted, at least in part, dozens of safety standards written by the oil and natural gas industry. [28]

"This isn't like the fox guarding the hen house," said Weimer. "It's like the fox designing the hen house."

Operators point out that defining their own standards allows the inspection system to tap into real-world expertise. Adopted standards go through a rulemaking process that gives stakeholders and the public a chance to comment and suggest changes, according to the agency.

Questions have also been raised about the ties between agency officials and the companies they regulate [29]. Before joining the agency in 2009, PHMSA administrator Cynthia Quarterman worked as a legal counsel for Enbridge Energy, the operator involved in the Kalamazoo River accident. But under her leadership, the agency has also brought a record number of enforcement cases against operators [30], and imposed the highest civil penalty in the agency's history [31] on the company she once represented.

# **Proposed Solutions Spark Debate**

How to adequately maintain the diversity of pipelines has proved to be a divisive issue – critics arguing for more automatic tests and safety measures and companies pointing to the high cost of such additions.

One such measure is the widespread installation of automatic or remote-controlled shutoff valves, which can quickly stop the flow of gas or oil in an emergency. These valves could help avoid a situation like that after the Kalamazoo River spill, which took operators 17 hours from the initial rupture to find and manually shut off. Operators use these valves already on most new pipelines, but argue that replacing all valves would not be cost-effective and false alarms would unnecessarily shut down fuel supplies. The CRS estimates that even if automatic valves were only required on pipelines in highly populated areas, replacing manual valves with automatic ones could cost the industry hundreds of millions of dollars.



of almost a million gallons from a ruptured pipeline in July 2010

Other measures focus on preventing leaks and ruptures in the first place. The industry already uses robotic devices called "smart pigs" [32]

to crawl through a pipeline, clearing debris and taking measurements to detect any problems [33]. But not all pipelines can accommodate smart pigs, and operators don't routinely run the devices through every line.

Just last month, a smart pig detected a "small anomaly" in the existing Keystone pipeline, prompting TransCanada to shut down the entire line. Environmentalists pointed out that this is not the first time TransCanada has called for a shut down, and won't be the last.

"The reason TransCanada needs to keep shutting down Keystone," the director of the National Wildlife Federation contended in a statement [34], "is because pipelines are inherently dangerous."

Last January, Obama signed a bill [35] that commissioned several new studies [36] to evaluate some of these proposed safety measures, although his decision on extending the Keystone pipeline may come long before those studies are completed.

Image credits: The Associated Press, Thomas Hawk [37], Kevin Martini [38]

Like this story? Sign up for our daily newsletter [39] to get more of our best work.

- 1. http://stateimpact.npr.org/texas/tag/keystone-xl-pipeline/
- $2. \ http://www.whitehouse.gov/the-press-office/2011/11/10/statement-president-state-departments-keystone-xl-pipeline-announcement$
- 3. http://articles.latimes.com/2012/aug/16/nation/la-na-nn-keystone-xl-pipeline-20120816
- 4. http://www.nytimes.com/2012/10/13/us/protesters-gather-at-keystone-xl-site-in-texas.html
- 5. http://www.transcanada.com/6059.html
- 6. http://www.nwf.org/
- 7. http://www.ntsb.gov/data/index.html
- 8. http://www.manhattan-institute.org/html/ir\_17.htm
- 9. http://projects.propublica.org/pipelines/
- 10. http://www.call811.com/
- $11. \ http://www.philly.com/philly/news/new_jersey/20121104\_Million-plus\_in\_N\_J\_still\_lack\_power.html$
- 12. http://www.njng.com/safety/hurricane-sandy-updates/index.asp
- 13. http://opsweb.phmsa.dot.gov/pipelineforum/docs/Secretarys Infrastructure Report\_Revised per PHC\_103111.pdf
- 14. http://primis.phmsa.dot.gov/comm/reports/safety/sigpsi.html
- $15. \ http://insideclimatenews.org/news/20120626/dilbit-primer-diluted-bitumen-conventional-oil-tar-sands-Alberta-Kalamazoo-Keystone-XL-Enbridge-State-Sta$
- 16. http://www.nrdc.org/energy/tarsandssafetyrisks.asp
- 17. http://keystonepipeline-xl.state.gov/documents/organization/181185.pdf
- 18. http://www8.nationalacademies.org/cp/projectview.aspx?key=49461
- 19. http://www.phmsa.dot.gov/
- 20. http://phmsa.dot.gov/pipeline/state-programs
- 21. http://www.ntsb.gov/doclib/reports/2011/PAR1101.pdf
- 22. http://www.pstrust.org/
- 23. http://www.gao.gov/products/GAO-12-388
- 24. http://switchboard.nrdc.org/blogs/amall/many\_hazards\_from\_natural\_gas.html
- $25. \ http://www.philly.com/philly/news/special_packages/inquirer/marcellus-shale/20111210\_Federal\_pipeline\_oversight\_agency\_was\_troubled\_from\_the\_start.html$

- 26. http://www.fas.org/sgp/crs/homesec/R41536.pdf
- 27. http://www.nytimes.com/2011/09/10/business/energy-environment/agency-struggles-to-safeguard-pipeline-system.html?ref=danfrosch
- 28. http://washingtonindependent.com/94743/oil-and-gas-industry-writes-its-own-pipeline-standards
- $29.\ http://www.nytimes.com/gwire/2010/09/17/17greenwire-critics-fault-oil-and-gas-pipeline-regulators-i-9153.html$
- 30. http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Press Releases/Record Enforcement Orders Closed\_02-08-12.pdf
- 31. http://www.freep.com/article/20120911/NEWS05/309110050/Enbridge-pays-3-7M-penalty-in-10-oil-spill
- $32. \ http://www.buckeye.com/pipelineawareness/keepingyousafepipelinesecurity/smartpigs/tabid/106/default.aspx$
- 33. http://www.npr.org/templates/story/story.php?storyId=5627707
- $34.\ http://blog.nwf.org/2012/10/original-keystone-pipeline-shuts-down-safety-a-concern/$
- 35. http://www.propublica.org/article/congress-moves-toward-tougher-stand-on-pipeline-safety-but-is-it-enough
- 36. http://www.gpo.gov/fdsys/pkg/BILLS-112hconres93enr/pdf/BILLS-112hconres93enr.pdf
- 37. http://www.flickr.com/photos/thomashawk/5006359844/in/set-72157624991763214/
- 38. http://www.flickr.com/photos/k6martini/4942160951/
- $39. \ http://www.propublica.org/forms/newsletter_daily_email?utm_campaign=subscribe&utm_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_medium=article&utm_term=footer_source=propublica&utm_term=footer_so$

© Copyright 2013 Pro Publica Inc.

### Steal Our Stories

Unless otherwise noted, you can republish our stories for free if you follow these rules.



# EXHIBIT 8



# CITY OF PITTSBURG DEVELOPMENT SERVICES DEPARTMENT PLANNING DIVISION 65 CIVIC AVENUE PITTSBURG, CA 94565

# **PROJECT PIPELINE LIST**

# SINGLE-FAMILY RESIDENTIAL

PROJECT	APPLICATION NO(S).	DEVELOPER	NO.	SITE	LOCATION	STATUS	MEETING(S)
				ACREAGE			
Alves Ranch	AP-08-516	Alves Ranch, LLC	167	40.42	North of West	Approved	01-20-09 (CC)
	(SUB, DR, MP)	(925) 831-1854	(SFD)		Leland Road at		02-10-09 (PC)
					Alves Ranch		
					Road		
Bancroft Gardens II	AP-03-78	Discovery Builders	28	5.79	Western	Subdivision	10-26-04 (PC)
	(SUB 8805, DR);	(925) 682-6419			terminus	Approved; DR	
	AP-11-730 (DR)				Birchwood Drive	application	
						pending	
Lawlor Estates	GP-02-03, RZ-02-14;	Discovery Builders	50	10.8	West Leland	49 of 50 units -	_
	SUB 8112;	(925) 682-6419			Road, east of	Built	07-07-03 (CC);
	AP-05-268 (DR);				Bailey Road		02-14-06 (PC);
	AP-06-391 (DA)						12-12-06 (PC);
							01-29-07 (CC)

City of Pittsburg Project Pipeline List Updated December 2012

PROJECT	APPLICATION NO(S).	DEVELOPER	NO. UNITS	SITE ACREAGE	LOCATION	STATUS	MEETING(S)
Mariner Walk	AP-04-126 (GP, PD/RZ, SUB 8869, DR)	Mariner Pittsburg Holdings, LLC (925) 753-4007	123	15	West of Herb White Way	Under Construction	08-23-05 (PC); 10-03-05 (CC); 10-11-05 (PC)
Montreux	AP-10-684 (RZ, SUB 8279, Annexation)	Louis Parsons, Altec Homes/ Seecon Financial (925) 671-7711	368	148.3	West of Kirker Pass, just south of city limits	Pending	
San Marco Development	SUB 7362; DR-00-26; VA-00-01; DR-01-10; DR-02-23; DR-02-24; AP-05-199 (DR); AP-06-336 (DR); AP-06-346 (RZ, SUB); AP-11-779 (RZ, SUB,DR)	Discovery Builders (925) 682-6419	1,412	421	South of Hwy 4 at Willow Pass Road	Under Construction	01-19-93 (PC); 11-28-00 (PC); 02-13-01 (PC); 08-28-01 (PC); 09-10-02 (PC); 03-25-05 (ZA); 07-11-06 (PC); 08-21-06 (CC) 12-07-06 (ZA) 10-15-12 (PC) 12-11-12 (PC)
Sky Ranch	RZ-02-21, SUB 8475, DR-02-48	Discovery Builders (925) 682-6419	415	163	Buchanan Road, west of Somersville Road	Approved	05-08-07 (PC); 06-04-07 (CC) 05-14-08 (LAFCO)
Sunnyside Estates	AP-11-810 (GP, RZ, SUBD)	Jackie Seeno 925-682-6419	33	4.4	Carion Court	Pending	
Tuscany Meadows	AP-12-843 (SUBD)	Discovery Builders (925) 682-6419	917	135.6	Buchanan Road at Somersville	Pending	
Vista del Mar	AP-03-33 (GP, RZ, SUB, DR); AP-06-379 (SR) AP-12-857 (AD)	William Lyon Homes (925) 543-5500	518	104	South of West Leland Road at Alves Ranch Road	Under Construction	11-23-04 (PC); 12-06-04 (CC); 06-28-05 (PC) 08-30-12 (ZA)

PROJECT	<b>APPLICATION NO(S).</b>	DEVELOPER	NO.	SITE	LOCATION	STATUS	MEETING(S)
			UNITS	ACREAGE			
Almenara Condominiums	AP-10-670 (DR, SUB)	Meridian Modular	20	.75	NE corner of	Built	04-13-10 (PC)
		Homes (858) 490-3624			Beacon and W. 10 <sup>th</sup> Streets		
Almenara – Phase II	AP-11-777 (DB)	Domus	44	1.9	SW corner of	Pending	
		Development			W 10 <sup>th</sup> &	0	
		(415) 856-0010			Beacon		
Alves Ranch	AP-08-516	Alves Ranch, LLC	364 to	40.42	North of West	Approved	01-20-09 (CC)
	(SUB, DR, MP)	(925) 682-9862	393		Leland Road at	(DR approval	02-10-09 (PC)
					Alves Ranch	for 98 units	
					Road	only)	
Los Medanos Apartments	AP-11-742 (DR)	Domus	30	.49	SE Corner of	Approved	06-28-11 (PC);
		Development			Los Medanos &		08-15-11 (CC)
		(415) 856-0010			E. 9 <sup>th</sup> Street		
Oak Hills Apartments –	AP-08-567 (AD)	Sierra Pacific	264	17.2	2201 Oak Hills	Approved	01-15-09 (ZA)
Clubhouse Remodel		(925) 427-3700			Circle		02-02-12 (ZA)
Peppertree Apartments –	AP-09-598 (AD)	Discovery	429	45	300 Peppertree	Approved	04-16-09 (ZA)
Clubhouse Remodel		Builders, Inc.			Way		05-29-12 (ZA)
				1 1 1		A	
san Marco Development	SUB /362;	SEECON	1,526	141	South of Hwy 4	Approved;	01-24-95 (PC);
	AP-U6-346 (HZ, SUB)	11//-1/9 (626)			at Willow Pass Boad	330 Units Built	0/-11-06 (PC); 08-21-06 (CC)
Stoneman Village Rooftop	AP-12-844 (AD)	Donovan	148	2.67	390 East	Built	05-29-12 (ZA)
Railing		Rittenbach, Allied			Leland Rd		~
)		Construction					
		Service					
Woodland Hills Apartments – Clubhouse Remodel	AP-09-599 (AD)	Discovery Builders (925) 682-6419	220	10.28	241 West Buchanan Rd.	Approved	04-16-09 (ZA) 05-31-12 (ZA)
Woods Manor Apartments	AP-08-530 (DR)	BRIDGE Housing	82	5.8	850 East	Under	07-08-08 (PC)
Remodel		Corp.			Leland Rd.	Construction	07-14-09 (PC)
_		(415) 989-1111					

## APARTMENTS/CONDOMINIUMS

City of Pittsburg Project Pipeline List Updated December 2012

Page 3 of 10

40
<u>(</u> )
$\mathbf{O}$
Ш
~
U
ſ
Δ
ш
S
Š
$\overline{\mathbf{m}}$
$\mathbf{X}$
2

PROJECT	APPLICATION NO(S). DEVELOPER	DEVELOPER	RES.	<b>NONRES</b>	SITE	LOCATION	STATUS	MEETING(S)
			UNITS	UNITS SQ. FT.	ACREAGE			
Siena Court Senior	AP-09-583 (DR)	Domus	111	10,300	1.98	Western side	Built	03-10-09 (PC)
Apartments		Development				of the 700		
		(415) 856-0010				block of		
						Railroad Ave		
Vidrio – Block B	AP-05-225 (DR)	Pittsburg RDA	75	11,558 sq. 2.41	2.41		Built	01-24-06 (PC)
				ft.		of 600 block		
						of Railroad		
						Avenue		

## COMMERCIAL

PROJECT	APPLICATION NO(S).	DEVELOPER/	BLDG.	SITE	LOCATION	STATUS	MEETING(S)
		APPLICANT	SQ. FT.	ACREAGE			
2110 Railroad Avenue	AP-12-888 (DR)	DCI	8,250	062	2110 Railroad	Pending	
Retail Shell Building		(916) 934-0106			Avenue		
3811 Railroad Building	AP-11-751 (AD)	Richard Mao	5,700	1.92	3811 Railroad	Under	04-13-11 (ZA)
Remodel		(510) 552-1687			Avenue	Construction	
All Star Ford	AP-12-882 (UP)	Brian Nokes	44,027	2	3800 Century Ct.	Approved	12-27-12 (PC)
Burger King Remodel	AP-12-894 (AD)	Anthony Sacca	3,405	.92	2162 Railroad Ave.	Pending	
		(707) 486-2771					
Burlington Coat Factory	AP-10-738 (DR)	Discovery Builders	6,360		4105 Century Blvd.	Built	02-08-11 (PC)
Addition		(925) 682-6419	(add'n)				
California Theater	AP-08-533 (DR)	City of Pittsburg,	16,000	.23	351 Railroad Ave.	Under	10-14-08 (PC)
Remodel		Attn: Dick Abono				Construction	
		(925) 252-4044					
Century Plaza Remodel	AP-06-353 (DR)	Sierra Pacific	439,830	50.0	Century Blvd at	Approved	09-26-06 (PC);
		(925) 427-3700			Somersville Road	(expires	09-22-09 (PC)
						9/26/14)	10-25-11 (PC)
Chili's Remodel	AP -12-816 (DR)	Robert	2,897	1.68	4330 Century Blvd	Built	02-07-12 (ZA)
		Montgomery,					
		Brinker International					
		(972) 770-7227					
Clear Channel Digital	AP-12-825 (SR)	Robert Hatton	n/a	2.79	Frontage Road at	Pending	
Sign		510-446-7216			Dover Way		

Page 4 of 10

PROJECT	APPLICATION NO(S).	DEVELOPER/ APPLICANT	BLDG. SQ. FT.	SITE ACREAGE	LOCATION	STATUS	MEETING(S)
Continental Tow	AP-12-818 (UP)	Chris Rockenbaugh (925 250-5465	n/a	1.43	2731 Pittsburg / Antioch Highway	Pending	
Contra Costa County Fire Prevention Bureau Office Building	AP-09-642 (DR) AP-11-744 (SR) AP-11-745 (SR)	(G III O ) )	6,227	1.91	2331 Loveridge Road	Built	12-08-09 (PC)
Delta Gateway Pad 12	AP-12-889 (DR)	Discovery Builders (925) 682-6419	10,623	1.04	Western Terminus of Delta Gateway Boulevard	Pending	
EJ Phair	AP-07-496 (DR)	John Phair (925) 595-1687	13,331	0.16	200 Cumberland Street	Built	05-13-08 (PC)
EJ Phair	AP-10-691 (UP)	John Phair (925) 595-1687	13,331	0.16	200 Cumberland Street	Approved	07-27-10 (PC)
El's Smog Shop	AP-12-881 (UP)	Aristotle Ramiro 925-252-0707	7,000	0.48	2172 Piedmont Way	Pending	01-08-13
Fermin's Autobody	AP-08-546	Fermin Ruiz	3,213	7,500 sq.ft.	437 W. 10 <sup>th</sup> Street	Under Construction	10-01-09 (ZA) 01-25-12 (ZA)
Ford Relocation Remodel	AP-12-883 (AD)	Brian Nokes	44,027	7	3800 Century Ct.	Under Construction	12-06-12 (ZA)
Granite Expo Outlet	AP-12-823 (VA)	Jacky Li 510-507-0999	50200	4.66	3033 Harbor Street	Approved	3/29/2012 (ZA)
Island Pacific Supermarket	AP-12-812 (UP, AD)	Island Pacific Enterprises	15,026	3.18	2100 North Park Blvd.	Under Construction	02-28-12 (UP, AD)
La Marina Laundromat	AP-09-659 (AD)	Mercedes Grandez (925) 938-8019	4,500	11,415	301 East 10 <sup>th</sup> St.	Built	04-29-10 (ZA)
Lumpy's Diner Rear Outdoor Patio Cover	AP-12-828 (AD)	City of Pittsburg, Attn: Kolette Simonton	535 (new structure)	<u>.08</u>	615 Railroad Ave.	Built	03-27-12 (PC)
Marina Commercial Center	AP-07-461 (VA, DR)	Palm Plaza Development (925) 392-6611	22,861	9.73	Northeast side of Marina Blvd	Built	09-25-07 (PC) 04-22-08 (PC)
Maya Cinemas	AP-12-832 (AD)	Doug Messner, Sierra Pacific Propeties	60,836	1.039	4085 Century Blvd.	Built	04-30-12 (PC)
McDonalds Remodel	AP-11-773 (DR)	Ware Malcomb Architects (925) 244-9620	3,907	.55	460 Atlantic Ave.	Built	07-26-11 (PC)
My Beauty Salon and Supply Company,	AP-12-837 (AD)	Bobby White (925) 522-1687	8,321	13,500	777 Railroad	Approved	9-7-2012 (ZA)
New Bethel Missionary Baptist Church	AP-08-543 (DR) AP-09-624 (UP, DR)	Frances Greene (925) 432-4566	20,600	2.41	360 Central Ave	Under Construction	10-14-08 (PC) 11-17-09 (PC)

Page 5 of 10

City of Pittsburg Project Pipeline List Updated December 2012

PROJECT	APPLICATION NO(S).	DEVELOPER/ APPLICANT	BLDG. SQ. FT.	SITE ACREAGE	LOCATION	STATUS	MEETING(S)
New Mecca Restaurant Expansion	AP-08-582 (DR, OD, SE)	Redevelopment Agency of the City of Pittsburg; Guillermo & Teresa Muniz	7225	0.23	306 & 324 Railroad Ave.	Built	02-10-09 (PC)
MoMo Restaurant	AP-812-817 (UP,OD)	Philip Yang (510) 334-2577	3,360	47	610 Railroad Ave.	Under Construction	03-27-12 (PC)
North Park Commercial Center Expansion	AP-12-890 (UP, DR, VA); AP-12-891 (UP, DR, VA); AP-12-892 (UP, DR); AP-12-893 (DR, VA)	Discovery Builders (925) 682-6419	63,151	10.5	North Park Boulevard	Pending	
PBA Chapel Project	AP-12-867 (AD)	Elden Limmeo (925) 439-3660	28,517	1.46	310 Central Ave	Pending	
Pittsburg Library Café (1,280 square foot addition)	AP-10-707 (ADR)	City of Pittsburg 925-252-4015	7,000	1.75	80 Power Avenue	Under Construction	08-10-10 (PC)
Pittsburg Library Addition (2,050 square foot addition)	AP-11-746 (ADR)	City of Pittsburg 925-252-4105	7,000	1.75	80 Power Avenue	Under Construction	05-09-11 (ZA)
Red Lobster Remodel	AP-12-813 (ADR)	GHA Architecture and Development 972-239-8884	8,493	0.395	4095 Century Boulevard	Built	01-31-12 (ZA)
San Marco Gas Station & Convenience Store	AP-09-588 (RZ, UP, DR)	Discovery Builders (925) 682-6419	6,000	1.44	Northwest corner, San Marco Blvd. & West Leland Road	Approved	07-19-10 (CC) 07-27-10 (PC)
St. Claire Cigars	AP-12-878	Aaron Turner 707-290-2121	880	0.18	64 E. 4 <sup>th</sup> Street	Pending	
Synergy Charter School	AP-12-848 (UP)	Margie DiGiorgio	6,800	.38	355 East Leland Rd.	Built	07-10-12 (PC)
The Post	AP-12-885 (UP)	Eric Huber 925-852-9740	4,550	0.33	501 Railroad Avenue	Pending	
Tow Workx	AP-12-851 (ZA)	Robert Porter	4,600	7.38	100A Bliss Ave.	Approved	08-14-12 (ZA)
Trench Plate Above Ground Fuel Storage Tank	AP-12-814 (UP)	Caspar Busalacchi 415-990-116	2,400	3.25	530 Garcia Avenue	Built	02-28-12 (PC)
Wilson's Dance Studio	AP-12-886	Hannah Wilson 925-207-6097	2,574	0.143	1187 Railroad Lane	Pending	1-08-13

City of Pittsburg Project Pipeline List Updated December 2012

Page 6 of 10

			<b>INDUS I RIAL</b>	AL				
PROJECT	APPLICATION NO(S).	DEVELOPER	BLDG. SQ. FT.	SITE ACREAGE	LOCATION	STATUS	PC MEETING	
All Bay Vehicle Donations	AP-09-615 (UP)	Robert Knox (925) 427-4483	006	1.56	1225 Loveridge Road	Approved; Appeal Pending	11-09-10 (PC)	
Avila Road RV Storage Yard and Caretaker's Quarters	AP-12-863 (UP) and AP-12-880 (AD)	Legacy Framers 925-427-1011	1,198	12.5	101 Avila Road	Approved	12-11-12 (UP, AD)	1
Columbia Solar Energy	AP-12-879 (DR, RZ, DA)					Pending		-
DDSD Solar Carport Canopies	AP-11-776 (AD)	DDSD - Irene O'Sullivan (925) 756-1917	23,735	69 <sup>.</sup>	2500 Pittsburg- Antioch Hwy	Approved	08-19-11 (ZA)	
DDSD Fueling Station Replacement	AP-12-859 (UP)	Patricia Chapman	n/a	14.69	2500 Loveridge Road	Approved	9-13-12 (PC)	1
Dow Alpha MRU and T-3	AP-12-831 (AD)	Phil McAllister, DOW Chemical Company		248.27	900 Loveridge Road	Approved	04-09-12 (ZA)	
Family Medical Transport	AP-12-871 (UP)	Amelia Younis	13,680	1.15	2250 Freed Ave	Approved	11-13-12 (PC)	
Gelateria Naia	AP-12-872 (UP)	Trevor Morris	5,500		671 Willow Pass Road #7	Approved	11-13-12 (PC)	-
Irish Construction	AP-11-769 (UP, DR)	Irish Construction (626) 288-8530	7,770	2.45	2141/2151 Piedmont Way	Built	07-26-11 (PC	
K 2 Pure	AP-08-573 (UP, DR)	Tim Morris (715) 421-2814	40,000+	15	950 Loveridge Road	Under Construction	10-19-09 (PC)	1
K2 Pure Fuel Cells	AP-11-792 (AD)	Peter Ellefson			950 Loveridge Road	Built	11-17-11 (ZA)	1
K 2 Pure, Phase III – HCI Skid Project	AP-11-793 (DR)	Tim Morris (715) 421-2814			950 Loveridge Road	Built	01-24-12 (PC)	-
LA-SRDC, LLC/ Scrap Metal Loading Project	AP-12-815 (UP, DR)	JinHo (David) Huh (773) 329-0598	320	÷	900 Loveridge Road	Approved	02-28-12 (PC)	
Lara's Concrete	AP-07-430 (UP)	Luis Lara (925) 458-6304	4,800	5	104 Avilla Road	Pending		
Marine Express Site Improvements	AP-12-864 (DR)	Randy Esch	168	2.86	695 East 3 <sup>rd</sup> Street	Pending		
MDR, Inc. Contractor Yard	AP-12-846 (UP, DR)				2139 Harbor St.	Pending		<u> </u>
Mount Diablo Recycling Center – Expansion of Use Permit	AP-09-654 (UP)	Dave Adler 925-682-7492	82,611	11.05	1300 Loveridge Road	Approved	01-12-10 (PC)	

INDUSTRIAL

City of Pittsburg Project Pipeline List Updated December 2012

Page 7 of 10

PROJECT	APPLICATION NO(S).	DEVELOPER	BLDG. SQ. FT.	SITE ACREAGE	LOCATION	STATUS	PC MEETING
Mount Diablo Resource Recovery Park – Modification of Transfer Station/Recycling Center Permits	AP-10-712 (UP)	Dave Adler 925-682-7492	82,611	17.5	1300 Loveridge Road	Pending	
PraxAir Temporary Modular Office Trailer	AP-12-869	Lee Sahagan, PraxAir	1,200	31.5	2000 Loveridge Rd.	Approved	09-27-12 (ZA)
Ramar Foods Solar Panels	AP-10-681 (DR)	Primo Quesada (925) 439-9009	31,230	2.27	355 Central Ave	Approved	05-08-10 (PC)
Ramar Foods Fuel Cell Installation	AP-12-839 (AD)	Primo Quesada (925) 439-9009	31,230	2.27	355 Central Ave	Approved	06-18-12 (ZA)
Rege Yard	AP-11-775 (UP)	David Rege (510) 599-9076	Portion of 217,800	5	111 Avila Road	Pending	
Trans Bay Cable	AP-04-157 (DA); AP-07-500 (DR)	Trans Bay Cable, LLC (415) 618-3301	25,150	5.6	570-610 West Tenth Street	Built	10-24-06 (PC); 11-06-06 (CC); 11-27-06 (CC); 01-29-07 (CC)
United Spiral Pipe Manufacturing Plant	AP-07-445 (UP, VA, DR, MS-676-07)	United Spiral Pipe, LLC (925) 439-6442	352,000	44.8	900 East Third Street	Built	09-25-07 (PC); 10-23-07 (PC)
Walmart Limited Remodel	AP-11-8907 (AD, SR)	Shade Lawrence O'Quinn (214) 749-0626	125,999	12.475	2203 Loveridge Road	Built	02-10-12 (ZA)
WesPac Energy – Pittsburg Terminal	AP-11-761 (UP, DR)	Art Deifenbach, WesPac Energy (949) 478-3158		164	696 West 10 <sup>th</sup> Street	Pending	

# LONG RANGE PLANNING PROJECTS

PROJECT	APPLICATION NO(S).   SITE	SITE	LOCATION	STATUS	MEETING(S)
		ACREAGE			
Hillside Development	n/a	TBD		On Hold (indefinitely)	
Standards & Design					
Guidelines					

	7-26-11 (PC) 8-15-11 (CC) 10-17-11 (CC)	5-12-09 (PC); 6-1-09 (CC); Amendments Adopted 7-6-10 (CC)	07-06-09 (CC); 08-11-09 (PC); 09-21-09 (CC); 10-19-09 (CC); 11-02-09 (CC)	
Pending; Environmental review (Draft EIR) underway	Approved	Approved; and certified by the State Department of Housing and Community Development.	Approved	Pending; Environmental review underway
South of the existing city limits and east of Kirker Pass Road.	Vacant land and parking lots surrounding the existing BART Station	City-wide`	Area within ½-mile of future eBART Station at State Route 4 and Railroad Avenue	Southwest Hills
TBD	Approx. 55 acres	City-wide	1,076	606
n/a	n/a	<u>Click Here for More</u> Information	<u>Click Here for More</u> Information	AP-10-717 (Annexation, RZ) <u>Applicant</u> : Faria Land Investors, LLC. (925) 682-6419
James Donlon Blvd. Extension (Buchanan Bypass) & Southeast Hills Annexation, including General Plan Amendment and Rezoning	Pittsburg Bay Point BART Master Plan	Pittsburg Housing Element	Railroad Avenue Specific Plan (eBART)	Southwest Hills/Faria Annexation

List of Abbreviations of Permits:

### AD (AD) Administrative Design Review (Approval or Denial by Planning Staff) (Approval or Denial by Planning Staff) DR (DR) Design/Architectural Review (Approval or Denial by Planning Commission) DA Development Agreement GP General Plan Amendment MP Minor Subdivision MP Minor Subdivision PR Zoning Amendment SR Sign Review SUB Major Subdivision UP Conditional Use Permit VA Variance

### Other Abbreviations:





Board of Directors Scott Hein President

Amara Morrison *Secretary* 

Burt Bassler *Treasurer* 

Heath Bartosh Joe Canciamilla Ken Dami John Gallagher Claudia Hein Scott Hein Gary Johnson Doug Knauer Brian Kruse Sue Ohanian Marty Reed Malcolm Sproul *Directors* 

**Staff Directors** 

Ronald Brown Executive Director

Seth Adams Land Program Director

Julie Seelen Advancement Director

Monica E. Oei *Finance Director* 

Founders Arthur Bonwell Mary L. Bowerman

Proud Member of

Land Trust Alliance California Council of Land Trusts Bay Area Open Space Council January 9, 2013

Kristin Pollot Associate Planner City of Pittsburg, Planning Department 65 Civic Av. Pittsburg, CA 94565

### **RE:** Comments on the Montreux Residential Subdivision Draft Environmental Impact Report State Clearinghouse #2013032079

Dear Ms. Pollot,

Thank you for the opportunity to comment on the draft Environmental Impact Report (dEIR) for the Montreux Residential Subdivision (Project) as proposed by Altec Homes, Inc. and Seecon Financial, Inc. (Applicants). We appreciate the chance to provide input on this Project. Save Mount Diablo and several other organizations own protected open space in the vicinity of the Project. As an organization dedicated to the preservation, defense, restoration, and enjoyment of open space, we are very interested in the effects this Project will have on surrounding areas. Our core concerns of open space scenic value, recreational opportunity, and wildlife habitat, are all relevant to the Project. We have strong concerns about the Project's inconsistency with Pittsburg's General Plan policies and the Project's effect on the aesthetic quality of the southern hills, as well as inadequacies in the dEIR.

### Summary of Main Concerns

One of our main concerns is that the project is fundamentally inconsistent with policy guidance provided in the General Plan<sup>1</sup>, especially with regard to development on hillsides and viewshed aesthetics. No fewer than 16 specific policies contained in the General Plan would be violated if the Project is carried out in its current form.

The project would significantly degrade the aesthetic quality of the hills to the south of Pittsburg that form a scenic backdrop of open space for the entire city. The "leap-frog" development proposed by the Applicants would require mass grading of most of the site and substantial reconfiguration of the northern ridgeline, which



<sup>&</sup>lt;sup>1</sup> <u>http://www.ci.pittsburg.ca.us/index.aspx?page=228</u>

is visible from SR-4 and many parts of Pittsburg. While the northern ridgeline will not be entirely removed, visual simulation figures 5.1-4 through 5.1-7 in the dEIR clearly show that instead of clustering development so that it fits with the natural landscape, the knolls and hills in the lower portions of the site, and a large part of the northern ridgeline and a portion of the southern ridgeline, will be graded. Additional visual simulations taken from north of the Project should be included in the dEIR. In addition, the Project does not follow a number of General Plan policies meant to safeguard the visual character of Pittsburg's southern hills.

The cumulative impacts of the Project and other projects currently being constructed or proposed by the Applicants and affiliated-companies in the vicinity of the Project have not been adequately analyzed. Impacts of the Major Projects listed in dEIR section 5.0 have only been cursorily analyzed. Another project that is being proposed by a company linked to the Applicants (Discovery Builders), the Pointe project in Antioch, was not even included in the list of Major Projects and if approved, will be located at the eastern end of the proposed James Donlon Boulevard Extension. The EIR should include the Pointe as a Major Project and the cumulative impacts analysis should be revised to include the impacts of the Pointe.

The public services that the dEIR describes as servicing the Project seem to be overwhelmed by existing development, as the dEIR itself recognizes. Fire and police response times both currently do not meet established guidelines, and the schools identified as the ones that will service the Project already operate at over-capacity. The Project should not be considered until it is proved that public services can adequately service the residential areas that currently exist and can also service additional developments like the Project.

### **Project Location and Description**

The approximately 165 acre project site, which includes a 148.3 acre main project site and a 16.8 acre off-site parcel, lies south of Pittsburg on the west side of Kirker Pass Rd. and approximately one mile south of Buchanan Rd. The off-site parcel lies just to the north on the west side of the main project site. The main project site is currently undeveloped grazing land and consists of a broad Y-shaped valley framed by hills and ridges to the north, south, and west (see Figure 1). The northern ridge lies in the Railroad Av./SR-4 viewshed while the southern ridge contains designated Major and Minor Ridgelines and is part of the Kirker Pass Rd. viewshed (see Figure 4-1). The main project site is located outside the City Limits but the off-site parcel is within City Limits. Residential units border the project site to the north, while open space surrounds the project in all other directions. To the west is the protected Keller Canyon open space area, to the south are East Bay Regional Park District protected areas covering the Concord Naval Weapons Station to Black Diamond Mines Regional Park corridor and the Thomas Home Ranch property protected and owned by Save Mount Diablo (across Kirker Pass Rd.), and to the east across Kirker Pass Rd. is unprotected open space (see Figure 2).





Figure 1. Photo of Montreux main project site looking west toward Kirker Pass Rd. Note the small hills and other terrain features of the valley and the rock outcroppings of the ridgeline on the right. Such natural elements would be destroyed under the current Montreux site plan. Photo courtesy of Scott Hein.



Figure 2. Map showing the location of the Montreux residential subdivision relative to open space in the area. The Montreux main project site and off-site parcel are colored pink (note that most of the area shaded pink consists of the main project site and off-site parcel, but not all of it. The pink shading denotes the property owned by Seeno companies). Protected open space is colored green, light-green, and green hash marks. East Bay Regional Parks and Save Mount Diablo own the protected open space immediately south of Montreux (the box outlined in red). Black Diamond Mines Regional Park is visible in the lower-right corner of the figure. The Thomas Ranch, which is unprotected open space, is colored yellow and red. The red color is the location of the proposed James Donlon Boulevard Extension passing through the ranch.



The Project calls for: the construction of 356 single family homes with average lot sizes of 7,668 sq. ft., construction of three stormwater retention basins (one of which would be constructed on the off-site parcel), placement of a partially buried water tank at the top of the hill at the northern boundary of the main project site, rezoning of the main project site from its current pre-zoning designation of Hillside Planned Development (HPD) to Single-Family Residential 6,000 sq. ft. minimum lots sizes (RS-6) pre-zoning (to allow for a greater density of homes), and annexation of the main project site into the City of Pittsburg, Contra Costa Water District (CCWD) Service Area, and the Delta Diablo Sanitation District (DDSD) Service Area.

Most of the existing topography would be graded and re-contoured, except for most of the southern portion of the main project site which might remain in its natural state—if it's not affected by grading, and if the applicant doesn't attempt to develop it later as he has tried in other locations—such as the offsite area on the existing project just to the north. Approximately 77 acres of the main project site would be devoted to residential uses and 71 acres would be set aside for open space, including approximately 42 acres of undeveloped land along the southern portion of the main project site to provide a required "greenwall." The valley and northern ridgeline would be substantially reconfigured for residential construction and placement of a water tank, respectively. Grading would include cuts to the hillslopes of approximately 75 ft. in some locations and fills of 10-85 ft. of graded soil in the low portions of the site.

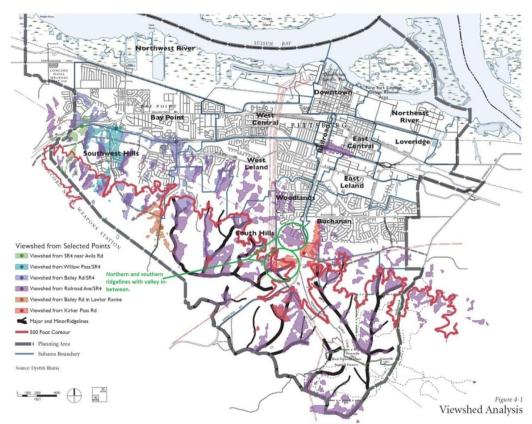


Figure 4-1. Viewshed analysis figure from Urban Design chapter of the Pittsburg General Plan. Modified to highlight the location of the ridgelines the Project would affect.



### Comments on Project's Inconsistency with the General Plan

The Project conflicts with 16 specific policies in the Pittsburg General Plan. These policies relate to the Land Use, Urban Design, and Resource Conservation chapters of the General Plan. Here we provide a list of these policies, and after each, a brief discussion of how the Project conflicts with the specific policy (bolding has been added to highlight particular text):

- 2-P-21: Revise the City's Hillside Preservation Ordinance to reflect General Plan policy direction. Revisions may include, but are not limited to:
  - Designating protected ridgelines, creeks, and other significant resource areas, along with daylight plane or setback standards;
  - Defining protected viewsheds;
  - Designating location and density of low-density hillside residential development based on slope stability and visual impact;
  - Provision of well-designed hillside projects that provide larger, familyoriented lots; and
  - Protection of significant ridgelines and **incorporation of hill forms into project design.**

The City of Pittsburg has not yet finalized the Hillside Preservation Ordinance, which was started several years ago and then apparently put on hold. It would be worthwhile to finalize the Ordinance before the Project is considered given that the Project consists of development on a hillside and massive grading of the northern ridgeline and its effects on viewsheds and significant ridgelines. In addition, hill forms have not been incorporated into Project design given the massive amount of grading called for on the northern ridgeline, in clear opposition to potential revisions called for in 2-P-21. By the same token, the Applicants are seeking to rezone the main project site for smaller lots to increase the number of houses they can construct, instead of providing larger, family-oriented lots as called for in the above policy 2-P-21.

• 2-P-23: **Restrict development on minor and major ridgelines** (as identified in Figure 4-2). Encourage residential construction on flatter natural slopes or non-sensitive graded areas that reduce environmental and visual impacts. **Minimize cut-and-fill of natural hillsides.** 

While the Project will not develop the Major and Minor ridgelines on the southern ridgeline on the south end of the main project site, construction of stormwater detention basins would require grading on the eastern end of the southern ridgeline to recontour the ridge. This is inconsistent with the intent of policy 2-P-23. In addition, the Project calls for cuts to hillslopes of approximately 75 ft. in some locations and fills of 10-85 ft. of graded soil in the low portions of the site. This massive cutting and filling clearly contradicts the minimization of such activities called for in this policy.



• 2-P-24: Prohibit new development on designated ridgelines. Ensure that residential developers cluster housing units to reduce both environmental and visual impact of hillside development.

The delay in developing the Hillside Ordinance means there are no designated ridgelines at this time, yet the Project would develop and substantially alter the northern ridgeline and recontour the east side of the southern ridgeline, which consists of Major and Minor ridgelines. However, there is no doubt that housing units will not be clustered under the Project (see Figure 3.0-6 below), it is a standard residential subdivision that will result in denser housing than originally intended under the current pre-zoning designation. Examining the density of housing planned under the Project and their uniform distribution in the lower valley and the southern-facing slopes of the northern ridgeline make it clear that the Project does not even attempt to cluster development.

• 2-P-27: Minimize single-access residential neighborhoods in the hills; maximize access for fire and emergency response personnel.

The Project is located outside the 1.5 mile response radius of existing or planned fire stations and would not meet the response time guideline of six minutes 90% of the time. According to Figure 3.0-6 (below) in the dEIR, the majority of residential units will use only one street to enter and exit the subdivision. One third of the subdivision would likely use a smaller street entrance/exit, but since this street would lack a traffic signal, it could be even less than that.

• 2-P-28: During development review, ensure that the design of new hillside neighborhoods minimizes potential land use incompatibilities with any grazing/agricultural activities in the southern hills.

Construction of the Project as is currently envisioned would terminate the current use of the property as grazing land. The number and density of houses would eliminate most ranching. In addition, the dEIR assumes that the James Donlon Extension (formerly the Buchanan Road Bypass) would be constructed and be able to service the Project. The James Donlon Extension would bisect the Wayne Thomas Ranch property, likely eliminating grazing activities and a livelihood for the Thomas family as well. So grazing activities would end on not just one, but two properties due to this Project and another associated with it.

- 2-P-73: Allow Low Density Residential development in selected areas along Kirker Pass Road and other valley floors as appropriate, under the following criteria:
  - Permanent greenbelt buffers be established to encompass: 1) the southerly 1/5 (approximately) of the Montreux property; and 2) the area south of the existing PG&E transmission corridor and south of the final alignment of the Buchanan Road Bypass, just east of Kirker Pass Road.

The City will consider, in conjunction with subdivision applications on these properties and related environmental analysis, general plan and/or the transfer of lost development rights as a result of the these greenbelts to other portions of



these properties, while not increasing the overall number of units permitted on these properties

- Natural topography be retained to the maximum extent feasible, and large-scale grading discouraged;
- **No development on minor and major ridgelines** (as identified in Figure 4-2), with residential construction on flatter natural slopes encouraged;
- Development designed and clustered so as to be minimally visible from Kirker Pass Road;
- Creeks and adjacent riparian habitat protected;
- $\circ$   $\,$  An assessment of biological resources completed; and
- $\circ$  Be limited to a maximum density of 3.0 du/ac.

The Project as it is currently proposed would require a massive amount of grading--1.4 million cubic yards—that would recontour both north and south ridgelines and place development on a substantial portion of the south facing slope of the northern ridgeline. A portion of the southern ridgeline, which contains Major and Minor Ridgelines, would be graded and recontoured to accommodate stormwater detention basins. As the visual simulations in Chapter 5 of the dEIR make clear, the Project would be extremely visible from Kirker Pass Road and require the flattening of a large part of the northern ridge. The Applicants characterize their Project as being "clustered" in Section 4.0 *Plans and Policies* because they say they largely limit their development to the valley floor of the main project site. In fact, a significant portion of the southern ridgeline would be developed. Far from being placed in a clustered fashion like that shown in Figure 4-4 (below), houses would be uniformly spaced without any accommodation for natural terrain features in the lower portions of the main project site.

### • 2-P-75: Cluster new residential development within the hills to maximize preservation of open space resources and viewsheds.

As already discussed above with respect to policy 2-P-73, the Project is a standard residential subdivision that proposes no clustering and massive grading (see Figure 3.0-6 below). The Project would develop and grade what is currently designated as open space, and severely degrade the northern ridgeline which is visible from a large portion of Pittsburg and lies in the Railroad Av./SR-4 viewshed (see Figure 4-1). The eastern portion of the southern ridgeline, which lies in the Kirker Pass Rd. viewshed and contains designated Major and Minor Ridgelines, would be graded and recontoured.

• 2-P-105: **Preserve all designated hillsides as open space**, according to the General Plan Land Use Diagram (Figure 2-2).

As discussed above, there are no designated ridgelines due to the delay in development of the Pittsburg Hillside Ordinance. However, Fig. 2-2 in the General Plan designates the northern and southern ridgelines of the main project site as open space. The Project proposes to substantially grade and recontour the northern ridgeline and place residential units on its lower south facing



slopes, while recontouring the eastern end of the southern ridgeline. This is most definitely not preservation of open space as called for in the above policy.

• 4-P-10: **Minimize grading of the hillsides**. Amend the City's Zoning Ordinance to allow density bonuses of 10 percent (maximum) for new hillside development that preserves 40 percent of natural hill contours.

As discussed above, the Project calls for massive grading of most of the main project site and a smaller portion of the off-site parcel. A large part of the northern ridgeline would be graded and the natural contours of the valley bottom would be completely lost. In addition, a portion of the southern ridgeline would be graded.

• 4-P-15: Minimize the visual prominence of hillside development by taking advantage of existing site features for screening, such as tree clusters, depressions in topography, setback hillside plateau areas, and other natural features.

Instead of taking advantage of site features to screen development and reduce their visual impact as this policy mandates, the Project would flatten the knolls and hills in the lower portion of the site and grade and reshape most of the northern ridgeline. No effort would be made to preserve existing topography except at the southern ridgeline, and even then part of the ridgeline will be graded.

• 4-P-16: Allow flag lots with common driveways within hillside neighborhoods, in order to encourage terracing of buildings while minimizing roadway cut-and-fill (see Figure 4-4 below).

The Project proposes a standard residential subdivision without common driveways or flag lots. Such non-uniform spacing and placement of residential units (see Figure 4-4 below) would better preserve the knolls and hills below the ridgelines and reduce the amount of grading that would be required. As far as cut-and-fill, the Project currently calls for cuts to the hill slopes of approximately 75 ft. in some locations and fills of 10-85 ft. of graded soil in the low portions of the site. This is a massive amount of cut-and-fill that will obliterate terrain features in much of the main project site.



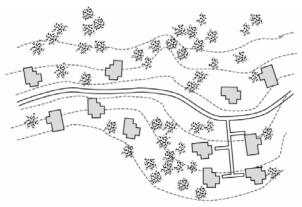


Figure 4-4: Flag Lots

Figure 4-4 from the Pittsburg General Plan.

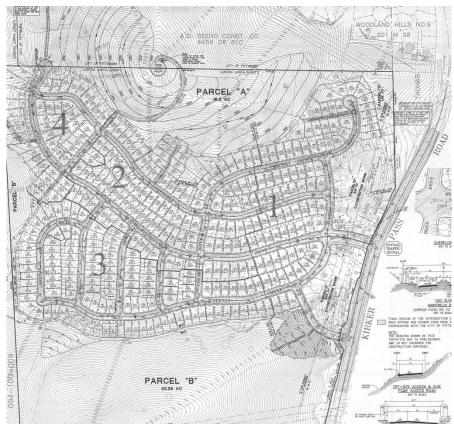


Figure 3.0-6. Conceptual Site Plan for the Project. Portion of original Figure 3.0-6 in dEIR.

• 4-P-17: Encourage clustering of Hillside Low-Density units in the southern hills, with resulting pockets of open space adjacent to major ridgelines and hillside slopes. Allow density bonuses of 10 percent (maximum) for preservation of 60 percent or more of a project's site area as open space.



As discussed above, the Project does not propose clustering of housing units, but a standard "cookie-cutter" residential subdivision that does not accommodate terrain on the lower levels of the site or the northern ridgeline. Contrast the housing configurations in Figure 4-4 with those in Figure 3.0-6 (above) to get a sense of the difference between clustered development, and the dense "cookie-cutter" residential subdivision proposed by the Project.

• 4-P-61: Retain views of the southern hills from the State Route 4 corridor, through implementation of ridgeline preservation policies (as described in Section 4.1).

The eastern edge of the southern ridgeline at the main project site, which consists of designated Major and Minor Ridgelines, would be graded and recontoured if the Project goes forward. The northern ridgeline, which lies in the Railroad Av./SR-4 viewshed, would be substantially altered. Massive grading on the south-side slopes for development would dramatically degrade views of this area from Kirker Pass Rd., while recontouring the ridge itself would alter the natural appearance of the ridgeline from northern viewpoints.

• 9-P-6: In order to preserve viewsheds of the southern hills, preserve major ridgelines (shown in Figure 9-1) throughout the Planning Area. Revise the Municipal Code per Policy 4-P-1: building pads and structural elements shall be located at least 150 feet away from (horizontally) the crest of a major ridgeline.

The southern ridgeline contains Major and Minor Ridgelines, and under the current Project plan its eastern end would be graded and recontoured.

• 9-P-7: During the design of hillside residential projects, encourage clustering of housing to preserve large, unbroken blocks of open space, particularly within sensitive habitat areas. Encourage the provision of wildlife corridors to ensure the integrity of habitat linkages.

As has been previously discussed, the Project calls for massive grading to construct a "cookiecutter" residential development that does not use clustering as a method to preserve terrain features such as knolls and small hills. The Project would fragment open space since a portion of open space would remain adjacent to existing development to the north, but would be cut off from the proposed "greenwall" at the southern ridgeline by development in the valley and southern slope of the northern ridge at the main project site.

• 9-P-8 As a condition of approval of new development, ensure revegetation of cut-andfill slopes with native plant species.

The massive grading that would occur under the Project would require a large amount of revegetation to the valley, slopes of ridges, and even the higher portions of ridges that have been recontoured, as well as the off-site parcel. Mitigation Measure AES-2 as described in Section 5.1 *Aesthetics*, says "the developer shall hydro-seed all disturbed, yet undeveloped, slopes...in order to encourage growth of new vegetation on disturbed hillsides." However, the dEIR does not specify if the Applicants would revegetate disturbed areas with only native species, a native-



introduced species, mix, or just introduced species. The EIR should identify a list of native species that would be used to revegetate disturbed areas, and include a management plan to ensure that native species dominate revegetated areas years after initial seeding. For the last several hundred years native grass species have been outcompeted in California by introduced annual grasses, which now dominate the Project site. If the Project is going to cause even greater disturbance, efforts should be made to restore the area so that it supports native species.

Section 4.0 *Plans and Policies* in the dEIR describes the Project as being consistent with 16 specific policies in the General Plan. We have listed six of the same policies the dEIR calls out, and dispute their assertions that the Project is consistent with these policies in terms of grading, clustered development, and preservation of ridgelines. To carpet the valley floor of the main project site and portions of the northern ridgeline with dense housing is not clustering, and basically demolishing the northern ridgeline and recontouring it to hide massive grading cannot be considered minimization of grading or true preservation of viewsheds.

Chapter 1 of the General Plan states that, "A city's general plan has been described as its constitution for development – the framework within which decisions on how to grow, provide public services and facilities, and protect and enhance the environment must be made." It also states that, "*policies* provide more specific direction on how to achieve goals. Policies outline actions, procedures, programs, or techniques to attain the goals." If the Project conflicts with at least 16 policies that are designed to provide specific direction on how to achieve Pittsburg's General Plan goals, and if the General Plan is the framework within which decisions *must* be made, then how can the current proposed Project be in alignment with the goals and best interests of Pittsburg?

### Comments on dEIR Section 5.1, Aesthetics

### Significant and Unavoidable Impacts to Viewsheds

While the ridgeline in the northern portion of the main project site is not a designated Major or Minor Ridgeline, it is visible over a large swath of Pittsburg and contains a broad rock outcropping, the preservation of which is encouraged in General Plan goal 4-G-4. This ridgeline would be excavated, reduced in elevation by about 75 ft., and be developed on its lower south facing slopes. The visual simulations included in the dEIR from the vantage point of Kirker Pass Rd. give some indication of how much the massive grading proposed on the Project would carve out of the northern ridgeline and how degraded the scenery would be in the process. A water tank would be visible from the north as well. While the Applicants maintain that the majority of Pittsburg would not be able to view the development or a degraded ridgeline since it would be recontoured to look more natural, in truth, the heart of the ridge will be carved out from the southern end and its total height will be substantially reduced. The ridge would, in essence, be a prop screen with only the facade of being natural. In addition, large numbers of residents pass the site daily on Kirker Pass Road, from which the development would be highly visible.

Perhaps the only positive component of the Project is that it calls for a "greenbelt" along the southern ridgeline, but even this is soured by the fact that the Project calls for grading the eastern portion of this Major Ridgeline. This is discussed further below.



Existing policy direction makes it clear that preserving the quality and character of the southern hills and ridges is of the utmost importance for Pittsburg. As such, the EIR should include an alternative that preserves all portions of the northern and southern ridgelines at the main project site, without the grading, recontouring, and development on the south-facing lower slopes of the northern ridgeline and without the grading of the southern Major Ridgeline. If necessary, a water tank could still be a component of this alternative. It is likely that a much lower number of houses would be required for such an alternative to be possible. If the number of residential units for the Project were reduced, then clustered development that preserves terrain features as called for in the General Plan could be put in place and the Project would be consistent with Pittsburg's land use and development policy goals. While the dEIR includes a Ridgeline Preservation Alternative, this alternative does not preserve all portions of the ridges in project site.

Another benefit would be that the significant and unavoidable impacts to at-risk persons living near the proposed Project in the Woodlands neighborhood, such as the young, elderly, and people with respiratory problems, would not be as severely impacted by emission of PM2.5 because the amount of grading would be reduced. As the dEIR recognizes, impacts to sensitive persons by PM2.5 emissions, which is identified as a Toxic Air Contaminant by the State of California, would still be a significant and unavoidable impact even after all mitigation measures are implemented.

### Impacts to Major and Minor Ridgelines in the Southern Ridgeline

As the above discussion of policy 2-P-23 describes, the eastern portion of the Major and Minor Ridgelines of the southern ridgeline on the main project site would be graded to recontour the ridge for stormwater retention basins. This would alter a view visible over a large swath of Pittsburg and surrounding areas from a natural to an artificial-looking terrain, and with the substantial grading and lowering of the northern ridgeline, together constitute a significant and unavoidable impact to the aesthetics of the area. While the Applicants propose hydroseeding and recontouring the northern ridgeline to make it look natural, the ridgeline would indeed be artificial and no mitigation measure can adequately make a 75 foot lowering of a ridge less than significant.

With regard to the Major Ridgeline that would be recontoured, the EIR should include an alternative scenario that does not involve altering the southern ridgeline (as called for above). If the alteration is necessary for the Project as it is currently proposed, the scenario should be adjusted to exclude the stormwater detention basin that necessitates recontouring the southern ridgeline and any residential units associated with the excluded basin. Avoiding modification to the Major and Minor Ridgelines in the southern portion of the main project site would be consistent with the spirit of many of Pittsburg's specific General Plan policies (see above discussion).

### Inadequacy of Visual Simulations Included in the dEIR

The dEIR does not include visual simulations looking south toward the Project from the north, so the visual impacts of the most severe grading (the lowering and excavation of the northern ridgeline), cannot be adequately evaluated. Most people that see the project area do so from the



north, from Pittsburg, and the ridgeline that will be most substantially altered under the Project lies in the Railroad Av./SR-4 viewshed. The EIR should include visual simulations of the effects of the Project from vantage points along Railroad Av. and SR-4.

### Comments on Cumulative Impacts Analysis

The list of Major Projects included in the dEIR to be analyzed in the Cumulative Analysis include Sky Ranch II, Black Diamond Ranch, Tuscany Meadows, and the James Donlon Boulevard Extension (JDBE). If approved, the latter project would be the one located closest to the Project. In a few short sentences, the dEIR states that because the JDBE is a roadway and no other improvements would be made in the area of that project, "views of the hillsides to the east would not substantially alter lands to the east of the project." How could a major arterial roadway located in steep, landslide-prone hills where currently no development exists, not substantially alter the aesthetics of the hills? Extreme amounts of grading and cut-and-fill will be necessary to construct the JDBE, which will also affect the views of these hills. In addition, the impact on local agriculture of the Project and the JDBE together is not discussed in the dEIR. If the Project is approved and built, ranching activity will largely end at the Project site, but considered together with the JDBE, ranching would be rendered much more difficult over a wide swath of the Pittsburg southern hills due to the JDBE bisecting a large working cattle ranch. Where is this discussion of cumulative impacts in the dEIR?

Taken together, the Major Projects and the Project represent more than 2,000 new homes and a major roadway in the vicinity of the southern hills of Pittsburg. This is not even the whole story, as the Pointe project, a project being proposed by Discovery Builders, which along with the Applicants is owned by the Seeno family, is not even listed with the Major Projects. This is puzzling, since it lies only 2.3 miles away from the main project site and is located at the other end of the JDBE. Given that the Pointe would actually demolish an entire hill and require even more grading and excavating than the Project, and would add traffic and other impacts that could affect the Project since it is also a residential subdivision, how is the Pointe not included in the list of Major Projects? How could the construction of more than 2,000 homes and a major roadway in the southern limits of Pittsburg and Antioch not be severely growth inducing and not cumulatively have major impacts on the southern hills?

The cumulative impacts analysis in the dEIR should include the Pointe project and be redone to fully account for the significant impacts that taken together all these projects would have in terms of traffic, air quality, greenhouse gas emissions, aesthetics, biological resources, land use and planning, and other impact categories.

### Comments on dEIR Section 5.6, Public Services

Section 5.6 of the dEIR identifies some of the public services that are expected to serve the Project as well as the adequacy of service provided. It is striking that even before the West Leland Fire Station was closed in July 2013, Pittsburg was unable to meet established fire



response time guidelines (Leach 2011<sup>2</sup>). Now that there is one less fire station to serve the area, it is reasonable to say that fire services would be further strained by adding a significant number of residential units, as the Project calls for. In addition, the Project is beyond the current city limits, accessible only by one road, and as discussed above, the subdivision itself seems to have only one main entrance (most of the division will likely use one entrance due to accessibility issues and a traffic signal). So not only would the Project add an additional burden on already inadequate resources, but the accessibility of the Project itself is limited. If fire resources are unable to adequately serve residential neighborhoods as they exist now, what sense does it make to add more housing that will make service increasingly inadequate?

These same points are also true for police response time. Even if we only consider housing that already exists in Pittsburg, the Pittsburg Police Department is not meeting its goal for emergency calls (LAFCO 2011<sup>3</sup>). The same question must then be asked, what sense does it make to place additional burdens on an already overburdened system?

Regarding the schools that are expected to service the Project, the elementary and junior high schools were operating at or over capacity three years ago, and the high school was just barely under capacity (SCI 2010<sup>4</sup>). The high school (Pittsburg High School) currently has 2,950 students enrolled, which is nearly at their maximum capacity of 3,000 students (Williams pers. comm.<sup>5</sup>). Why is Pittsburg even considering placing additional students in schools that are already at or beyond their maximum capacity to accept more students?

Given that fire, police, and school services, cannot adequately serve the Pittsburg communities that already exist, let alone serve an additional community of the size that the Project plans, wouldn't the logical thing to do be to not develop new residential areas when those that already exist cannot be serviced within established guidelines? The Project should not be considered until public services can adequately service the residential areas that currently exist.

### Other Comments on the dEIR

The Applicants are not identified anywhere in the main dEIR document. They should be named in the Executive Summary and/or Project Description sections and clearly identified as the Applicants for this Project.

The dEIR's Section 4.0, *Plans and Policies*, regards the Project as consistent with a number of specific General Plan policies that we find the Project to be remarkably inconsistent with. In addition, since the section discussed a topic typically found in an EIR's Land Use and Planning

<sup>&</sup>lt;sup>5</sup> Williams, Beverly. 2014. Phone conversation with Pittsburg High School employee Beverly Williams. Enrollment and capacity figures provided by Principal Todd Whitmire.



<sup>&</sup>lt;sup>2</sup> Leach, Ted. 2011. Fire Inspector, Contra Costa County Fire Protection District. Personal communication via electronic mail with Paul Stephenson, Impact Sciences, December 15.

<sup>&</sup>lt;sup>3</sup> Contra Costa County. 2011. Contra Costa Local Agency Formation Commission (LAFCO), East County Sub-Regional Municipal Services Review. December 10.

<sup>&</sup>lt;sup>4</sup> SCI Consulting Group. 2010. Comment by Pittsburg Unified School District on the Montreux Annexation and Subdivision Application. October 5.

section, we ask why the Applicants decided to label this section as they did. The change from a standard component in an EIR seems unnecessary and confusing. The section should be retitled and revised, and an honest, realistic discussion of the Project's inconsistency's with the General Plan included.

### **Closing Remarks**

Save Mount Diablo supports development that is planned and executed in a sustainable, environmentally sensitive manner. Infill of areas already surrounded by development or the revitalization of run-down neighborhoods would be types of development that we could support. However, this Project lies outside of the Pittsburg City Limits, is not connected to other development, calls for massive grading of ridgelines, and would degrade important viewsheds. The Project is nothing more imaginative than another "cookie-cutter" residential subdivision that makes no attempt to preserve terrain features or cluster development to incorporate natural elements into overall project design. To propose this Project next to several lands that have been protected for open space and wildlife values is inconsistent with the overall character of the area and flies in the face of the various goals and policies established by Pittsburg that have already been discussed. The cumulative impacts of this Project and others being proposed or already under construction would also significantly change the appearance and character of the southern hills. The public services that would service the Project are already inadequate for the amount of development that already exists. How can it be a good idea to place more burdens on an already over-burdened system?

We are opposed to this Project and those like it. However, if the process must move forward, major changes to the Project should be made, including preservation (no grading or excavation) of both the northern and southern ridgelines and clustered development in the valley. Serious inadequacies in the dEIR must also be addressed.

Thank you for the opportunity to provide comments on the Project.

Sincerely, Juan Pablo Galván Land Use Planner

Cc:

Meredith Hendricks, Save Mount Diablo
Ron Brown, Save Mount Diablo
Mayor Sal Evola, City of Pittsburg
Vice Mayor Pete Longmire, City of Pittsburg
Council Member Ben Johnson, City of Pittsburg
Council Member Will Casey, City of Pittsburg
Council Member Nancy Parent, City of Pittsburg
Bob Doyle, East Bay Regional Parks
Joel Devalcourt, Greenbelt Alliance
Dick Schneider, Sierra Club
Mack Casterman, California Native Plant Society







April 29, 2013

Kristin Vahl Pollot, AICP Associate Planner City of Pittsburg Civic Center 65 Civic Avenue Pittsburg, California 94565

### Subject: Notice of Preparation (NOP) for the Montreux Residential Subdivision Project (APN: 089-020-009; 011; 014; and 015).

Dear Ms. Vahl Pollot:

Save Mount Diablo (SMD) appreciates the opportunity to comment on the Notice of Preparation for the proposed Montreux Residential Subdivision project. SMD is a nonprofit conservation organization founded in 1971 which acquires land for addition to parks on and around Mt. Diablo, and monitors land use planning which might affect protected lands and resources. Save Mount Diablo has an interest in the lands surrounding Black Diamond Mines Regional Preserve, and between it and the Keller Landfill and the Naval Weapons Station Concord. SMD supports open space preservation in the vicinity of these areas in order to preserve open space scenic values, recreational opportunities and wildlife habitat, especially in the corridor between these areas.

### **General Comments**

The setting of the Montreux property is open space. It is surrounded by the PG&E buffer and Keller Preserve to the west; the East Bay Regional Park District's Black Diamond Mines Preserve to the east; Save Mount Diablo's Wayne Thomas property across Kirker Pass Road; and the Concord Naval Weapons Station property to the south. These properties have been preserved to protect endangered species, agriculture, recreation resources and open space. Our fundamental question is: *How would a cookie cutter subdivision that proposes to fill in drainages, remove trees and entire hillsides be* 



1901 Olympic Blvd., # 320, Walnut Creek, CA 94596 • T (925) 947-3535 • SaveMountDiablo.org • Tax ID # 94-2681735

consistent in the steep and landslide-prone hills south of Pittsburg, surrounded by properties that have been preserved for endangered species, recreation, open space and their aesthetic values?

The project has been around for decades. Why would it be proposed at this time given the large number of units that have been approved but not built or are still under consideration in Sky Ranch II, Tuscany Meadows and other projects? Also, what is the disposition of the open space to the north, and why would the City of Pittsburg consider allowing the removal of hillsides within this open space that form the aesthetic backdrop for the entire City and wider region?

### Specific Comments

In reviewing the NOP, SMD is concerned about the following issues and requests that information be included in the DEIR to address these critical matters.

- 1) The Project Description is Incomplete: The DEIR project description should include the architectural design plans to allow for evaluation of the project in relation to policy direction related to maintaining rural character. According to the NOP, "No architectural design plans have been submitted at this time, and the future design of the units would be subject to design review". Particularly, given the visual sensitivity of the project proposed within the southern hills of Pittsburg, the architectural plans and specifications should be included in the DEIR. It is premature to evaluate the project without this information. The Project Description should also describe the existing PG&E pipeline that appears to cross the property and how it would be affected by the proposed project.
- 2) The Project design is fundamentally inconsistent with the policy guidance provided in the General Plan for Hillside Areas. The NOP notes that "Grading would include cuts to the hill slopes of approximately 75 vertical feet in some locations and fills of between 10 and 85 feet of graded soil in the low portions of the site. The northern ridgeline (with an elevation of up to 655 feet) would be significantly reconfigured. Most of the existing ridgeline would be graded and re-contoured, with the crest of the ridge shifted toward the north and graded to conform to the topography of the north side of the hills. A partially buried water tank would be added at the top of the hill on the northern boundary of the site."

General Plan Policy 4-G-4 indicates "Encourage development that preserves unique natural features such as topography, rock outcroppings, mature trees, creeks and ridgelines in the design of hillside neighborhoods." <u>The project as proposed</u> removes key features such as ridgelines, rock-outcroppings, mature trees, and ephemeral drainages.

Policy 2-P-75 indicates: "Cluster new residential development within the hills to maximize preservation of open space resources and viewsheds." <u>The proposed</u> project does not cluster units. It is a standard residential subdivision.

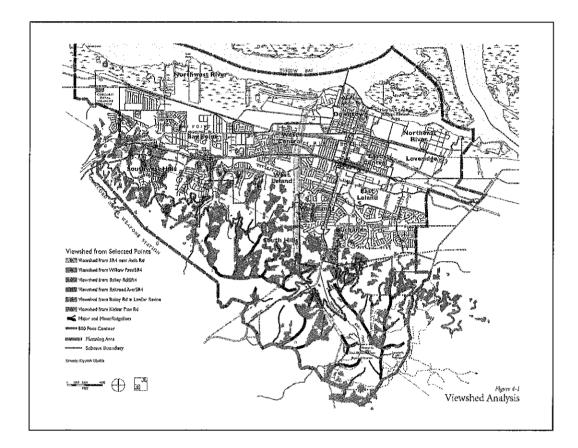
Other General Plan policy direction that should be considered in the DEIR includes:

- "Natural topography be retained to the maximum extent feasible, and largescale grading discouraged". <u>The project involves massive grading, and removal</u> <u>of an entire hillside and ridgeline.</u>
- "No development on minor and major ridgelines (as identified on Figure 4-2, above) with residential construction on flatter slopes encouraged." <u>The site is</u> <u>being flattened and northerly ridgelines removed.</u>
- "Development designed and clustered so as to be minimally visible from Kirker Pass Road". <u>Units are not clustered</u>. <u>The development would dramatically affect</u> <u>views from Kirker Pass Road</u>.

Given the inconsistency of the proposed project with policies applicable to hillside areas, the Initial Study Land Use Section 10 (b) should be identified as a **Potentially Significant Impact**, and should be fully evaluated in the DEIR. The DEIR should include a comprehensive analysis of the level of consistency of the project with existing plans and policies.

3) The Project is fundamentally inconsistent with the Viewshed Protection objectives stated in the General Plan. The project consists of a standard urban subdivision located within the visually sensitive hills south of the City of Pittsburg. The Aesthetic section of the DEIR should include visual simulations from Kirker Pass Road, the Black Diamond Mines Regional Preserve, and from the City of Pittsburg. The hills form a key aesthetic backdrop to the City; General Plan Figure 4-1, the Viewshed Analysis, identifies the 500-foot Contour and Major and Minor Ridgelines that

should be protected. The project as proposed would dramatically affect the topography of the site by lowering and re-contouring key ridgelines, thereby significantly affecting visual quality of these hillsides.



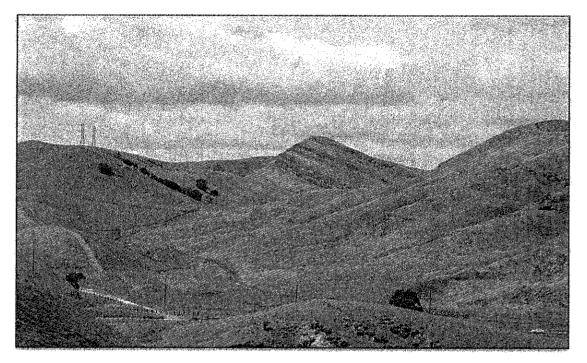
General Plan Policy 2-P-23 indicates: "Restrict development on minor and major ridgelines (as defined by Figure 4-2). Encourage residential construction on flatter natural slopes or non-sensitive graded areas that reduce environmental and visual impacts. Minimize cut-an-fill of natural hillsides." <u>The proposed project does not protect these ridgelines and does not encourage construction on flatter natural slopes.</u> Instead, the project proposes massive grading to flatten slopes and ridgelines. It is designed in a manner that is diametrically opposed to this policy direction.

Similarly, General Plan Policy 2-G-8 indicates: Ensure that hillside development enhances the built environment, improves safety through slope stabilization, is respectful of topography and other natural constraints and preserves ridgelines and viewsheds. <u>Again, the proposed project is designed in a manner that is fundamentally</u> <u>inconsistent with this direction.</u> The DEIR should include an extensive consistency analysis of the project in relation to existing plans and policies, particularly policies related to hillside development.

4) The Project consists of 'Leap Frog' Development: The project represents leap-frog development that contradicts current land use practices that promote development that is close to public transportation and existing urban services. By proposing a project outside of the existing city limits and service boundaries, the applicant is creating a project that would result in much higher greenhouse gases during construction and over the long term than would be the case for sites already within the city limits and already served with urban services.

The DEIR should evaluate the project in relation to General Plan Policy 2-G-1: "Maintain compact urban form within the City's projected municipal boundary. Ensure that hillside lands not environmentally suitable for development are maintained as open space."

- 5) The Project design should protect Wetlands and Creek Channels. According to the NOP, a total of 0.468 acres of wetlands and creek channels were delineated on the project site. This total includes 0.342 acres of jurisdictional waters of the US, including wetlands and 0.126 acres of non-jurisdictional isolated wetlands and ephemeral creeks. Degradation of these resources conflicts with General Plan Policy 2-P-25 "As a condition of approval, ensure that residential developers incorporate natural creeks as open space amenities into the design of residential neighborhoods." Initial Study Issue 9 (d) should be evaluated more completely, given the alteration of site drainage that would result from the project. The DEIR should study potentially significant impacts related to biological resources and hydrology.
- 6) Mature Trees should be Protected: The project site supports a number of mature oak trees along drainage and hillside areas. The DEIR should describe and evaluate trees that would be affected by the proposed project. Mitigation measures should be included to protect or replace impacted trees.



View across Kirker Pass Road toward the Montreux Project site (Photo by Scott Hein; original photo cropped to focus on the Montreux property)

The Seeno companies have a long history of grading, encroaching on streams, cutting trees and performing work on various properties they control, prior to environmental analysis and without permits. This was the case for the trees removed without a permit on the Montreuxu site, in 1999, and is part of a pattern.

7) The Mass Grading that is proposed would result in Potentially Significant Impacts to Air Quality and Greenhouse Gases. Removal/ flattening of the northern hillside within the project site not only conflicts with the policy direction in the General Plan, but also results in potentially significant impacts related to air quality and greenhouse gases. Both issues should be studied in the DEIR as potentially significant impacts and cumulative impacts.

The NOP mentions that basic construction mitigation measures would be implemented as indicated in Table 8-1 of the BAAQMD CEQA Guidelines (May 2011) (*8-1 Basic Construction Mitigation Measures*). As a project involving massive grading and removal of entire ridgelines, at minimum, the additional mitigation measures included in Table 8-2 *Additional Construction Mitigation Measures*, should also be identified in the DEIR to mitigate construction impacts. The NOP seems to vastly underestimate construction emissions. NOP *Table 1: Estimate Construction Emissions* indicates that "The PM10 and PM2.5 emissions are for the vehicle exhaust component only." However, the BAAQMD CEQA Guidelines, on page B-10, indicate that URBEMIS assumes that fugitive PM dust emissions from soil disturbance activities and travel on unpaved roads account for approximately 79 percent and 21 percent of total the fugitive PM dust emissions, respectively. The NOP Appendix B Air Quality and GHG Modeling Data indicates that PM10 levels in 2014 would be 82.84 lbs per day mitigated. The BAAQMD threshold indicated in Table 1 on page 28 of the NOP is 82 lbs per day, so the project appears to exceed the threshold of significance. The DEIR should provide further clarification regarding the project's impact related to fugitive particulate matter dust emissions.

8) The DEIR should include Alternatives that are designed to be consistent with the General Plan policy direction provided for Hillside development and an Alternative Located within the Existing City Limits. The proposed project appears to have been designed in a manner that ignores the policy framework related to Hillside Development. The DEIR should include an environmentally sensitive alternative which is designed in a manner that is consistent with the policy direction for hillside development, and that is also consistent with the existing pre-zoning for the site (Hillside Planned Development (HPD) and Open Space (OS)). Given the standard urban subdivision that is proposed, an off-site alternative located on a flatter site within the existing city limits should also be considered.

The NOP notes that "with the approval of the proposed change from HPD to RS-6, the proposed project would be consistent with the City of Pittsburg Zoning Ordinance." However, currently, the proposed project is not consistent with the existing zoning. In 2005, Pittsburg voters approved the City of Pittsburg Voter Approved Urban Limit Line and Prezoning Act. Measure P included prezoning of the site for HPD and OS. While prezoning can be changed by either a subsequent vote of the voters at a city election or by a majority vote of the City Council, SMD believes that the prezoning as HPD and OS is critical for preserving the hillsides south of Pittsburg. Apart from the No Project Alternative and an off-site alternative located within the city limits, the alternatives considered should be consistent with the HPD and OS pre-zoning, given the visually sensitive location in the hills south of the City of Pittsburg.

9) Cumulative and Growth Inducing Impacts: The project should be evaluated together with the James Donlon Extension, Tuscany Meadows, and Sky Ranch II projects. Together, these developments are likely to result in a surplus of housing that will be growth-inducing for the region. Unlike projects that are built near city centers served by public transportation, cumulative and growth-inducing impacts related to aesthetics,

traffic, air quality, geology, hydrology, land use, noise, public services and utilities will all be unnecessarily aggravated, and should be studied in the DEIR.

**10)** The Hillside Preservation Ordinance is Needed to Evaluate this Project: The project is premature and should not be considered until the City of Pittsburg has finalized its Hillside Preservation Ordinance which was started several years ago, and then apparently put on-hold. General Plan Policy 2-P-21 indicates:

"Revise the City's Hillside Preservation Ordinance to reflect General Plan policy direction. Revisions may include but are not limited to:

- Designating protected ridgelines, creeks and other significant resources areas, along with daylight plane or setback standards;
- Defining protected viewsheds;
- Designating location and density of low-density hillside residential development based on slope stability and visual impact;
- Provision of well-designed hillside projects that provide larger, family-oriented lots and
- Protection of significant ridgelines and incorporation of hill forms into project design."

Since the City of Pittsburg has not yet finalized its Hillside Preservation Ordinance, the DEIR should evaluate the project in relation to the direction provided by Policy 2-P-21 indicated above.

Thank you for the opportunity to submit comments on the proposed Montreux Residential Subdivision NOP and the information required in the DEIR to comply with the California Environmental Quality Act (CEQA).

Save Mount Diablo also requests notification of all materials distributed related to the project and associated environmental process, and all public discussions, meetings and hearings conducted.

Sincerely,

Tanky Woltering

Nancy Woltéring Land Conservation Analyst



### **MEMBERS**

Public Member

Federal Glover

County Member

Michael R. McGill

Special District Member

Donald A. Blubaugh

### Mary N. Piepho County Member Rob Schroder City Member Igor Skaredoff Special District Member

Don Tatzin

City Member

September 14, 2016 (Agenda)

Contra Costa Local Agency Formation Commission 651 Pine Street. Sixth Floor Martinez, CA 94553

### LAFCO Agricultural & Open Space Preservation Policy

Dear Commissioners:

This report from LAFCO's Policies & Procedures Committee ("Committee") transmits the revised draft LAFCO Agricultural & Open Space Preservation Policy (AOSPP) - Version 1 (applicant proposed mitigation) - Attachments 1a (clean) and 1b (tracked), and Version 2 (required mitigation) - Attachment 2. The LAFCO Executive Officer worked closely with the Committee on the issues discussed below and concurs with the Committee's recommendations.

### BACKGROUND

Development of a LAFCO AOSPP was identified years ago as part of the Commission's ongoing efforts to update its Policies & Procedures. The discussion was elevated in March 2015, at which time the Committee presented a report to the Commission that included a summary of relevant LAFCO statutes and a collection of LAFCO policies and procedures representing 18 different LAFCOs from around the State.

In July 2015, LAFCO hosted an Agriculture & Open Space Preservation Workshop to engage stakeholders in a conversation as to whether or not LAFCO should develop an AOSPP, and if so, what the policy should address. There was broad support for a LAFCO AOSPP.

Since July 2015, there has been extensive outreach, and throughout the process, LAFCO has received valuable input from agriculture, building, environmental, legal, farming, local government and other interest groups, along with members of the general public (for a full chronology of the AOSPP progression, please refer to the July 13, 2016 Committee report). The Committee and LAFCO staff sincerely thank all those who participated in the evolution of the draft policy and provided thoughtful comments.

Lou Ann Texeira Executive Officer

> City Member Stanley Caldwell Special District Member

September 14, 2016 Agenda Item 8

ALTERNATE MEMBERS

Candace Andersen

County Member

Sharon Burke

Public Member

Tom Butt

### DISCUSSION

At the July 13, 2016 LAFCO meeting, the Commission received a revised draft AOSPP reflecting both the Commission's guidance and comments, as well as comments from the stakeholders, during and following the March 2016 LAFCO meeting. In response to the policy presented in July, LAFCO received dozens of written comments and heard from 13 speakers at the July meeting. Many of the commenters requested that stronger mitigation measures be required in LAFCO's policy.

While the Commission agreed that the draft policy presented in July was more robust, the Commission requested further clarifications and refinement of the policy. In addition, the Commission asked that the Committee also prepare an alternative version of the policy to include required mitigation.

Since the July LAFCO meeting, the Committee has had further discussions with building, environmental and farming representatives. Also, on September 1<sup>st</sup>, Commissioners Blubaugh, Skaredoff and Tatzin, along with Tomi Riley, Chief of Staff for Supervisor Mary N. Piepho, and the LAFCO Executive Officer received a tour of Frog Hollow Farms.

The revised policies – both Version 1 (applicant proposed mitigation) and Version 2 (required mitigation) - reflect the Commission's prior comments and direction, and many of the comments received from interested parties.

Revisions to Version 1 include the following:

- Revised Policy 5 in response to the development community's concerns.
- Added clarification regarding the meaning of "right to farm" based on Contra Costa County's right to farm ordinance.
- Provided clarification to the land use inventory. Many public agencies prepare land use inventories in accordance with their Housing Element and economic development strategic plans.
- Provided clarification regarding buffers.
- Expanded the language regarding comparable mitigation examples (e.g., habitat conservation plan or other similar plans).
- Added Guideline 7 relating to timing and fulfillment of mitigation.

LAFCO received comments requesting that the "Observations" at the end of the policy be removed or retained. The Committee recommends retaining these as they provide valuable ideas and perspective.

LAFCO also received comments regarding LAFCO's relationship to urban limit lines and urban growth boundaries. The Commission's policies relating to these growth boundaries include the following provision: "The Commission will generally favor adopted plans that are supportive of the Commission's responsibility to discourage urban sprawl, preserve open space and prime agricultural lands, provide for efficient public services and encourage the orderly formation and development of local agencies." The LAFCO AOSPP is not intended to change these policies.

In addition, pursuant to the Commission's direction, the Committee prepared an alternative LAFCO AOSPP (Version 2) which provides for required mitigation. The tracked changes in Version 2 reflect the differences between Version 1 and Version 2.

Finally, in an effort to provide further clarification on key issues, and respond to a number of recurrent questions and misperceptions, the Committee prepared a Frequently Asked Questions (FAQ) – Attachment 3. The FAQ, as currently written, primarily coincides with Version 1 of the AOSPP. Should the Commission adopt Version 2, some additional questions and modified answers will be needed.

### POLICY AND OTHER ISSUES

### A. Agriculture Enterprise

In reviewing the City of Brentwood's *Agricultural Enterprise Program and Agricultural Mitigation Fee*, and in visiting Frog Hollow Farm and experiencing that approach to farming, the Committee concludes that efforts to enhance agriculture enterprise are necessary, albeit LAFCO's potential role in this endeavor is limited. The LAFCO policy supports agriculture enterprise, and encourages economically viable agriculture-based businesses that will keep agriculture production high.

Other possible components of LAFCO's effort to support agriculture enterprise might include revisions to LAFCO's out of agency service policy to allow for municipal services to support agriculture business. If the Commission wants to consider this addition, the Committee recommends that the Commission provide direction to modify LAFCO's out of agency service policy, rather than make further revisions to the AOSPP for this purpose.

LAFCO encourages the County and municipalities to review their General Plans and other policies in terms of supporting and enhancing agriculture enterprise.

### B. LAFCO's Authority

On August 31, 2016, LAFCO received a letter from Kristina Lawson, attorney with Manatt Phelps & Phillips expressing a number of concerns (included in Attachment 4). In her letter, Ms. Lawson implies that LAFCO's draft AOSPP exceeds the scope of LAFCO's authority under the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH).

As we have previously stated, LAFCO is *required to establish written policies and procedures and exercise its powers pursuant to the CKH in a manner consistent with those policies and procedures* (Gov. Code section 56300). The proposed AOSPP is one of numerous policies contained in the Contra Costa LAFCO Commissioner Handbook.

The CKH grants LAFCO broad authority to carry out its statutory responsibilities to encourage the orderly formation of cities and special districts, discourage urban sprawl, and preserve agricultural and open space lands.

LAFCO has the authority to approve, with or without conditions, or deny an application. LAFCO has broad discretion to deny an application, including for the absence of, or inadequate mitigating measures included in an application to LAFCO. LAFCO also has authority to impose a range of terms and conditions when approving an application pursuant to Gov. Code §§56885.5, 56886-56890.

# C. CEQA and LAFCO's PROPOSED AOSPP

In her August 16<sup>th</sup> letter, Ms. Lawson indicates that LAFCO's draft AOSPP constitutes a project subject to review under the California Environmental Quality Act (CEQA). Ms. Lawson notes that Santa Clara LAFCO prepared an initial study in conjunction with its agricultural mitigation policies.

Prior to developing the draft AOSPP, the LAFCO Policy Committee reviewed agriculture and open space preservation policies covering 18 other LAFCOs. Of those LAFCOs with the most substantial policies (e.g., Monterey, San Luis Obispo, Santa Clara, Stanislaus, Yolo), only Santa Clara prepared an Initial Study/Negative Declaration. Monterey, San Luis Obispo, Stanislaus and Yolo LAFCOs found their policies exempt from CEQA.

It has been determined that Contra Costa LAFCO's draft AOSPP (Versions 1 and 2) is not a project under CEQA.

#### **RECOMMENDATIONS:**

Approve desired version of the LAFCO AOSPP. If Version 2 (required mitigation) is desired, provide direction regarding Guideline 3b 1(a), (b) and (c) and the Commission's preferred ranges/ratios.

Respectfully submitted,

# Sharon Burke and Don Tatzin

c: Distribution

Attachment 1a – Version 1 - Clean Revised Draft LAFCO AOSPP Attachment 1b – Version 1 - Tracked Revised Draft LAFCO AOSPP Attachment 2 – Version 2 Attachment 3 – Frequently Asked Questions Attachment 4 - Comments to Draft LAFCO Agricultural & Open Space Preservation Policy

## 4.1 DRAFT AGRICULTURAL AND OPEN SPACE PRESERVATION POLICY – VERSION 1

# PREFACE

LAFCO's enabling and guiding legislation, the Cortese Knox Hertzberg (CKH) Act, begins with the following statement.

"The Legislature finds and declares that it is the policy of the state to encourage orderly growth and development which are essential to the social, fiscal, and economic well-being of the state. The Legislature recognizes that the logical formation and determination of local agency boundaries is an important factor in promoting orderly development and in balancing that development with sometimes competing state interests of discouraging urban sprawl, preserving open-space and prime agricultural lands, and efficiently extending government services." (§56001)

Beginning in the late 1800s, farmers and ranchers made Contra Costa County an important source of agricultural products. Much of the County has good soils, a mild climate, and adequate water. Western and central Contra Costa were used for agriculture well into the twentieth century. John Muir farmed and ranched approximately 2,600 acres in what is now Martinez, Concord, and the Alhambra Valley. While the County's population was increasing, by current standards, the County's population was small. The 1910 census recorded 31,764 residents, less than the 2015 population of Pleasant Hill.

Development, which began in earnest after World War II, transformed Contra Costa County. As urban and suburban development occurred, Contra Costa County experienced significant reduction in the amount and economic importance of agricultural lands. Simultaneously, critical open space habitat for sensitive species declined. By 2010, the Census reported that Contra Costa had 1,049,025 people, representing 3,300% growth since 1910. Contra Costa County's 2040 population is forecast to be 1,338,400.

As a result of population and job growth, agricultural land was converted to houses, schools, commercial centers, job centers, and transportation corridors. In 2015, there were about 30,000 acres of active agricultural land in Contra Costa County, excluding rangeland and pastureland, most of it located in the eastern portion of the County. There are approximately 175,000 acres of rangeland and pastureland in the County.

Agriculture in Contra Costa County is worth approximately \$128.5 million (farm production) in 2015 and is an important economic sector. The value of agricultural production has risen in recent years.<sup>2</sup> However, some worry that Contra Costa's agricultural industry may approach a tipping point beyond which agriculture becomes less viable due to a lack of labor, suppliers, and processors located nearby.<sup>3</sup>

The pressure on agricultural land also extends to wildlife and riparian areas. In some cases, conversion of these lands through development disrupts an ecosystem that used to depend on the now developed land as a travel route, or a seasonal or permanent source of food and water.

The County and some cities are active in efforts to preserve agricultural and open space lands. For example, in the 1970s, the County created a County Agricultural Core to the east and south of Brentwood. The City of Brentwood has an agricultural mitigation program that collected more than \$12 million in

<sup>2</sup> 2008-2015 Crop and Livestock Reports, Contra Costa County Agricultural Commissioner

<sup>&</sup>lt;sup>1</sup> 2015 Crop and Livestock Report, Contra Costa County Agricultural Commissioner

<sup>&</sup>lt;sup>3</sup> Sustaining our Agricultural Bounty: An Assessment of the Current State of Farming and Ranching in the San Francisco Bay Area – A white paper by the American Farmland Trust, Greenbelt Alliance and Sustainable Agriculture Education (SAGE), January 2011

mitigation fees and through conservation organizations, and acquired the development rights over approximately 1,000 acres of agricultural lands. In 2006, the voters adopted Urban Limit Lines (ULLs) for the County and each municipality, and these actions helped protect undeveloped land outside the ULLs. Furthermore, the County adopted the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCCHCP/NCCP) that protects sensitive habitat for plants and animals in East Contra Costa.

LAFCO embraces its objectives of encouraging orderly growth and development while discouraging urban sprawl, efficiently extending government services, and preserving open space and prime agricultural lands. Through the review and approval or denial process of boundary changes and other applications, LAFCO has considerable authority to provide for the preservation of open space and agricultural land, and impose terms and conditions. (§§56885 -56890).

While LAFCO has authority to achieve the objectives of the CKH Act, there are things that LAFCO cannot do, for example, directly regulate land use.<sup>4</sup> Therefore, successful preservation of prime agricultural, agricultural and open space lands and of agriculture as a business requires that both applicants and other agencies also lead. At the end of this policy are observations about other opportunities facing residents, advocacy organizations, and governmental agencies that could also strengthen and preserve agriculture and open space lands.

# **AUTHORITY OF LAFCO**

LAFCO's authority derives from the CKH Act. Among the purposes of LAFCO are to encourage planned, orderly, and efficient urban development while at the same time giving appropriate consideration to the preservation of prime agricultural, agricultural and open space lands (\$56300). The CKH Act includes provisions that grant LAFCO the authority to consider and provide for the preservation of open space and agricultural lands. Among these provisions is \$56377 which describes the intent of the legislation with regard to agricultural lands:

"56377. In reviewing and approving or disapproving proposals which could reasonably be expected to induce, facilitate, or lead to the conversion of existing open space lands to uses other than open space uses, the commission shall consider all of the following policies and priorities:
(a) Development or use of land for other than open space uses shall be guided away from existing prime agricultural lands in open space use toward areas containing non-prime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.
(b) Development of existing vacant or non-prime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the SOI of a local agency should be encouraged before any proposal is approved that would allow for or lead to the development of existing open space lands for non-open space uses that are outside of the existing jurisdiction of the local agency or outside of the existing jurisdiction of the local agency."

LAFCO is specifically charged in some instances with protecting open space and agricultural land. For example, an island annexation may not be approved if the island consists of prime agricultural land [§56375.3(b)(5)]. LAFCO may not approve a change to an SOI where the affected territory is subject to a Williamson Act contract or farmland security zone unless certain conditions exist (§§56426 and 56426.5).

<sup>&</sup>lt;sup>4</sup> "A commission shall not impose any conditions that would directly regulate land use density or intensity, property development, or subdivision requirements" [§§56375(6), 56886].

When making a decision, LAFCO must consider whether an application and its effects conform to both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities in Sections 56377 and 56668(d). Finally, LAFCO must consider the effect of an application on maintaining the physical and economic integrity of agricultural lands [§56668 (e)].

An application for a change of organization, reorganization, the establishment of or change to a sphere of influence (SOI), the extension of extraterritorial services, and other LAFCO actions as contained in the CKH Act will be evaluated in accordance with LAFCO's adopted Agricultural and Open Space Preservation Policy.

# PURPOSE OF THE POLICY

The purpose of this policy is threefold: 1) to provide guidance to the applicant on how to assess the impacts on prime agricultural, agricultural and open space lands of applications submitted to LAFCO, and enable the applicant to explain how the applicant intends to mitigate those impacts; 2) to provide a framework for LAFCO to evaluate and process in a consistent manner, applications before LAFCO that involve or impact prime agricultural, agricultural and/or open space lands; and 3) to explain to the public how LAFCO will evaluate and assess applications that affect prime agricultural, agricultural and/or open space lands.

# **DEFINITIONS**

Several terms are important in understanding LAFCO's responsibility and authority to preserve prime agricultural, agricultural and open space lands. These terms and definitions are found below and are applicable throughout these policies. The CKH Act contains the following definitions for agricultural land, prime agricultural land and open space:

**56016**. "**Agricultural lands**" means land currently used for the purpose of producing an agricultural commodity for commercial purposes, land left fallow under a crop rotational program, or land enrolled in an agricultural subsidy or set-aside program.

**56064.** "**Prime agricultural land**" means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:

(a) Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.

(b) Land that qualifies for rating 80 through 100 Storie Index Rating.

(c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Range and Pasture Handbook, Revision 1, December 2003.

(d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars (\$400) per acre.(e) Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars (\$400) per acre.

**56059**. **"Open space"** means any parcel or area of land or water which is substantially unimproved and devoted to an open-space use, as defined in Section 65560.

**65560**. (a) "Local open-space plan" is the open-space element of a county or city general plan adopted by the board or council, either as the local open-space plan or as the interim local open-space plan adopted pursuant to Section 65563.

(b) "Open-space land" is any parcel or area of land or water that is essentially unimproved and devoted to an open-space use as defined in this section, and that is designated on a local, regional, or state open-space plan as any of the following:

(1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays, and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, greenways, as defined in Section 816.52 of the Civil Code, and watershed lands.

(2) Open space used for the managed production of resources, including, but not limited to, forest lands, rangeland, agricultural lands, and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; bays, estuaries, marshes, rivers, and streams that are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

(3) Open space for outdoor recreation, including, but not limited to, areas of outstanding scenic, historic, and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas that serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, greenways, and scenic highway corridors.

(4) Open space for public health and safety, including, but not limited to, areas that require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs, and areas required for the protection and enhancement of air quality.

(5) Open space in support of the mission of military installations that comprises areas adjacent to military installations, military training routes, and underlying restricted airspace that can provide additional buffer zones to military activities and complement the resource values of the military lands.

(6) Open space for the protection of places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code (i.e., Native American Historical, Cultural and Sacred Sites).

#### **GOALS, POLICIES AND GUIDELINES**

The following Goals, Policies, and Guidelines are consistent with the legislative direction provided in the CKH Act. The Goals are intended to be the outcome LAFCO wants to achieve. The Policies provide direction with regard to how those Goals should be achieved by providing specific guidance for decision makers and proponents. Guidelines give stakeholders procedures and practical tips regarding what information LAFCO commissioners and staff need to evaluate an application that affects prime agricultural, agricultural and/or open space lands.

#### **GOALS**

Agriculture and open space are vital and essential to Contra Costa County's economy and environment. Accordingly, boundary changes for urban development should be proposed, evaluated, and approved in a manner that is consistent with the continuing growth and vitality of agriculture within the county. Open space lands provide the region with invaluable public benefits for all who visit, live and work in Contra Costa County. The following goals will help guide LAFCO's decisions regarding prime agricultural, agricultural and open space lands.

**Goal 1**. Minimize the conversion of prime agricultural land and open space land to other land uses while balancing the need to ensure orderly growth and development and the efficient provision of services. <sup>5</sup>

**Goal 2**. Encourage cities, the county, special districts, property owners and other stakeholders to work together to preserve prime agricultural, agricultural and open space lands.

**Goal 3**. Incorporate agricultural and open space land preservation into long range planning consistent with principles of smart growth at the state, county, and municipal levels.

Goal 4. Strengthen and support the agricultural sector of the economy.

**Goal 5**. Fully consider the impacts an application will have on existing prime agricultural, agricultural and open space lands.

Goal 6. Preserve areas that sustain agriculture in Contra Costa County.

# **POLICIES**

It is the policy of Contra Costa LAFCO that, consistent with the CKH Act, an application for a change in organization, reorganization, for the establishment of or change to an SOI, the extension of extraterritorial services, and other LAFCO actions as contained in the CKH Act ("applications"), shall provide for planned, well-ordered, efficient urban development patterns with appropriate consideration to preserving open space, agricultural and prime agricultural lands within those patterns. LAFCO's Agricultural and Open Space Preservation Policy provides for a mitigation hierarchy which 1) encourages avoidance of impacts to prime agricultural, agricultural and open space lands, 2) minimizes impacts to these lands, and 3) mitigates impacts that cannot be avoided while pursuing orderly growth and development.

The following policies support the goals stated above and will be used by Contra Costa LAFCO when considering an application that involves prime agricultural, agricultural and/or open space lands:

**Policy 1**. The Commission encourages local agencies to adopt policies that result in efficient, coterminous and logical growth patterns within their General Plan, Specific Plans and SOI areas, and that encourage preservation of prime agricultural, agricultural and open space lands in a manner that is consistent with LAFCO's policy.

**Policy 2.** Vacant land within urban areas should be developed before prime agricultural, agricultural and/or open space land is annexed for non-agricultural and non-open space purposes.<sup>6</sup>

**Policy 3**. Land substantially surrounded by existing jurisdictional boundaries (e.g., islands) should be annexed before other lands.

**Policy 4**. Where feasible, and consistent with LAFCO policies, non-prime agricultural land should be annexed before prime agricultural land.

<sup>&</sup>lt;sup>5</sup> In minimizing the conversion of open space land, the Commission may give lower priority to rangeland per 65560.b.2.

<sup>&</sup>lt;sup>6</sup> The Commission recognizes there may be instances in which vacant land is planned to be used in a manner that is important to the orderly and efficient long-term development of the county and land use agency and that differs from the proposed use of the area in an application to LAFCO. LAFCO will consider such situations on a case-by-case basis.

**Policy 5.** While annexation of prime agricultural lands, agricultural lands and open space lands is not prohibited, in general, urban development should be discouraged in these areas. For example, agricultural land should not be annexed for non-agricultural or non-open space purposes when feasible alternatives exist that allow for orderly and efficient growth. Large lot rural development that places pressure on a jurisdiction to provide services, and causes agricultural areas to be infeasible for farming or agricultural business, is discouraged.

**Policy 6**. The continued productivity and sustainability of agricultural land surrounding existing communities should be promoted by preventing the premature conversion of agricultural land to other uses and, to the extent feasible, minimizing conflicts between agricultural and other land uses. Buffers and/or local right to farm ordinances should be established to promote this policy. Contra Costa County has a Right to Farm ordinance which requires notification of purchases and users of property adjacent to or near agricultural operations of the inherent potential problems associates with such purchase or residential use.

Policy 7. Development near agricultural land should minimize adverse impacts to agricultural operations.

Policy 8. Development near open space should minimize adverse impacts to open space uses.

**Policy 9**. The Commission will consider feasible mitigation (found in the following guidelines) if an application would result in the loss of prime agricultural, agricultural and/or open space lands.

**Policy 10**. Any mitigations that are conditions of LAFCO's approval of an application should occur close to the location of the impact and within Contra Costa County.

## **GUIDELINES**

These Guidelines are intended to provide further direction regarding the application of LAFCO's Goals and Policies; to advise and assist the public, agencies, property owners, farmers, ranchers and other stakeholders with regard to LAFCO's expectations in reviewing an application that involves prime agricultural, agricultural and/or open space lands; and to provide sample mitigation measures.

**Guideline 1.** Applications submitted to LAFCO involving prime agricultural, agricultural and/or open space lands shall include an Agricultural and Open Space Impact Assessment. At a minimum the following shall be addressed as part of the assessment:

- a. An application must discuss how it balances the State's interest in preserving prime agricultural and/or open space lands against the need for orderly development (§56001).
- b. An application must discuss its effect on maintaining the physical and economic integrity of agricultural lands [§56668 (e)].
- c. An application must discuss whether it could reasonably be expected to induce, facilitate, or lead to the conversion of existing open space land to uses other than open space uses (§56377).
- d. An application must describe whether, and if so, how it guides development away from prime agricultural, agricultural and/or open space lands.
- e. An application must describe whether, and if so, how it facilitates development of existing vacant or non-agricultural and/or non-open space lands for urban uses within the existing boundary or SOI of a local agency.

f. An application must discuss what measures it contains that will preserve the physical and economic integrity of adjacent prime agricultural, agricultural and/or open space land uses.

**Guideline 2.** If an application involves a loss of prime agricultural, agricultural and/or open space lands, property owners, cities and towns, the county, special districts, and other agricultural and open space conservation agencies should work together as early in the process as possible to either modify the application to avoid impacts or to adequately mitigate the impacts.

**Guideline 3.** The following factors should be considered for an annexation of prime agricultural, agricultural and/or open space lands:

- a. The applicant should reference and include a land use inventory that indicates the amount of available land within the subject jurisdiction for the proposed land use. The land use inventory may be one that has been prepared by the applicable land use agency.
- b. The applicant should provide an evaluation of the effectiveness of measures proposed by the applicant to mitigate the loss of prime agricultural, agricultural and/or open space lands, and to preserve adjoining lands for prime agricultural, agricultural and/or open space use to prevent their premature conversion to other uses. Examples of such measures include, but are not limited to:
  - 1. Acquisition or dedication of prime agricultural and agricultural land (e.g., substitution ratio of at least 1:1 for the prime agricultural land annexed), development rights, bringing qualified land into an open space plan, open space and agricultural conservation easements to permanently protect adjacent or other prime agricultural, agricultural and/or open space lands within the county. Any land previously protected should not be used as the mitigation for any other project.
  - 2. Participation in other local development programs that direct development towards urban areas in the county (such as transfer or purchase of development credits).
  - 3. Payment to local government agencies and/or recognized non-profit organizations working in Contra Costa County for the purpose of preserving prime agricultural, agricultural and/or open space lands; payment should be sufficient to fully fund the acquisition, dedication, restoration and maintenance of land which is of equal or better quality.
  - 4. Establishment of buffers of at least 300 feet to protect adjacent prime agricultural, agricultural and/or open space lands from the effects of development. Such buffers many be permanent, temporary, or rolling, and may take many forms (e.g., easements, dedications, appropriate zoning, streets, parks, etc.).
  - 5. Where applicable, compliance with the provisions of the ECCCHCP/NCCP or a similar plan enacted by the County, cities or another regional, state or federal permitting agency.
  - 6. Other measures agreed to by the applicant and the land use jurisdiction that meet the intent of replacing prime agricultural and agricultural lands at a minimum 1:1 ratio.
  - 7. Participation in an advanced mitigation plan for prime agricultural, agricultural and/or open space lands.
  - 8. Participation in measures to promote and/or enhance the viability of prime agricultural and agricultural lands and the agricultural industry in Contra Costa County.

**Guideline 4.** Detachment of prime agricultural, agricultural and/or open space lands should be encouraged if consistent with the SOI for that agency.

**Guideline 5**. Annexation for land uses in conflict with an existing agricultural preserve contract shall be prohibited, unless the Commission finds that it meets all the following criteria:

- a. The area is within the annexing agency's SOI.
- b. The Commission makes findings required by Gov. Code Section 56856.5.
- c. The parcel is included in an approved city specific plan.
- d. The soil is not categorized as prime agricultural land.
- e. Mitigation for the loss of agricultural land has been secured in the form of agricultural easements to the satisfaction of the annexing agency and the county.
- f. There is a pending, or approved, cancelation for the property that has been reviewed by the local jurisdictions and the Department of Conservation.
- g. The Williamson Act contract on the property has been non-renewed and final approval of the non-renewal has been granted.

**Guideline 6**. Property owners of prime agricultural and agricultural lands adjacent to land that is the subject of a LAFCO application shall be notified when an application is submitted to LAFCO.

**Guideline 7**. Regarding the timing and fulfillment of mitigation, if the mitigation measure is not in place prior to LAFCO's approval, the responsible entity (e.g., government agency, recognized non-profit organization) should provide LAFCO with information as to how the entity will ensure that the mitigation is provided at the appropriate time. Following LAFCO's approval, the responsible entity should provide LAFCO with an annual update on the status of agricultural mitigation fulfillment until the mitigation commitment is fulfilled.

## **OBSERVATIONS**

LAFCO identified other actions that are not within its purview but that if followed could reduce the impacts of new development on prime agricultural, agricultural, and open space lands. These are provided here so that applicants, other governmental agencies, advocacy organizations, and the public might consider them.

**Observation 1.** LAFCO will evaluate all applications that are submitted and complete. However, LAFCO notes that over a period the impact of new applications is likely to be reduced if applicants adopt a hierarchy that gives preference to those projects that have no impacts on prime agricultural, agricultural and/or open space lands, followed by those that minimize impacts, and lastly those that require mitigation of their impacts.

**Observation 2.** Undeveloped prime agricultural, agricultural and open space lands exist primarily in east Contra Costa County, as does much of the remaining open space; however, most of the historical conversion of this land occurred elsewhere in the county. In order to preserve the remaining land, a countywide effort involving funding may be appropriate.

**Observation 3.** Any jurisdiction that contains prime agricultural, agricultural and/or open space land can periodically review whether its land use and other regulations strike the proper balance between discouraging development and conversion of prime agricultural, agricultural and open space lands with encouraging economically viable agriculture-based businesses that will keep agriculture production high.

#### 4.1 DRAFT AGRICULTURAL AND OPEN SPACE PRESERVATION POLICY - VERSION 1

#### **PREFACE**

LAFCO's enabling and guiding legislation, the Cortese Knox Hertzberg (CKH) Act, begins with the following statement.

"The Legislature finds and declares that it is the policy of the state to encourage orderly growth and development which are essential to the social, fiscal, and economic well-being of the state. The Legislature recognizes that the logical formation and determination of local agency boundaries is an important factor in promoting orderly development and in balancing that development with sometimes competing state interests of discouraging urban sprawl, preserving open-space and prime agricultural lands, and efficiently extending government services." (§56001)

Beginning in the late 1800s, farmers and ranchers made Contra Costa County an important source of agricultural products. Much of the County has good soils, a mild climate, and adequate water. Western and central Contra Costa <u>waswere</u> used for agriculture well into the twentieth century. John Muir farmed and ranched approximately 2,600 acres in what is now Martinez, Concord, and the Alhambra Valley. While the County's population was increasing, by current standards, the County's population was small. The 1910 census recorded 31,764 residents, less than the 2015 population of Pleasant Hill.

Development, which began in earnest after World War II, transformed Contra Costa County. As urban and suburban development occurred, Contra Costa County experienced significant reduction in the amount and economic importance of agricultural lands. Simultaneously, critical open space habitat for sensitive species declined. By 2010, the Census reported that Contra Costa had 1,049,025 people, representing 3,300% growth since 1910. Contra Costa County's 2040 population is forecast to be 1,338,400.

As a result of population and job growth, agricultural land was converted to houses, <u>schools</u>, commercial centers, job centers, and transportation corridors. In 2015, there were about 30,000 acres of active agricultural land in Contra Costa County, excluding rangeland and pastureland, most of it located in the eastern portion of the County. There <u>isare</u> approximately 175,000 acres of rangeland and pastureland in the County.<sup>1</sup>

Agriculture in Contra Costa County is worth approximately \$128.5 million (farm production) in 2015 and is an important economic sector. The value of agricultural production has risen in recent years.<sup>2</sup> However, some worry that Contra Costa's agricultural industry may approach a tipping point beyond which agriculture becomes less viable due to a lack of labor, suppliers, and processors located nearby.<sup>3</sup>

The pressure on agricultural land also extends to wildlife and riparian areas. In some cases, conversion of these lands through development disrupts an ecosystem that used to depend on the now developed land as a travel route, or a seasonal or permanent source of food and water.

The County and some cities are active in efforts to preserve agricultural and open space lands. For example, in the 1970s, the County created a County Agricultural Core to the east and south of Brentwood.

Formatted: Font: 12 pt

<sup>&</sup>lt;sup>1</sup> 2015 Crop and Livestock Report, Contra Costa County Agricultural Commissioner

<sup>&</sup>lt;sup>2</sup> 2008-2015 Crop and Livestock Reports, Contra Costa County Agricultural Commissioner

<sup>&</sup>lt;sup>3</sup> Sustaining our Agricultural Bounty: An Assessment of the Current State of Farming and Ranching in the San Francisco Bay Area – A

Wwhite paper by the American *fF*armland Trust, Greenbelt Alliance and Sustainable Agriculture Education (SAGE), January 2011

The City of Brentwood has an agricultural mitigation program that collected more than \$12 million in mitigation fees and through conservation organizations, and acquired the development rights over approximately 1,000 acres of agricultural lands. In 2006, the voters adopted Urban Limit Lines (ULLs) for the County and each municipality, and these actions helped protect undeveloped land outside the ULLs. Furthermore, the County adopted the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCCHCP/NCCP) that protects sensitive habitat for plants and animals in East Contra Costa.

LAFCO embraces its objectives of encouraging orderly growth and development while discouraging urban sprawl, efficiently extending government services, and preserving open space and prime agricultural lands. Through the review and approval or denial process of boundary changes and other applications, LAFCO has considerable authority to provide for the preservation of open space and agricultural land, and impose terms and conditions. (§§56885 -56890).

While LAFCO has authority to achieve the objectives of the CKH Act, there are things that LAFCO cannot do, for example, directly regulate land use.<sup>4</sup> Therefore, successful preservation of prime agricultural, agricultural and open space lands and of agriculture as a business requires that both applicants and other agencies also lead. At the end of this policy are observations about other opportunities facing residents, advocacy organizations, and governmental agencies that could also strengthen and preserve agriculture and open space lands.

#### **AUTHORITY OF LAFCO**

LAFCO's authority derives from the CKH Act. Among the purposes of LAFCO are <u>to encourage planned</u>, <u>orderly</u>, <u>and efficient urban development while at the same time giving appropriate consideration to the</u> <u>preservation of prime agricultural and open space lands discouraging urban sprawl and preserving</u> <del>open space and agricultural lands</del> (§56300). The CKH Act includes provisions that grant LAFCO the authority to consider and provide for the preservation of open space and agricultural lands. Among these provisions is §56377 which describes the intent of the legislation with regard to agricultural lands:

"56377. In reviewing and approving or disapproving proposals which could reasonably be expected to induce, facilitate, or lead to the conversion of existing open space lands to uses other than open space uses, the commission shall consider all of the following policies and priorities:
(a) Development or use of land for other than open space uses shall be guided away from existing prime agricultural lands in open space use toward areas containing non-prime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.
(b) Development of existing vacant or non-prime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the SOI of a local agency should be encouraged before any proposal is approved that would allow for or lead to the development of existing open space lands for non-open space uses that are outside of the existing jurisdiction of the local agency or outside of the existing jurisdiction of the local agency."

LAFCO is specifically charged in some instances with protecting open space and agricultural land. For example, an island annexation may not be approved if the island consists of prime agricultural land [§56375.3(b)(5)]. LAFCO may not approve a change to an SOI where the affected territory is subject to a Williamson Act contract or farmland security zone unless certain conditions exist (§§56426 and 56426.5).

<sup>&</sup>lt;sup>4</sup> "A commission shall not impose any conditions that would directly regulate land use density or intensity, property development, or subdivision requirements" [§§56375(6), 56886].

Contra Costa LAFCO encourages planned, orderly, and efficient urban development while at the same time giving appropriate consideration to the preservation of prime agricultural, agricultural and open space lands (\$56300).

When making a decision, LAFCO must consider whether an application and its effects conform to both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities in Sections 56377 and 56668(d). Finally, LAFCO must consider the effect of an application on maintaining the physical and economic integrity of agricultural lands [§56668 (e)].

An application for a change of organization, reorganization, the establishment of or change to a sphere of influence (SOI), the extension of extraterritorial services, and other LAFCO actions as contained in the CKH Act will be evaluated in accordance with LAFCO's adopted <u>Agricultural and Open Space policy on the Preservation Policy of Open Space and Agricultural Land</u>.

#### PURPOSE OF THE POLICY

The purpose of this policy is threefold: 1) to provide guidance to the applicant on how to assess the impacts on prime agricultural, agricultural and open space lands of applications submitted to LAFCO, and <u>enable the applicant</u> to explain how the applicant intends to mitigate those impacts; 2) to provide a framework for LAFCO to evaluate and process in a consistent manner, applications before LAFCO that involve or impact prime agricultural, agricultural and/or open space lands; and 3) to explain to the public how LAFCO will evaluate and assess applications that affect prime agricultural, agricultural and/or open space lands.

#### **DEFINITIONS**

Several terms are important in understanding LAFCO's responsibility and authority to preserve prime agricultural, agricultural and open space lands. These terms and definitions are found below and are applicable throughout these policies. The CKH Act contains the following definitions for agricultural land, prime agricultural land and open space:

**56016**. "**Agricultural lands**" means land currently used for the purpose of producing an agricultural commodity for commercial purposes, land left fallow under a crop rotational program, or land enrolled in an agricultural subsidy or set-aside program.

**56064.** "**Prime agricultural land**" means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:

(a) Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.

(b) Land that qualifies for rating 80 through 100 Storie Index Rating.

(c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Range and Pasture Handbook, Revision 1, December 2003.

(d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars (\$400) per acre.

(e) Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars (\$400) per acre for three of the previous five calendar years.

**56059**. **"Open space"** means any parcel or area of land or water which is substantially unimproved and devoted to an open-space use, as defined in Section 65560.

**65560**. (a) "Local open-space plan" is the open-space element of a county or city general plan adopted by the board or council, either as the local open-space plan or as the interim local open-space plan adopted pursuant to Section 65563.

(b) "Open-space land" is any parcel or area of land or water that is essentially unimproved and devoted to an open-space use as defined in this section, and that is designated on a local, regional, or state open-space plan as any of the following:

(1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays, and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, greenways, as defined in Section 816.52 of the Civil Code, and watershed lands.

(2) Open space used for the managed production of resources, including, but not limited to, forest lands, rangeland, agricultural lands, and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; bays, estuaries, marshes, rivers, and streams that are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

(3) Open space for outdoor recreation, including, but not limited to, areas of outstanding scenic, historic, and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas that serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, greenways, and scenic highway corridors.

(4) Open space for public health and safety, including, but not limited to, areas that require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs, and areas required for the protection and enhancement of air quality.

(5) Open space in support of the mission of military installations that comprises areas adjacent to military installations, military training routes, and underlying restricted airspace that can provide additional buffer zones to military activities and complement the resource values of the military lands.

(6) Open space for the protection of places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code (i.e., Native American Historical, Cultural and Sacred Sites).

#### **GOALS, POLICIES AND GUIDELINES**

The following Goals, Policies, and Guidelines are consistent with the legislative direction provided in the CKH Act. The Goals are intended to be the outcome LAFCO wants to achieve. The Policies provide direction with regard to how those Goals should be achieved by providing specific guidance for decision makers and proponents. Guidelines give stakeholders procedures and practical tips regarding what information LAFCO commissioners and staff need to evaluate an application that affects prime agricultural, agricultural and/or open space lands.

#### **GOALS**

Agriculture and open space are vital and essential to Contra Costa County's economy and environment. Accordingly, boundary changes for urban development should be proposed, evaluated, and approved in a manner that is consistent with the continuing growth and vitality of agriculture within the county. Open space lands provide the region with invaluable public benefits for all who visit, live and work in Contra Costa County. The following goals will help guide LAFCO's decisions regarding prime agricultural, agricultural and open space lands.

**Goal 1**. Minimize the conversion of prime agricultural land <u>and open space land</u> to other land uses while balancing the need to ensure orderly growth and development and the efficient provision of services.<sup>5</sup>

**Goal 2**. Encourage cities, the county, special districts, property owners and other stakeholders to work together to preserve prime agricultural, agricultural and open space lands.

**Goal 3**. Incorporate agricultural <u>and open space</u> land preservation into long range planning consistent with principles of smart growth at the state, county, and municipal levels.

Goal 4. Strengthen and support the agricultural sector of the economy.

**Goal 5**. Fully consider the impacts an application will have on existing prime agricultural, agricultural and open space lands.

Goal 6. Preserve areas that sustain agriculture in Contra Costa County.

#### POLICIES

It is the policy of Contra Costa LAFCO that, consistent with the CKH Act, an application for a change in organization, reorganization, for the establishment of or change to an SOI, the extension of extraterritorial services, and other LAFCO actions as contained in the CKH Act ("applications"), shall provide for planned, well-ordered, efficient urban development patterns with appropriate consideration to preserving open space, agricultural and prime agricultural lands within those patterns. LAFCO's Agricultural and Open Space Preservation Policy provides for a mitigation hierarchy which 1) encourages avoidance of impacts to prime agricultural, agricultural and open space lands, 2) minimizes impacts to these lands, and 3) mitigates impacts that cannot be avoided while pursuing orderly growth and development.

The following policies support the goals stated above and will be used by Contra Costa LAFCO when considering an application that involves prime agricultural, agricultural and/or open space lands:

**Policy 1**. The Commission encourages local agencies to adopt policies that result in efficient, coterminous and logical growth patterns within their General Plan, Specific Plans and SOI areas, and that encourage preservation of prime agricultural, agricultural and open space lands in a manner that is consistent with LAFCO's policy.

**Policy 2.** Vacant land within urban areas should be developed before prime agricultural, agricultural and/or open space land is annexed for non-agricultural and non-open space purposes.<sup>6</sup>

**Policy 3**. Land substantially surrounded by existing jurisdictional boundaries (e.g., islands) should be annexed before other lands.

<sup>&</sup>lt;sup>5</sup> In minimizing the conversion of open space land, the Commission may give lower priority to rangeland per 65560.b.2. <sup>6</sup> The Commission recognizes there may be instances in which vacant land is planned to be used in a manner that is important to the orderly and efficient long-term development of the county and land-use agency and <u>that differs from the proposed use of</u> the area in an application to LAFCO. LAFCO will consider such situations on a case-by-case basis.

**Policy 4**. Where feasible, and consistent with LAFCO policies, non-prime agricultural land should be annexed before prime agricultural land.

**Policy 5.** While annexation of prime agricultural lands, agricultural lands and open space lands is not prohibited, <u>Hin</u> general, urban development should be discouraged in <u>these areasagricultural areas</u>. For example, agricultural land should not be annexed for non-agricultural <u>or non-open space</u> purposes when feasible alternatives exist <u>that allow for orderly and efficient growth</u>. Large lot rural development that places pressure on a jurisdiction to provide services, and causes agricultural areas to be infeasible for farming <u>or agricultural business</u>, is discouraged.

**Policy 6.** The continued productivity and sustainability of agricultural land surrounding existing communities should be promoted by preventing the premature conversion of agricultural land to other uses and, to the extent feasible, minimizing conflicts between agricultural and other land uses. Buffers and/or local right to farm ordinances should be established to promote this policy. <u>Contra Costa County has a Right to Farm ordinance which requires notification of purchases and users of property adjacent to or near agricultural operations of the inherent potential problems associates with such purchase or residential use.</u>

Policy 7. Development near agricultural land should minimize adverse impacts to agricultural operations.

Policy 8. Development near open space should minimize adverse impacts to open space uses.

**Policy 9**. The Commission will consider feasible mitigation (found in the following guidelines) if an application would result in the loss of prime agricultural, agricultural and/or open space lands.

**Policy 10**. Any mitigations that are conditions of LAFCO's approval of an application should occur close to the location of the impact and within Contra Costa County.

#### **GUIDELINES**

These Guidelines are intended to provide further direction regarding the application of LAFCO's Goals and Policies; to advise and assist the public, agencies, property owners, farmers, ranchers and other stakeholders with regard to LAFCO's expectations in reviewing an application that involves prime agricultural, agricultural and/or open space lands; and to provide sample mitigation measures to address such lands.

**Guideline 1.** Applications submitted to LAFCO involving prime agricultural, agricultural and/or open space lands shall include an Agricultural and Open Space Impact Assessment. At a minimum the following shall be addressed as part of the assessment:

- a. An application must discuss how it balances the State's interest in preserving prime agricultural, agricultural and/or open space lands against the need for orderly development (§56001).
- b. An application must discuss its effect on maintaining the physical and economic integrity of agricultural lands [§56668 (e)].
- c. An application must discuss whether it could reasonably be expected to induce, facilitate, or lead to the conversion of existing open space land to uses other than open space uses (§56377).
- d. An application must describe <u>whether</u>, and if so, how it guides development away from prime agricultural, agricultural and/or open space lands.

- e. An application must describe whether, and if so, how it facilitates development of existing vacant or non-agricultural and/or non-open space lands for urban uses within the existing boundary or SOI of a local agency.
  - f. An application must discuss what measures it contains that will preserve the physical and economic integrity of adjacent prime agricultural, agricultural and/or open space land uses.

**Guideline 2.** If an application involves a loss of prime agricultural, agricultural and/or open space lands, property owners, cities and towns, the county, special districts, and other agricultural and open space conservation agencies should work together as early in the process as possible to either modify the application to avoid impacts or to adequately mitigate the impacts.

**Guideline 3.** The following factors should be considered for an annexation of prime agricultural, agricultural and/or open space lands:

- a. The applicant should <u>provide reference and include</u> a land use inventory that indicates the amount of available land within the subject jurisdiction for the proposed land use. <u>The land use inventory may be one that has been prepared by the applicable land use agency.</u>
- b. The applicant should provide an evaluation of the effectiveness of measures proposed by the applicant to mitigate the loss of prime agricultural, agricultural and/or open space lands, and to preserve adjoining lands for prime agricultural, agricultural and/or open space use to prevent their premature conversion to other uses. Examples of such measures include, but are not limited to:
  - 1. Acquisition or dedication of prime agricultural and agricultural land (e.g., substitution ratio of at least 1:1 for the prime agricultural land annexed), development rights, bringing qualified land into an open space plan, open space and agricultural conservation easements to permanently protect adjacent or other prime agricultural, agricultural and/or open space lands within the county. Any land previously protected should not be used as the mitigation for any other project.
  - 2. Participation in other local development programs that direct development towards urban areas in the county (such as transfer or purchase of development credits).
  - 3. Payment to local government agencies and/or recognized non-profit organizations working in Contra Costa County for the purpose of preserving prime agricultural, agricultural and/or open space lands; payment should be sufficient to fully fund the acquisition, dedication, restoration and maintenance of land which is of equal or better quality.
  - 4. Establishment of buffers <u>of at least 300 feet</u> to protect adjacent prime agricultural, agricultural and/or open space lands from the effects of development. <u>Such buffers many be permanent</u>, <u>temporary, or rolling, and may take many forms (e.g., easements, dedications, appropriate zoning, streets, parks, etc.).</u>
  - 5. Where applicable, compliance with the provisions of the ECCCHCP/NCCP or a similar plan enacted by the County, cities or another regional, state or federal permitting agency.
  - 6. Other measures agreed to by the applicant and the land use jurisdiction that meet the intent of replacing prime agricultural and agricultural lands at a minimum 1:1 ratio.
  - 7. Participation in an advanced mitigation plan for prime agricultural, agricultural and/or open space lands.
  - 8. Participation in measures to promote and/or enhance the viability of prime agricultural and agricultural lands and the agricultural industry in Contra Costa County.

Formatted: Not Highlight

**Guideline 4.** Detachment of prime agricultural, agricultural and/or open space lands should be encouraged if consistent with the SOI for that agency.

**Guideline 5**. Annexation for land uses in conflict with an existing agricultural preserve contract shall be prohibited, unless the Commission finds that it meets all the following criteria:

- a. The area is within the annexing agency's SOI.
- b. The Commission makes findings required by Gov. Code Section 56856.5.
- c. The parcel is included in an approved city specific plan.
- d. The soil is not categorized as prime agricultural land.
- e. Mitigation for the loss of agricultural land has been secured in the form of agricultural easements to the satisfaction of the annexing agency and the county.
- f. There is a pending, or approved, cancelation for the property that has been reviewed by the local jurisdictions and the Department of Conservation.
- g. The Williamson Act contract on the property has been non-renewed and final approval of the non-renewal has been granted.

**Guideline 6**. Property owners of prime agricultural and agricultural lands adjacent to land that is the subject of a LAFCO application shall be notified when an application is submitted to LAFCO.

**Guideline 7.** Regarding the timing and fulfillment of mitigation, if the mitigation measure is not in place prior to LAFCO's approval, the responsible entity (e.g., government agency, recognized non-profit organization) should provide LAFCO with information as to how the entity will ensure that the mitigation is provided at the appropriate time. Following LAFCO's approval, the responsible entity should provide LAFCO with an annual update on the status of agricultural mitigation fulfillment until the mitigation commitment is fulfilled.

#### ADDITIONAL OBSERVATIONS

LAFCO identified other actions that are not within its purview but that if followed could reduce the impacts of new development on prime agricultural, agricultural, and open space lands. These are provided here so that applicants, other governmental agencies, advocacy organizations, and the public might consider them.

**Observation 1.** LAFCO will evaluate all applications that are submitted and complete. However, LAFCO notes that over a period the impact of new applications is likely to be reduced if applicants adopt a hierarchy that gives preference to those projects that have no impacts on prime agricultural, agricultural and/or open space lands, followed by those that minimize impacts, and lastly those that require mitigation of their impacts.

**Observation 2.** Undeveloped prime agricultural, agricultural and open space lands exist primarily in east Contra Costa County, as does much of the remaining open space; however, most of the historical conversion of this land occurred elsewhere in the county. In order to preserve the remaining land, a countywide effort involving funding may be appropriate.

**Observation 3.** Any jurisdiction that contains prime agricultural, agricultural and/or open space land can periodically review whether its land use and other regulations strike the proper balance between

Formatted: Font: (Default) Times New Roman, 12 pt, Bold

Formatted: Font: Bold
Formatted: Font: Not Bold
Formatted: Font: Not Bold
Formatted: Font: Not Bold
<b>Formatted:</b> Font: (Default) Times New Roman, 12 pt
Formatted: Font: (Default) Times New Roman, 12 pt
Formatted: Font: (Default) Times New Roman, 12 pt
Formatted: Font: (Default) Times New Roman, 12 pt
Formatted: Font: (Default) Times New Roman, 12 pt

discouraging development and conversion of prime agricultural, agricultural and open space lands with encouraging economically viable agriculture-based businesses that will keep agriculture production high.

Sept 7, August 10, July 6, 2016

## 4.1 DRAFT AGRICULTURAL AND OPEN SPACE PRESERVATION POLICY – VERSION 2

# **PREFACE**

LAFCO's enabling and guiding legislation, the Cortese Knox Hertzberg (CKH) Act, begins with the following statement.

"The Legislature finds and declares that it is the policy of the state to encourage orderly growth and development which are essential to the social, fiscal, and economic well-being of the state. The Legislature recognizes that the logical formation and determination of local agency boundaries is an important factor in promoting orderly development and in balancing that development with sometimes competing state interests of discouraging urban sprawl, preserving open-space and prime agricultural lands, and efficiently extending government services." (§56001)

Beginning in the late 1800s, farmers and ranchers made Contra Costa County an important source of agricultural products. Much of the County has good soils, a mild climate, and adequate water. Western and central Contra Costa were used for agriculture well into the twentieth century. John Muir farmed and ranched approximately 2,600 acres in what is now Martinez, Concord, and the Alhambra Valley. While the County's population was increasing, by current standards, the County's population was small. The 1910 census recorded 31,764 residents, less than the 2015 population of Pleasant Hill.

Development, which began in earnest after World War II, transformed Contra Costa County. As urban and suburban development occurred, Contra Costa County experienced significant reduction in the amount and economic importance of agricultural lands. Simultaneously, critical open space habitat for sensitive species declined. By 2010, the Census reported that Contra Costa had 1,049,025 people, representing 3,300% growth since 1910. Contra Costa County's 2040 population is forecast to be 1,338,400.

As a result of population and job growth, agricultural land was converted to houses, schools, commercial centers, job centers, and transportation corridors. In 2015, there were about 30,000 acres of active agricultural land in Contra Costa County, excluding rangeland and pastureland, most of it located in the eastern portion of the County. There are approximately 175,000 acres of rangeland and pastureland in the County. <sup>1</sup>

Agriculture in Contra Costa County is worth approximately \$128.5 million (farm production) in 2015 and is an important economic sector. The value of agricultural production has risen in recent years.<sup>2</sup> However, some worry that Contra Costa's agricultural industry may approach a tipping point beyond which agriculture becomes less viable due to a lack of labor, suppliers, and processors located nearby.<sup>3</sup>

The pressure on agricultural land also extends to wildlife and riparian areas. In some cases, conversion of these lands through development disrupts an ecosystem that used to depend on the now developed land as a travel route, or a seasonal or permanent source of food and water.

The County and some cities are active in efforts to preserve agricultural and open space lands. For example, in the 1970s, the County created a County Agricultural Core to the east and south of Brentwood.

<sup>&</sup>lt;sup>1</sup> 2015 Crop and Livestock Report, Contra Costa County Agricultural Commissioner

<sup>&</sup>lt;sup>2</sup> 2008-2015 Crop and Livestock Reports, Contra Costa County Agricultural Commissioner

<sup>&</sup>lt;sup>3</sup> Sustaining our Agricultural Bounty: An Assessment of the Current State of Farming and Ranching in the San Francisco Bay Area – A white paper by the American Farmland Trust, Greenbelt Alliance and Sustainable Agriculture Education (SAGE), January 2011

The City of Brentwood has an agricultural mitigation program that collected more than \$12 million in mitigation fees and through conservation organizations, and acquired the development rights over approximately 1,000 acres of agricultural lands. In 2006, the voters adopted Urban Limit Lines (ULLs) for the County and each municipality, and these actions helped protect undeveloped land outside the ULLs. Furthermore, the County adopted the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCCHCP/NCCP) that protects sensitive habitat for plants and animals in East Contra Costa.

LAFCO embraces its objectives of encouraging orderly growth and development while discouraging urban sprawl, efficiently extending government services, and preserving open space and prime agricultural lands. Through the review and approval or denial process of boundary changes and other applications, LAFCO has considerable authority to provide for the preservation of open space and agricultural land, and impose terms and conditions. (§§56885 -56890).

While LAFCO has authority to achieve the objectives of the CKH Act, there are things that LAFCO cannot do, for example, directly regulate land use.<sup>4</sup> Therefore, successful preservation of prime agricultural, agricultural and open space lands and of agriculture as a business requires that both applicants and other agencies also lead. At the end of this policy are observations about other opportunities facing residents, advocacy organizations, and governmental agencies that could also strengthen and preserve agriculture and open space lands.

# **AUTHORITY OF LAFCO**

LAFCO's authority derives from the CKH Act. Among the purposes of LAFCO are to encourage planned, orderly, and efficient urban development while at the same time giving appropriate consideration to the preservation of prime agricultural, agricultural and open space lands (§56300). The CKH Act includes provisions that grant LAFCO the authority to consider and provide for the preservation of open space and agricultural lands. Among these provisions is §56377 which describes the intent of the legislation with regard to agricultural lands:

"56377. In reviewing and approving or disapproving proposals which could reasonably be expected to induce, facilitate, or lead to the conversion of existing open space lands to uses other than open space uses, the commission shall consider all of the following policies and priorities:
(a) Development or use of land for other than open space uses shall be guided away from existing prime agricultural lands in open space use toward areas containing non-prime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.
(b) Development of existing vacant or non-prime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the SOI of a local agency should be encouraged before any proposal is approved that would allow for or lead to the development of existing open space lands for non-open space uses that are outside of the existing jurisdiction of the local agency."

LAFCO is specifically charged in some instances with protecting open space and agricultural land. For example, an island annexation may not be approved if the island consists of prime agricultural land [§56375.3(b)(5)]. LAFCO may not approve a change to an SOI where the affected territory is subject to a Williamson Act contract or farmland security zone unless certain conditions exist (§§56426 and 56426.5).

<sup>&</sup>lt;sup>4</sup> "A commission shall not impose any conditions that would directly regulate land use density or intensity, property development, or subdivision requirements" [§§56375(6), 56886].

When making a decision, LAFCO must consider whether an application and its effects conform to both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities in Sections 56377 and 56668(d). Finally, LAFCO must consider the effect of an application on maintaining the physical and economic integrity of agricultural lands [§56668 (e)].

An application for a change of organization, reorganization, the establishment of or change to a sphere of influence (SOI), the extension of extraterritorial services, and other LAFCO actions as contained in the CKH Act will be evaluated in accordance with LAFCO's adopted Agricultural and Open Space Preservation Policy.

## PURPOSE OF THE POLICY

The purpose of this policy is threefold: 1) to provide guidance to the applicant on how to assess the impacts on prime agricultural, agricultural and open space lands of applications submitted to LAFCO, and enable the applicant to explain how the applicant intends to <u>meet or exceed the mitigateion provisions</u> <u>outlined in this policy-those impacts</u>; 2) to provide a framework for LAFCO to evaluate and process in a consistent manner, applications before LAFCO that involve or impact prime agricultural, agricultural and/or open space lands; and 3) to explain to the public how LAFCO will evaluate and assess applications that affect prime agricultural, agricultural and/or open space lands.

# **DEFINITIONS**

Several terms are important in understanding LAFCO's responsibility and authority to preserve prime agricultural, agricultural and open space lands. These terms and definitions are found below and are applicable throughout these policies. The CKH Act contains the following definitions for agricultural land, prime agricultural land and open space:

**56016**. "**Agricultural lands**" means land currently used for the purpose of producing an agricultural commodity for commercial purposes, land left fallow under a crop rotational program, or land enrolled in an agricultural subsidy or set-aside program.

**56064.** "**Prime agricultural land**" means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:

(a) Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.

(b) Land that qualifies for rating 80 through 100 Storie Index Rating.

(c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Range and Pasture Handbook, Revision 1, December 2003.

(d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars (\$400) per acre.(e) Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars (\$400) per acre.

**56059**. **"Open space"** means any parcel or area of land or water which is substantially unimproved and devoted to an open-space use, as defined in Section 65560.

**65560**. (a) "Local open-space plan" is the open-space element of a county or city general plan adopted by the board or council, either as the local open-space plan or as the interim local open-space plan adopted pursuant to Section 65563.

(b) "Open-space land" is any parcel or area of land or water that is essentially unimproved and devoted to an open-space use as defined in this section, and that is designated on a local, regional, or state open-space plan as any of the following:

(1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays, and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, greenways, as defined in Section 816.52 of the Civil Code, and watershed lands.

(2) Open space used for the managed production of resources, including, but not limited to, forest lands, rangeland, agricultural lands, and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; bays, estuaries, marshes, rivers, and streams that are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

(3) Open space for outdoor recreation, including, but not limited to, areas of outstanding scenic, historic, and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas that serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, greenways, and scenic highway corridors.

(4) Open space for public health and safety, including, but not limited to, areas that require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs, and areas required for the protection and enhancement of air quality.

(5) Open space in support of the mission of military installations that comprises areas adjacent to military installations, military training routes, and underlying restricted airspace that can provide additional buffer zones to military activities and complement the resource values of the military lands.

(6) Open space for the protection of places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code (i.e., Native American Historical, Cultural and Sacred Sites).

#### **GOALS, POLICIES AND GUIDELINES**

The following Goals, Policies, and Guidelines are consistent with the legislative direction provided in the CKH Act. The Goals are intended to be the outcome LAFCO wants to achieve. The Policies provide direction with regard to how those Goals should be achieved by providing specific guidance for decision makers and proponents. Guidelines give stakeholders procedures and practical tips regarding what information LAFCO commissioners and staff need to evaluate an application that affects prime agricultural, agricultural and/or open space lands.

#### **GOALS**

Agriculture and open space are vital and essential to Contra Costa County's economy and environment. Accordingly, boundary changes for urban development should be proposed, evaluated, and approved in a manner that is consistent with the continuing growth and vitality of agriculture within the county. Open space lands provide the region with invaluable public benefits for all who visit, live and work in Contra Costa County. The following goals will help guide LAFCO's decisions regarding prime agricultural, agricultural and open space lands.

**Goal 1**. Minimize the conversion of prime agricultural land and open space land to other land uses while balancing the need to ensure orderly growth and development and the efficient provision of services. <sup>5</sup>

**Goal 2**. Encourage cities, the county, special districts, property owners and other stakeholders to work together to preserve prime agricultural, agricultural and open space lands.

**Goal 3**. Incorporate agricultural land <u>and open space</u> preservation into long range planning consistent with principles of smart growth at the state, county, and municipal levels.

Goal 4. Strengthen and support the agricultural sector of the economy.

**Goal 5**. Fully consider the impacts an application will have on existing prime agricultural, agricultural and open space lands.

Goal 6. Preserve areas that sustain agriculture in Contra Costa County.

**Goal 7**. Mitigate the impacts that will result from a LAFCO approval that will lead to the conversion of prime agricultural, agricultural, and open space lands to at least the degree specified in the Agricultural and Open Space Preservation Policy.

# **POLICIES**

It is the policy of Contra Costa LAFCO that, consistent with the CKH Act, an application for a change in organization, reorganization, for the establishment of or change to an SOI, the extension of extraterritorial services, and other LAFCO actions as contained in the CKH Act ("applications"), shall provide for planned, well-ordered, efficient urban development patterns with appropriate consideration to preserving open space, agricultural and prime agricultural lands within those patterns. LAFCO's Agricultural and Open Space Preservation Policy provides for a mitigation hierarchy which 1) encourages avoidance of impacts to prime agricultural, agricultural and open space lands, 2) minimizes impacts to these lands, and 3) mitigates impacts that cannot be avoided while pursuing orderly growth and development.

The following policies support the goals stated above and will be used by Contra Costa LAFCO when considering an application that involves prime agricultural, agricultural and/or open space lands:

**Policy 1**. The Commission encourages local agencies to adopt policies that result in efficient, coterminous and logical growth patterns within their General Plan, Specific Plans and SOI areas, and that encourage preservation of prime agricultural, agricultural and open space lands in a manner that is consistent with LAFCO's policy.

**Policy 2.** Vacant land within urban areas should be developed before prime agricultural, agricultural and/or open space land is annexed for non-agricultural and non-open space purposes.<sup>6</sup>

**Policy 3**. Land substantially surrounded by existing jurisdictional boundaries (e.g., islands) should be annexed before other lands.

<sup>&</sup>lt;sup>5</sup> In minimizing the conversion of open space land, the Commission may give lower priority to rangeland per 65560.b.2.

<sup>&</sup>lt;sup>6</sup> The Commission recognizes there may be instances in which vacant land is planned to be used in a manner that is important to the orderly and efficient long-term development of the county and land use agency and that differs from the proposed use of the area in an application to LAFCO. LAFCO will consider such situations on a case-by-case basis.

**Policy 4**. Where feasible, and consistent with LAFCO policies, non-prime agricultural land should be annexed before prime agricultural land.

**Policy 5.** While annexation of prime agricultural lands, agricultural lands and open space lands is not prohibited, in general, urban development should be discouraged in these areas. For example, agricultural land should not be annexed for non-agricultural or non-open space purposes when feasible alternatives exist that allow for orderly and efficient growth. Large lot rural development that places pressure on a jurisdiction to provide services, and causes agricultural areas to be infeasible for farming or agricultural business, is discouraged.

**Policy 6**. The continued productivity and sustainability of agricultural land surrounding existing communities should be promoted by preventing the premature conversion of agricultural land to other uses and, to the extent feasible, minimizing conflicts between agricultural and other land uses. Buffers and/or local right to farm ordinances should be established to promote this policy. Contra Costa County has a Right to Farm ordinance which requires notification of purchases and users of property adjacent to or near agricultural operations of the inherent potential problems associates with such purchase or residential use.

Policy 7. Development near agricultural land should minimize adverse impacts to agricultural operations.

Policy 8. Development near open space should minimize adverse impacts to open space uses.

**Policy 9**. The Commission will <u>consider feasible require at least minimum</u> mitigations (found in the following guidelines) if an application would result in the loss of prime agricultural, agricultural and/or open space lands.

**Policy 10**. Any mitigations that are conditions of LAFCO's approval of an application should occur close to the location of the impact and within Contra Costa County.

# **GUIDELINES**

These Guidelines are intended to provide further direction regarding the application of LAFCO's Goals and Policies; to advise and assist the public, agencies, property owners, farmers, ranchers and other stakeholders with regard to LAFCO's expectations in reviewing an application that involves prime agricultural, agricultural and/or open space lands; and to provide <u>sampleminimum</u> mitigation measures.

**Guideline 1.** Applications submitted to LAFCO involving prime agricultural, agricultural and/or open space lands shall include an Agricultural and Open Space Impact Assessment. At a minimum the following shall be addressed as part of the assessment:

- a. An application must discuss how it balances the State's interest in preserving prime agricultural and/or open space lands against the need for orderly development (§56001).
- b. An application must discuss its effect on maintaining the physical and economic integrity of agricultural lands [§56668 (e)].
- c. An application must discuss whether it could reasonably be expected to induce, facilitate, or lead to the conversion of existing open space land to uses other than open space uses (§56377).
- d. An application must describe whether, and if so, how it guides development away from prime agricultural, agricultural and/or open space lands.

- e. An application must describe whether, and if so, how it facilitates development of existing vacant or non-agricultural and/or non-open space lands for urban uses within the existing boundary or SOI of a local agency.
- f. An application must discuss what measures it contains that will preserve the physical and economic integrity of adjacent prime agricultural, agricultural and/or open space land uses.

**Guideline 2.** If an application involves a loss of prime agricultural, agricultural and/or open space lands, property owners, cities and towns, the county, special districts, and other agricultural and open space conservation agencies should work together as early in the process as possible to either modify the application to avoid impacts or to adequately mitigate the impacts.

**Guideline 3.** The following factors should be considered for an annexation of prime agricultural, agricultural and/or open space lands:

- a. The applicant should reference and include a land use inventory that indicates the amount of available land within the subject jurisdiction for the proposed land use. The land use inventory may be one that has been prepared by the applicable land use agency.
- b. The applicant should <u>explain how it will meet the minimum mitigation provisions of this policy.</u> <u>These provisions includeprovide an evaluation of the effectiveness of measures proposed by the</u> applicant to mitigate the loss of prime agricultural, agricultural and/or open space lands, and to preserve adjoining lands for prime agricultural, agricultural and/or open space use to prevent their premature conversion to other uses. Examples of such measures include, but are not limited to:
  - 1. For every acre of prime agricultural, agricultural, and open space land that will be converted to another use as a result of an application before LAFCO, comparable land within Contra Costa County should be protected in the following ratios.
    - (a) Prime agricultural land [2-3] acres protected for every acre converted
    - (b) Non-prime agricultural land [1-2] acres protected for every acre converted
    - (c) Open space land [1-3] acres protected for every acre converted, with rangeland that does not meet another definition of open space land requiring the least protection
    - (d) Land may be protected through acquisition for permanent use as agricultural or open space uses, acquiring development rights that permanently preclude other uses, bringing qualified land into an open space plan, open space and agricultural conservation easements to permanently protect adjacent or other prime agricultural, agricultural and/or open space lands within the county. Any land previously protected should not be used as the mitigation for any other project.
    - (e) Land may be protected directly by the applicant or a fee may be paid to local government agencies and/or recognized non-profit organizations working in Contra Costa County for the purpose of preserving prime agricultural, agricultural and/or open space lands; payment must be sufficient to fully fund the acquisition, dedication, restoration and maintenance of land which is of equal or better quality.
  - **1.2.** Applications that propose to convert prime agricultural and agricultural lands to other uses should include provisions to maintain at least a 300' buffer between the new uses and any adjacent prime agricultural and agricultural lands. Such buffers may be permanent, temporary, or rolling, and may take many forms (e.g., easements, dedications, appropriate zoning, streets, parks, etc.).
  - 2.3.Applications that propose to convert prime agricultural and agricultural lands to other uses and are adjacent to prime agricultural and agricultural lands shall adopt a "Right to Farm" agreement that

shall be included in the title of the land and in any subdivision thereof. Contra Costa County has a Right to Farm ordinance which requires notification of purchases and users of property adjacent to or near agricultural operations of the inherent potential problems associates with such purchase or residential use.

- 3.4. Applications may receive partial or full credit against these requirements for other mitigations included in the application that result in a similar or greater benefit. These credits may, for example, arise from meeting the requirements of local agricultural and open space mitigation policies, complying with the provisions of the ECCCHCP/NCCP or a similar plan enacted by the County, cities or another regional, state or federal permitting agency, or other comparable actions approved by LAFCO.
- 5. Applications may receive partial or full credit against the requirements listed above for other mitigations proposed by the applicant. To receive any credit, the applicant must provide an evaluation of the effectiveness of measures proposed by the applicant to mitigate the loss of prime agricultural, agricultural and/or open space lands, and to preserve adjoining lands for prime agricultural, agricultural and/or open space use to prevent their premature conversion to other uses. Examples of such measures include, but are not limited to:
- 4. Acquisition or dedication of prime agricultural and agricultural land (e.g., substitution ratio of at least 1:1 for the prime agricultural land annexed), development rights, bringing qualified land into an open space plan, open space and agricultural conservation easements to permanently protect adjacent or other prime agricultural, agricultural and/or open space lands within the county. Any land previously protected should not be used as the mitigation for any other project.
  - a. Participation in other local development programs that direct development towards urban areas in the county (such as transfer or purchase of development credits).
- 5. Payment to local government agencies and/or recognized non-profit organizations working in Contra Costa County for the purpose of preserving prime agricultural, agricultural and/or open space lands; payment should be sufficient to fully fund the acquisition, dedication, restoration and maintenance of land which is of equal or better quality.
- 6. Establishment of buffers of at least 300 feet to protect adjacent prime agricultural, agricultural and/or open space lands from the effects of development. Such buffers many be permanent, temporary, or rolling, and may take many forms (e.g., easements, dedications, appropriate zoning, streets, parks, etc.).
- 7. Where applicable, compliance with the provisions of the ECCCHCP/NCCP or a similar plan enacted by the County, cities or another regional, state or federal permitting agency.
- 8.6. b. Other measures agreed to by the applicant and the land use jurisdiction that meet the intent of replacing prime agricultural and agricultural lands at <u>athe</u> minimum <u>1:1</u> ratios listed above.
- 9.7. c. Participation in an advanced mitigation plan for prime agricultural, agricultural and/or open space lands.
- <u>10.8.</u> d. Participation in measures to promote and/or enhance the viability of prime agricultural and agricultural lands and the agricultural industry in Contra Costa County.

**Guideline 4.** Detachment of prime agricultural, agricultural and/or open space lands should be encouraged if consistent with the SOI for that agency.

**Guideline 5**. Annexation for land uses in conflict with an existing agricultural preserve contract shall be prohibited, unless the Commission finds that it meets all the following criteria:

- a. The area is within the annexing agency's SOI.
- b. The Commission makes findings required by Gov. Code Section 56856.5.
- c. The parcel is included in an approved city specific plan.
- d. The soil is not categorized as prime agricultural land.
- e. Mitigation for the loss of agricultural land has been secured in the form of agricultural easements to the satisfaction of the annexing agency and the county.
- f. There is a pending, or approved, cancelation for the property that has been reviewed by the local jurisdictions and the Department of Conservation.
- g. The Williamson Act contract on the property has been non-renewed and final approval of the non-renewal has been granted.

**Guideline 6**. Property owners of prime agricultural and agricultural lands adjacent to land that is the subject of a LAFCO application shall be notified when an application is submitted to LAFCO.

**Guideline 7**. Regarding the timing and fulfillment of mitigation, if the mitigation measure is not in place prior to LAFCO's approval, the responsible entity (e.g., government agency, recognized non-profit organization) should provide LAFCO with information as to how the entity will ensure that the mitigation is provided at the appropriate time. Following LAFCO's approval, the responsible entity should provide LAFCO with an annual update on the status of agricultural mitigation fulfillment until the mitigation commitment is fulfilled.

#### **OBSERVATIONS**

LAFCO identified other actions that are not within its purview but that if followed could reduce the impacts of new development on prime agricultural, agricultural, and open space lands. These are provided here so that applicants, other governmental agencies, advocacy organizations, and the public might consider them.

**Observation 1.** LAFCO will evaluate all applications that are submitted and complete. However, LAFCO notes that over a period the impact of new applications is likely to be reduced if applicants adopt a hierarchy that gives preference to those projects that have no impacts on prime agricultural, agricultural and/or open space lands, followed by those that minimize impacts, and lastly those that require mitigation of their impacts.

**Observation 2.** Undeveloped prime agricultural, agricultural and open space lands exist primarily in east Contra Costa County, as does much of the remaining open space; however, most of the historical conversion of this land occurred elsewhere in the county. In order to preserve the remaining land, a countywide effort involving funding may be appropriate.

**Observation 3.** Any jurisdiction that contains prime agricultural, agricultural and/or open space land can periodically review whether its land use and other regulations strike the proper balance between discouraging development and conversion of prime agricultural, agricultural and open space lands with encouraging economically viable agriculture-based businesses that will keep agriculture production high.

# Frequently Asked Questions Contra Costa Local Agency Formation Commission Agricultural & Open Space Preservation Policy

The questions and answers below pertain to the Contra Costa Local Agency Formation Commission (LAFCO) and the Commission's Agricultural & Open Space Preservation Policy (AOSPP).

#### What is a Local Agency Formation Commission (LAFCO)?

LAFCO is an independent regulatory agency that receives its powers directly from the California State Legislature. LAFCO regulates the boundaries of cities and most special districts under its jurisdiction, encourages orderly boundaries, ensures the efficient delivery of services, discourages urban sprawl, and preserves agricultural lands and open space.

#### What Does LAFCO Do?

LAFCO is responsible for reviewing proposed jurisdictional boundary changes including annexations and detachments to/from cities and special districts, incorporation of new cities, formation of new special districts, and the consolidation, merger, and dissolution of existing special districts. LAFCO is also responsible for reviewing extraterritorial service agreements between local governmental agencies and establishing and reviewing spheres of influence (SOIs) for cities and special districts. LAFCO has authority to approve a proposal, with or without conditions, or deny a proposal.

#### Who Runs LAFCO?

Contra Costa LAFCO is composed of seven regular commissioners: two members from the County Board of Supervisors; two members who represent cities in the county; two members who represent independent special districts in the county, and one public member. There are also four alternate commissioners, one from each of the above categories. LAFCO staff consists of an Executive Officer, LAFCO Clerk, legal counsel and various support services provided under contracts.

#### Why Does LAFCO Have an AOSPP?

One of LAFCO's responsibilities is to protect agricultural lands and open space. Agriculture and open space are vital to Contra Costa County and offer environmental, economic, quality of life and other benefits.

# Does LAFCO's AOSPP Prioritize the Preservation of Agricultural and Open Space Lands Over Orderly Growth and Development?

No. LAFCO is charged with balancing sometimes competing state interests of orderly development with discouraging urban sprawl, preserving open space and agricultural land, and efficiently extending government services. The AOSPP focuses primarily on the preservation of agricultural and open space lands. Contra Costa LAFCO has a multitude of other policies and procedures that deal with orderly growth and development, the extension of services, and numerous other issues.

#### What is the Purpose of LAFCO's AOSPP?

The purpose of LAFCO's AOSPP is to 1) provide guidance to an applicant on how to assess the impacts on agricultural and/or open space lands of applications submitted to LAFCO, and to explain

how the applicant intends to mitigate those impacts; 2) provide a framework for LAFCO to evaluate, and process in a consistent manner, applications before LAFCO that involve or impact and/or open space lands; and 3) explain to the public how LAFCO will evaluate and assess applications that affect agricultural and/or open space lands.

#### What Will I Find in LAFCO's AOSPP?

LAFCO's AOSPP contains Goals, Policies and Guidelines. The *Goals* support the importance of agriculture and open space lands in Contra Costa County, and help guide LAFCO's decisions regarding boundary changes and the preservation of agricultural and open space lands. The *Policies* provide for a mitigation hierarchy which 1) encourages avoidance of impacts to prime agricultural, agricultural and open space lands, 2) minimizes impacts to these lands, and 3) mitigates impacts that cannot be avoided while pursuing orderly growth and development. The *Guidelines* provide further direction regarding the application of LAFCO's Goals and Policies; advise and assist the public, agencies, property owners, farmers, ranchers and other stakeholders with regard to LAFCO's expectations in reviewing an application that involves agricultural and/or open space lands; and provides sample mitigation measures to address such lands. In addition, the AOSPP contains some general observations as "food for thought." Nothing in LAFCO's AOSPP is construed to automatically disqualify an application.

#### Can LAFCO stop me from selling my agricultural land to a developer?

No. LAFCO has no direct land use authority and has no role in who owns land. LAFCO's AOSPP encourages mitigation that will result from a LAFCO approval that will lead to the conversion of prime agricultural, agricultural, and open space lands to at least the degree specified in the AOSPP.

#### Can LAFCO's AOSPP force me to put a conservation easement on my property?

No. LAFCO's policy will require that a LAFCO application that will convert agricultural and/or open space land to an urban use mitigate for the loss of land (e.g., paying a fee, purchasing a conservation easement from a willing farmer or rancher, otherwise supporting agriculture business, etc.).

#### Do agricultural conservation easements allow public access on my land?

Public access may be allowed but is not a required component of an agricultural conservation easement. An agricultural conservation easement is an agreement between a willing farmer or rancher and a land trust. Farmers and ranchers can negotiate various easement terms, including whether to allow public access. Most agricultural conservation easements do <u>not</u> allow public access.

#### Do agricultural conservation easements restrict the way that farmers can farm?

The property owner and the land trust negotiate the terms of the easements. Current agricultural easements in East Contra Costa County provide farmers with broad discretion in how they farm their land.

#### LAFCO's AOSPP Requires a Land Use Inventory. Where Can I Find This Information?

LAFCO's AOSPP requests that the applicant reference and include a land use inventory that indicates the amount of available land within the subject jurisdiction *for the proposed land use*. The land use inventory may be one that has been prepared by the applicable land use agency. The County and cities are required to prepare a Housing Element, which includes a "Sites Inventory and Analysis." In addition, many counties and cities maintain GIS data layers which include an inventory of vacant parcels.

# LAFCO Requires an Agricultural and Open Space Impact Assessment as Part of an Application to LAFCO. What if the Applicant Fails to Complete, or Partially Completes the Assessment?

Depending on the nature of the proposal, the application may be deemed incomplete until the needed information is provided. LAFCO staff is available for pre-application meetings and to assist with applications. There is no fee for these services.

# What If My Application to LAFCO Will Convert Agricultural or Open Space Land to a Non-Agricultural or Non-Open Space use – Can LAFCO Impose Mitigation Measures?

LAFCO can impose terms and conditions on any proposal, including, but not limited to, those measures identified in the AOSPP.

What if the Application to LAFCO Will Convert Agricultural or Open Space Land to a Non-Agricultural or Non-Open Space use, and the Applicant Has Already Paid an Agricultural Mitigation Fee (e.g., City of Brentwood) and/or Paid into a Comparable Conservation Program (e.g., East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan? Will LAFCO Take This Into Consideration? Can LAFCO Impose Additional Measures?

Yes. These types of measures are recognized and included among LAFCO's list of sample mitigation measures and LAFCO can consider these as mitigation. Yes, LAFCO can impose additional mitigation measures if it believes that the proposed measures do not adequately mitigate the impacts to agricultural and/or open space lands.

#### What if Only a Portion of My Project Area Impacts Agricultural or Open Space Land?

LAFCO considers each application on its own merits. When reviewing an application, LAFCO must consider at least 16 different factors, one of which is "*the effect of the proposal on maintaining the physical and economic integrity of agricultural lands*..." No one factor is determinative. The AOSPP will apply only to the portion of the project area that consists of prime agricultural, agricultural, or open space land.

# What if the Project Area is Currently Designated for an Agricultural or Open Space Use (by the County), and the Annexing City has Pre-Zoned the Project Area for a Non-Agricultural or Open Space Use – Can LAFCO Deny the City's Request to Annex the Property?

Yes. LAFCO has broad discretion to approve, with or without conditions, or deny a proposal. The applicability of the AOSPP to a parcel is determined by several factors and zoning is only one of these factors.

# What if the Project Area is Currently Designated for an Agricultural or Open Space Use, and is Within a Voter Approved Urban Limit Line – Can LAFCO Deny the Request to Annex the Property?

Yes. LAFCO has broad discretion to approve, with or without conditions, or deny a proposal. LAFCO consider the location of a parcel vis-a-vis urban limit lines and urban growth boundaries as a factor in its deliberations.

# Comments to Draft LAFCO Agricultural Open Space Preservation Policy Received On and Since July 13, 2016

Commenter	Format	Received
Cecchini & Cecchini	Letter	7/13/16
Chad Godoy, Contra Costa County Agricultural Commissioner	Letter	7/13/16
Jeff Wiedemann, Rancher	Email	7/13/16
Save Mt. Diablo Members	Emails	7/13/16
Donna Gerber, Greenbelt Alliance Board Member	Memo	8/17/16
Manatt, Phelps & Phillips, LLC	Letter	8/31/16
Walnut Creek Open Space Foundation	Letter	8/31/16
Jim Blickenstaff, Chair, Mt. Diablo Group/Sierra Club	Email	9/6/16
July and August Support Emails	Emails	7/13 - 8/22/16

Cecchini & Cecchini PO Box 1150 Discovery Bay, CA 94548 (925) 437-5003

Dear Contra Costa County LAFCO Members,

I am writing this letter in support for a farmland preservation policy only if it has a component to also preserve farmers and not just the land they work on. Land can only be considered "farmland" if there are farmers able to work it. According to the USDA the average age of a farmer in 2013 was 58 and only 5% of those farmers were under 35. Being a farmer is a difficult profession naturally and has become even more difficult with the anti-agtourism and anti-value-added policies that our federal, state & county governments have implemented.

Not all farmers are profitable and many barely make a living. Contra Costa County is highlighted by a minute group of successful farmers, however this part-to-whole analogy cannot and should not be used to show evidence of profitable farmers since this is not a true sample of farmers in the area. The more correct view is that the majority of the farmers in the area are barely making a living.

My farm has had personal hardships ever since our federal government adopted NAFTA, allowing Mexico to import asparagus into our market at below US growers' costs. According to the California Asparagus Commission, after implementation of NAFTA, the acreage in CA declined from 40,000 acres in 2000 to 7,000 acres as of 2016. Cecchini & Cecchini has deteriorated from a 1,200 acre asparagus farm in 2010 to a current all time low of 20 acres in which we are trying to direct market. This trend can be seen across the farming industry just spend 15 minutes on Google to find out.

US consumers will only pay so much for food. Cheaper imports become attractive as US farmers cost rise. These rising costs are due to availability & cost of water, a skilled reliable work force, regulations and fees and the high cost of equipment & land to farm are all issues a farmer faces and will face in the future. Most consumers are not knowledgeable enough to know if their cucumber came from a farm 50 miles away or 1000s of miles away. The modern consumer believes all fruits and all vegetables grow everywhere all year. Educating the consumer is part of the solution and should be considered in the efforts of a "farmer" or farmland preservation plan.

Farmland preservation people please ask yourself this question: Why are you preserving farmland? Is it because you do not want houses built on it or because you hope to have public access to the land? Maybe it is because you feel like you are doing us farmers a favor? Your answer must be parallel to a farmers need otherwise it should no longer be referred to as "farmland preservation plan" and instead possibly "land imprisonment plan."

Cecchini & Cecchini PO Box 1150 Discovery Bay, CA 94548 (925) 437-5003

How will the farmers continue to be successful? The rigid constraints of current land easements leave much room for future farmers to have the freedom to be able to adapt to new market or crop shifts. For example if a farmer sells an easement in perpetuity then 20 years later a shift occurs in the ag industry and because of the restrictive policies of the past easement the next generation of farmers are now unable to restructure their farm. How will that farmer be supported to keep her farmland? The one time financial gain from a farmland trust has already been used up. The one time financial gain is part of the solution but again it is only part of the solution.

A little history of farming in Contra Costa County: In the late 1800's most of the land was used to grow wheat. In the early part of the 1900's East County became a large fruit growing area with many large packing facilities. In the 1930's Contra Costa island land farmers started growing asparagus. There was about 5,000 acres of asparagus in the county. In the 1940's the Brentwood area began growing celery, lettuce, and then later in the 1970's cabbage. Where did all of these crops go?? In West County near Richmond there used to be many flower and plant growers/business. Today only one currently stands. The point of showing this history is to show how the agriculture industry changes drastically every 10 to 20 years. Will your policies address the need for flexibility and creativity for agriculture enterprise?

The final part of the problem/solution id like to address is meetings and farmer input, not to be confused with participation. There are many groups such as Sustainable Contra Costa County and Contra Costa County Food System Alliances that state a mission to "save agriculture". How many farmers helped to develop their policies? Their members or employees work for organizations that pay them to go to meetings and join groups to get their organization's views heard. Farmer's do not have the ability to go to a meeting in Pleasant Hill in the middle of the day and are most certainly not paid to do so. In the middle of the day, if the sun is shining, most farmers are indeed farming... Furthermore said organizations then send these employees to LAFCO initiatives to explain their highly biased plan how a policy on agriculture should be adopted. None or very few farmers have been involved in this process.

Contra Costa Co, California & the USA needs to have programs that are not mired in red tape, high fees and regulation to help farmers to be quick to change as the markets change. We need programs to introduce young people into jobs in agriculture. Contra Costa County farmers need many different opportunities such as Ag Tourism, value added products, small wineries, farm bakeries, and many things I haven't even thought of at this time.

#### Cecchini & Cecchini PO Box 1150 Discovery Bay, CA 94548 (925) 437-5003

Before LAFCO adopts a farm policy:

- 1. The farmland policy should be county wide not only in East County
- 2. LAFCO should meet with farmers in their respective areas of the county.
- 3. LAFCO members should ask farmers what policies are needed to help farmland and businesses.
- 4. Remember that farmland is not open space. It is privately owned land that a family is trying to make a living on and should not be trespassed on unless invited.
- 5. It is important that LAFCO and people who live in farming areas of the county understand that farmers & farm labor are working everyday. Farmers don't take off weekends during the growing & harvesting season.

Sincerely, Barbara Cecchini, Owner/Operator Cecchini & Cecchini Campus Director First Generation Farmers (925) 437-5003 www.firstgenerationfarmers.org

Alli Cecchini First Generation Farmers Founder & Executive Director 925-331-7607 **Department of Agriculture** 2366 A Stanwell Circle Concord, CA 94520-4807 (925) 646-5250 FAX (925) 646-5732 Contra Costa County

Chad Godoy Agricultural Commissioner Director of Weights and Measures



Dear LAFCO,

July 13, 2016

As the Agricultural Commissioner for Contra Costa County, LAFCO is making one of the most important policies for the future of agriculture. I continue to have concern for the far reaching and future implications of this policy on our agriculture community. While I understand the need for the county to continue to grow, add housing and jobs those should not come at the expense of threatening our agricultural economy. The current Agriculture-Open Space Policy (AOSP) doesn't go far enough to protect prime agricultural lands in Contra Costa County.

As I read through the comments on AOSP there is concern that a 1:1 ratio for mitigating the loss of prime agricultural land doesn't go far enough and it was suggested 3:1 ratio would be better. I agree but still caution LAFCO to adopt any ratio for mitigating the loss prime agricultural land. The reason is that simple any adopted mitigation would obligate the loss of that amount of prime agricultural land in the county. So if a 3:1 ratio is adopt then AOSP will allow up to 33% of the available agricultural land to potentially be developed. A future loss of 33% of prime agricultural lands would devastate our agricultural economy. For our agricultural operations to remain viable and continue to prosper LAFCO needs to develop some other metric to protect prime agriculture lands.

As stated from our Farm Bureau there also needs to be further protections for prime agricultural lands surrounded by urban sprawl to continue their farming operations. These farming operation face considerable pressure from their urban neighbors who may not understand some of the farming practices.

I still am concerned that the AOSP allows the possibility to mitigate the loss of prime agricultural land outside our county, or may allow for the loss of prime agricultural land to become the mitigation factor for open space as stated in Policy 10. Policy 10 needs to be strengthened or further clarified that the mitigations shall be in Contra Costa County.

Thank you Contra Costa LAFCO for addressing the loss of agricultural and open space lands and your endeavor to create a policy to give future LAFCO members and the public guidance on this issue.

Chad Godoy Contra Costa Agricultural Commissioner From: Jeff Wiedemann <<u>jeffrey.wiedemann@gmail.com</u>>
Date: July 13, 2016 at 3:24:03 PM PDT
To: Mary Piepho <<u>Mary.Piepho@bos.cccounty.us</u>>, Kopchik John <<u>jkopc@cd.cccounty.us</u>>
Cc: Wiedemann Nancy <<u>nancy@wiedemannranch.com</u>>, Wiedemann Jeff
<<u>jeff@wiedemannranch.com</u>>, Clayton Wiedemann <<u>clayton.wiedemann@gmail.com</u>>, Wiedemann
Christian <<u>christian.wiedemann@gmail.com</u>>
Subject: Fwd: July 2016 Contra Costa LAFCO Meeting 07-13-2016

Hi Mary

Thanks for sending this our way. The LAFCO Policy doesn't look too ominous. I'm a little disappointed that the Cattlemen's Assn and Farm Bureau were not more involved (contacted?).

Out of the whole Policy, I like ADDITIONAL OBSERVATIONS 2 & 3.

**Observation 2 ...a countywide effort involving funding may be appropriate.** That the County and cities should go out of their way to assess fees for Ag Land preservation seems unlikely. Yes, this has been done for the protection of habitat (open space) but there is a totally different propaganda machine at work there. It makes sense but hard to implement (realistic?)

**Observation 3 ...encouraging economically viable agriculture-based businesses that will keep agriculture production high.** Again, (and again and again,...) the protection of ag lands MUST INCLUDE the protection of ag producers. Again, the City, County, Regional, State and Federal regulations that are heaped upon rural property owners are smothering us. Look at CoCoCounty's forthcoming "runoff mitigation' regulations, look at forthcoming regulation of groundwater and constant restrictions on our land use (lowered equity values), and on and on.

Either get this stuff off our backs or call it what it really is: The preservation of OPEN SPACE. Look at your own definitions:

**Open Space** - Undeveloped land where nothing happens. **Agricultural Lands** - Undeveloped land where something is happening.

We can pretend it's the same thing, but It's not even close to the same thing. So good luck. I know you are trying to find a balance. Again, thanks for keeping us in the loop.

Jeff

------ Forwarded message ------From: Mary Piepho <<u>Mary.Piepho@bos.cccounty.us</u>> Date: Tue, Jul 12, 2016 at 2:57 PM Subject: FW: July 2016 Contra Costa LAFCO Meeting 07-13-2016 To: Christian Wiedemann <<u>christian.wiedemann@gmail.com</u>> Cc: John Kopchik <<u>John.Kopchik@dcd.cccounty.us</u>>, Tomi Riley <<u>Tomi.Riley@bos.cccounty.us</u>>

Christian, I wanted to make sure you were aware of the proposed Ag and Open Space policy being considered for adoption tomorrow by Lafco. There remain some concerns from the Building Association representatives, some environmental organizations are in support, not sure about your interests. Please let me know if you have any thoughts or concerns. Or, feel free to attend tomorrow's meeting. M

Linda Young Dirk Sikkema 100 Saint Germain Ln Pleasant Hill, CA 94523

Received into the record at the 71316\_LAFCO Meeting

July 8, 2016

LAFCO 651 Pine Street 6<sup>th</sup> Floor Martinez, CA 94553

RE: draft LAFCO Agricultural and Open Space Preservation Policy

Dear LAFCO Commissioners and Staff:

We are writing in support of the draft LAFCO Agricultural and Open Space Preservation Policy (Policy). We appreciate the work all of you have put into the Policy but think that it should be strengthened by requiring a mitigation ratio of at least 1:1 for annexations affecting open space and agricultural land.

This modest change is in agreement with what many other LAFCOs across the state have done, and would help to mitigate the effects of development that has already greatly reduced the amount of agricultural land in Contra Costa and across the Bay Area. I ask you to support the draft Policy and incorporate the modest change of a 1:1 mitigation requirement.

Thank you.

Linda Young

From: countyourblessingsjason@aol.com [mailto:countyourblessingsjason@aol.com] Sent: Thursday, July 07, 2016 7:45 AM To: smdinfo Subject: LAFCO

Dear,

Received into the record at the

City/Town Managers and City/Town Planning Directors Special District General Managers County Administrator and Director, Department of Conservation & Development

My name is Jason Leffingwell and I am writing you in support of the draft LAFCO Agricultural and Open Space Preservation Policy (Policy). We appreciate the work that LAFCO commissioners and staff have put into the Policy, and think that it should be strengthened by requiring a mitigation ratio of at least 1:1 for annexations affecting open space and agricultural land. This modest change is in agreement with what many other LAFCOs across the state have done, and would help to mitigate the effects of development that has already greatly reduced the amount of agricultural land in Contra Costa and across the Bay Area. I ask you to support the draft Policy and incorporate the modest change of a 1:1 mitigation requirement. Thank you. Regards,

Jason Leffingwell,

Let your smile change the world, Don't let the world change your smile :)

From: john kiefer [mailto:jhkiefer@comcast.net] Sent: Thursday, July 07, 2016 8:24 AM To: Juan Pablo Galvan Subject: I want to tell CC LAFCO to preserve open space!



Dear LAFCO Commission,

I am writing you in support of the draft LAFCO Agricultural and Open Space Preservation Policy. We appreciate the work that LAFCO commissioners and staff have put into the Policy, and think that it should be strengthened by requiring a mitigation ratio of at least 1:1 for annexations affecting open space and agricultural land. This modest change is in agreement with what many other LAFCOs across the state have done, and would help to mitigate the effects of development that has already greatly reduced the amount of agricultural land in Contra Costa and across the Bay Area. I ask you to support the draft Policy and incorporate the modest change of a 1:1 mitigation requirement. Thank you.

Regards, john kiefer 3441 Blackhawk Rd. Lafayette August 17, 2016

TO: LAFCO Sub Committee Commissioners Don Tatzin and Sharon Burke FROM: Donna Gerber, Former Contra Costa County Supervisor District 3 (including San Ramon Valley and Far East County, Brentwood etc.)

First, I very much appreciate your work to meet LAFCO's mission of preventing sprawl development and protecting agricultural and open space land. I hope you will take all the time you need; it's important to get it right, and the California Legislature has given LAFCO the authority to do so.

For the 6 years I served on the Board of Supervisors, I experienced first hand what an uphill battle this is due to powerful vested interests. I also observed that city and county leaders often do not have the best information to inform their decisions. I commend your tenacity and careful consideration of these matters.

This memo reiterates my July 13, 3 minute, comments to the LAFCO Commission, provides additional detail and also electronic copies of documents presented in hard copy. I hope this will assist your sub-committee as you produce a new draft policy.

As historical context, in 2000 I partnered with then County Supervisor Joe Canciamilla, to lead the Board of Supervisors to tighten the County ULL protecting @ 14,000 agricultural acres from unjustifiable, sprawl development. (Coincidentally AB 2838 Cortese, Knox, Hertzberg passed in 2000 and provided LAFCOs additional power and responsibility to prevent sprawl development and loss of agriculture and open space lands). Also in 2000, I led the effort to empower my constituents near Pleasant Hill BART station to shape and support a compact, transit oriented, mixed use transit village that was approved in 2002. So I know both sides of the equation, prevention of sprawl through protection of agricultural land and approval of more sustainable, infill development that allows the public to benefit from a full range of housing and lifestyles.

It is no secret that Contra Costa County is historically the Bay area poster child for rampant suburban sprawl with loss of agricultural and open space land and changing highways and freeways into sewers of traffic congestion. The tightening of the ULL in 2000 coupled with the great recession of 2007 significantly slowed that legacy; but the floodgates are about to open again. For example: the County is processing Tassajara Parks, an urban development on agricultural land outside the ULL in San Ramon (and I note on your agenda under "pending applications" that LAFCO has an application for the expansion of water and sewer boundaries to enable this development); and

Brentwood is actively planning to develop over 2,000 acres outside the ULL and SOI with primarily low density housing.

In contrast, voters have demonstrated overwhelming support for limiting sprawl and protecting agriculture and open space land and this is demonstrated by their pressure for and continuous votes for ULL's since 1990 through 2010.

Also in contrast, unlike City Council members or County Supervisors; as LAFCO Commissioners; you are specifically charged under AB 2838 section 56325.1 to represent the County in a regional manner; **"all commission members shall exercise their independent judgment on behalf of the interests of residents, property owners and the public as a whole in furthering the purposes of this division".** AB 2838 also strengthened LAFCO's to consider ULL's, densities, infill opportunities and regional growth goals.

So what are regional consequences of sprawl and loss of agriculture? Suburban sprawl is not only bad for farming and open space and the quality of life issues such as traffic gridlock and poor air quality; sprawl development requires expensive infrastructure and despite developer fees, sprawl development does not pay for itself. Very few Contra Costa city councils nor the Board of Supervisors have had good information on the economic implications of their land use decisions. Suburban infrastructure costs more and takes longer to pay back than compact infrastructure and does not generate the tax base to fully support municipal and county services. This has led to often out of balance fees on some development while encouraging the building industry to "buy" their approvals with one time community amenities.

At the hearing I provided 2 articles that offer a smart financial analysis that would inform the County, cities and the public regarding the financial implications of sprawling into agricultural lands. One is an analysis and specific data for a suburban county in Florida and the second is the same analysis method applied to a Northern California city (Santa Rosa). The documents are attached electronically here.

In suburban, Sarasota County, FL; this tax revenue analysis shows that mixed use, main street development produces \$1.2 million per acre in annual property tax compared to a single family suburban house of \$3600 per acre or a Walmart with \$8400 per acre. The comparison is also true on the public investment side. Residential, suburban units on 30 acres requires 42 years to pay back cost of infrastructure vs. 3 years for downtown, compact development. And this data comparison also holds true when comparing sales tax generation if done on a "per acre" basis. Importantly, LAFCO's role in preventing sprawl and loss of agricultural land not only protects the quality of our food, our quality of life and farming economics....it can also inform and incentivize economic development toward compact, more sustainable development inside the suburban cities AND toward the more compact, more transit oriented and sustainable cities in the County. Development will occur inside cities if it can't go out on agricultural land. It doesn't get much more "orderly" than that. The fact that suburban sprawl is the most expensive development model for municipalities coupled with the fact that it does not pay for itself; should be of concern for LAFCO's required focus on regional planning.

Therefore, I urge you to modify the proposed policy in two very concrete ways. LAFCO can achieve its' mission through abiding by the voter approved ULL and by requiring the data that compares the economic consequences of converting agricultural land to urban uses vs. the alternative, compact model of development. These two changes will also make the policy specific and concrete for applicants.

- 1. As you are permitted under CKH and as many organizations have proposed to you in their documented comments, your policy must require that all jurisdictions abide by all voter approved ULLs and LAFCO must reject applications that lead to urban development outside the voter approved ULLs.
- 2. Also as permitted under CKH; and under Guideline 1 or 3 of your draft policy; LAFCO requires applicants proposing annexations beyond city or county boundaries to provide a Tax Revenue Analysis showing a revenue profile of the jurisdiction with property tax and sales tax profiles on a "per acre" basis (consistent with the examples I've provided). Consistent with your draft policy, this analysis could be part of an applicant assessment of non agricultural options for urban development. All city or county applications must include this analysis.

Finally, (and this is in addition to my public comments) regarding any mitigation for conversion of agricultural and open space land; I would respectfully suggest, a 2:1 or 3:1 ratio of mitigation should there be an annexation application approved that annexes agricultural land inside the ULL. Annexation applications outside voter approved ULL's should be rejected as a matter of policy.

Again, thank you for your efforts on this very important and very timely matter. I am available regarding any questions you may have.

# Study: Santa Rosa land-use policy overlooks tax potential

# GARY QUACKENBUSH

BUSINESS JOURNAL STAFF REPORTER | January 21, 2016

Received into the record at the 7 13 16 LAFCO Meeting

Order Article Reprint

SANTA ROSA — Sonoma County's largest city has several square miles of parking lots that provide little in the way of critically needed municipal revenue, one example of how the city's land-use policies are leaving a lot of money in the ground by not maximizing property and sales taxes per acre, according to an urban designer who unveiled details of a city-backed pilot study.

"What our study shows is the inherently higher per-acre value of inner-city, mixed-use buildings that can produce more revenue in the form of property and retail sales taxes per acre than those located away from city center," said Joseph Minicozzi, president of Asheville, N.C.-based Urban3. He was speaking to a standing-room-only audience on the second night of three public workshops held in the Bike Monkey store, 121 Fifth St., on Jan. 20.

The total assessed value of property downtown is \$18.3 billion, almost one-fourth of the \$72.8 billion value of all Sonoma County property, the study found. The city and newly formed local smart-growth advocacy group Urban Community Partnership (urbancommunitypartnership.org) brought in Urban3 and Minnesota-based Strong Towns to analyze ways to encourage higher-density development and redevelopment in Sonoma County's urban areas.

"We also found that 16 percent of the land (6 square miles) within the city is devoted to parking lots, with a much lower taxable base, that could become higher tax revenue sources if developed," Minicozzi said.

At the same time, Santa Rosa represents only 2 percent of the Sonoma County footprint, while making up 32 percent of the county's tax production. Some 38 percent of County

land is taxable, while 15 percent is nontaxable.

"Downtown, 36 percent of the land is taxable, but with mixed-use development and current C-10 (ten story) zoning, new and repurposed property would represent an even greater assessed tax base, and supply much-needed revenue for the city and county for ongoing and unfunded liabilities, without an increase in taxes or fees," Minicozzi said.

Urban 3 is a private consulting firm specializing in land value economics, property and retail tax analysis and community design.

"We seek to empower our clients with the ability to promote development patterns that secure a community's fiscal condition while reinforcing a stronger sense of place," Minicozzi said. "As our company name acknowledges, cities and towns are a 'cubed' threedimensional representation of space. This space, created by the built environment, is the basis of urban design. We strive to provide a deeper understanding of this environment by measuring data, visualizing results; and digging deeper into the effect of policies on the built environment."

The true value of existing inner city property exceeds that of new developments just blocks away, Minicozzi said. In real estate as with development, valuation is all about location. The results of this study were revealed to city officials and staff members at a three-hour meeting earlier in the week. Dollar figures and economic data referenced in this analysis were provided by the city and county and reflect current property assessments.

"As an urban planning consultant, I always look at the opportunities associated with a property based on options and a cost-benefit analysis," Minicozzi added. "If a more valuable urban core area is under built, based on its potential, property and sales taxes will not be adequate, leading to lower revenue for the city. Impact and permit fees don't cover the long-term costs associated with upkeep and maintenance of streets as well as fire/police services, costs associated with fire hydrants along with other ongoing expenses."

Those interested in encouraging economic growth should build on a foundation of understanding the tax implications of differing choices, Minicozzi said. One effective tool he uses for determining comparative economic worth is assessed value per acre. He compared valuations for several Santa Rosa-area big-box stores, shopping malls and corporate campuses:

- Wal-Mart, Rohnert Park, \$803,805/acre
- Wal-Mart, Windsor, \$1,393,000/acre
- Keysight Technologies, Santa Rosa, \$1,448,893/acre
- Medtronic, Santa Rosa, \$1,613,920/acre
- Costco Wholesale, Santa Rosa, \$1,619,631/acre
- Target, Santa Rosa, \$1,757,294/acre
- · Coddingtown Mall, Santa Rosa, \$2,237,000/acre
- Santa Rosa Plaza Mall, \$4,268,000/acre

"Note: the higher the value, the closer a property is to the city center," Minicozzi said. "Now compare the values per acre of these large retailers on dozens of acres each with the assessed value of single-lot properties in or near downtown Santa Rosa that occupy only a fraction of an acre."

- 442 Eighth St., two stories, \$4,689,640/acre
- 526 B St., three stories, \$8,522,750/acre
- 553 Fifth St., three stories, \$10,973,000/acre
- 520 Mendocino Ave., three stories, \$12,683,300/acre
- B Street townhouses, two stories, \$7,407,090/acre
- Empire Building (built in 1910, now for sale), four stories, \$3,900,000/acre
- Rosenberg Building (subsidized housing), six stories, \$26,316,095/acre

In the Urban3 analysis, the Railroad Square Historic District west of Highway 101, indicates that this area has the second-highest valuation following downtown Santa Rosa. In the

case of the Hotel La Rose, the building was originally constructed in 1907 and later refurbished. Here are a few notable valuation examples:

- Terraces, three stories, \$17,349,200/acre
- Charles Schwab, four stories, \$17,683,300/acre
- Hotel LaRose, three stories, \$14,000,000/acre

Another way at looking at growth potential is examining retail sales taxes paid and tax totals per acre. Minicozzi gave some local examples:

- Plaza Mall, \$1.72 million total retail tax, \$54,000 retail tax/acre
- Santa Rosa Marketplace, \$3.05 million, \$51,000
- Coddingtown Mall, \$1.36 million, \$22,000
- Railroad District, \$234,000, \$45,000
- Downtown historic core, \$630,000, \$52,000

"The Railroad Square results show the potential of developing property close to a passenger train right of way to provide housing and local services for those commuting by rail ...," Minicozzi said.

The third and final public workshop was Jan. 21 at Bike Monkey. It will feature Charles Marohn, president of Strong Towns, talking about the value-added implications of development close to transportation corridors.

# PLANNING PRACTICI

# Sarasota's SMART Growth Dividend

SARASOTA COUNTY, like many other Florida counties, saw a huge wave of suburban development in the boom years from 1995 to 2007. During that time, more than 31,000 acres of land within the county and its incorporated municipalities came under development. Responding to state growth management policies and seeking to discourage future sprawl, county officials enacted an urban services boundary in 1997. Its purpose was to channel future growth into areas where the county was planning to provide urban services and infrastructure. A citizen-led initiative in 2008 strengthened the growth limit, requiring a unanimous vote of the county commission to enlarge the land area within it.

While the boundary now constrains the county's supply of developable land, the three home-rule cities in the county—Venice, North Port, and Sarasota—can still annex into unincorporated county lands inside the urban services boundary. Given such limits on its supply of developable land, and possible losses due to annexation, Sarasota County is concerned that *fitture* property tax revenues could be squeezed. The county's *current* revenue has already taken a major hit in the post-boom economy.

The shortfall results mostly from lower property assessments tied to falling real estate prices, coupled with and exacervbated by a slowdown of population growth. A further impact on local revenue collections is the loss of fee income due to a downturn in new construction: Residential permitting activity in Sarasota County has gone from more than 2,300 newly platted lots in 2005 to under 90 in 2009. Commercial development has followed a similar pattern: There were 110 projects in 2005 and fewer than 30 in 2009.

With such threats to its future revenue base, county staffers have started to rethink their approach to community building. "We Doing the numbers proves that compact, centrally located, mixed use development yields the most property

> taxes. By Peter Katz

need a better understanding of where our revenues are coming from," said Sarasota County Administrator Jim Ley last year. With regard to creating new sources of revenue, he added, "we need to start thinking more like a city."

Responding to Ley's directive, county planners came up with an idea. When researching new approaches for a comprehensive plan update, they found a unique tax revenue analysis of the Asheville, North Carolina, area. The analysis, prepared by Joe Minicozzi of Public Interest Projects, included a "revenue profile" that compared tax revenues generated by a range of building types in different locations around the city. What made that analysis different from more conventional studies was that the figures were calculated on a *per are* basis rather

than the more typical *per lot, per unit, or per bousebold* basis. Although unusual, this approach clearly showed a much greater return from some types of development—mostly close-in, mixed use properties, both old and new—over more conventional, single-use suburban offerings.

Seeing the dramatic results for Asheville, Sarasota County staff asked Public Interest Projects to compile a similar profile for the Sarasota region. That work is the primary focus of this article.

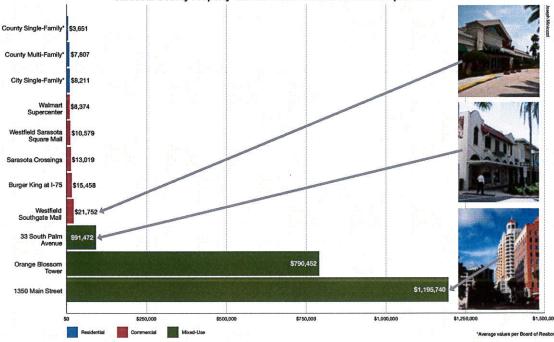
The data highlighted in the profile is straightforward—it's the amount of county property tax paid by the owners of each of the profiled properties (information that is readily obtainable from the local tax assessor). The taxes are then divided into the land area occupied by each property to obtain a *tax per are* figure. The complete revenue profile thus provides an apples-to-apples comparison of the property tax yield for each development type.

While the revenue analysis may be straightforward, the cost analysis is not. That is because municipal services are provided, charged for, and accessed in ways that differ greatly from place to place.

Still, common sense suggests that some of the biggest public costs will be lower in downtown areas. Funding public schools is generally cheaper there because, in most U.S. regions, families with children tend to live in more suburban areas. Among families who do live downtown, many will opt to place their children in private schools. Water use, too, is likely to be lower in more urban areas because yards are relatively small if they exist at all.

#### The county's revenue profile

Looking at the top bar of Sarasota's revenue profile (in the graphic above), one sees that owners of single-family homes in the unin-



corporated county pay, on average, almost \$3,700 per acre a year in property taxes. Multifamily developments (such as apartments or condominiums) are typically assessed at more than double that amount, yielding about \$7,800 in property taxes on a per acre basis. Within the city of Sarasota, single-family home owners annually pay \$8,211 per acre, on average, in county taxes alone.

Looking at commercial development (the red bars in the graphic), one sees that the county's new 21-acre Walmart Supercenter annually pays only \$163 more in property taxes per year, on a per acre basis, than the average single-family home in the city of Sarasota. Walmart's tax bill of \$8,374 per acre seems low, especially given the controversy that such big-box projects generate when they come before reviewime bodies.

Southgate, an established shopping mall anchored by Macy's, Dillards, and Saks Fifth Avenue, suggests a different story. The 32-acre property, which is located within the city of Sarasota, brings in

more than two and one-half times the tax revenue of the big box center, or \$21,752 per acre. The difference can be attributed to a more central location, a better standard of construction, and the higher merchandise price point set by upscale anchor merchants (the latter translating into higher rents per square foot, and thus higher property valuations).

A first-tier regional shopping center like Southgate may be the best revenue generator that many counties can ever hope to attain. That is why local governments try so hard to woo prestigious national merchants like Macy's or Nordstrom (the ultimate prize). But it's an achievable goal only if the locality has the demographic makeup to attract such merchants.

#### Mixed use: changing the game

Mixed use properties (shown in the green bars at the bottom of the profile) perform dramatically better even than Southgate, the strongest mall in the county, when it comes to generating property tax revenue.

Take these examples, all of them located at or near one intersection in downtown Sarasota, just a few blocks in from the bay:

 33 South Palm Avenue, a two-story building dating from the 1920s, was originally part of a larger hotel complex. Its first floor is a retail store; the second floor is zoned for offices. The structure currently generates more than \$90,000 in county property taxes per year, calculated on a per acre basis.

• The 10-story Orange Blossom Tower was built in 1926 as the American National Bank Building. In the 1930s, it was converted to a hotel and later became a retirement residence. Today, the structure houses condominiums, second-floor offices, and ground floor retail. It brings in nearly \$800,000 in county property taxes per acre.

 1350 Main Street generates more taxes than any other building in the profile.
 Its arcaded ground floor houses a bank and other retail uses; condominiums occupy the upper floors. Although some units have water views, the building's principal attraction

Sarasota County Property Tax Revenue Profile: 2008 Tax Yield per Acre

#### <u>(elated topic</u>

### What the Numbers Show

Our firm has created a computer model that shows that capital invested in high-density projects can produce a higher rate of return than lower density projects, including the big box stores that so many communities may mistakenly covet. The key is to look at municipal revenues generated per acre by a variety of land uses, including single-family housing, a typical suburban mall, and a more complex mixed use property.

Our 2008 study of Buncombe County, North Carolina, broke down the county property tax yield of Asheville-area properties on a per acre basis. We found that the average acre of single-family housing in the county contributed about \$1,236 in property tax while the average acre of housing within the Asheville city limits contributed \$1,716. The findings for downtown Asheville were far more dramatic: An average six-story mixed use project yielded \$250,125 per acre. That's about 31 times the property tax yield of the Asheville Mall, which is also within the city limits but produced just \$7,995 in county taxes per acre. Even after big box retail taxes were added to the study, the combined big box property and retail tax yields a total of about \$51,000 per acre.

Results were similar in Sarasota, where we found that 3.4 acres of mixed use downtown development yielded 8.3 times more annual county property taxes than a suburban 30.6-acre, 357-unit garden-style apartment project. Further, the multifamily residential public infrastructure costs downtown were only 57 percent of the suburban project, while the revenues were 830 percent greater. A difference of \$1.9 million a year versus \$239,000 a year. And it took the urban project just three years to pay for the infrastructure versus the 42 years for the suburban project.

In sum, the urban form consumed less land, cost less to provide public infrastructure, and had a higher tax return.

#### Joe Minicozzi, AICP

 Minicozzi is the New Projects Director at Public Interest Projects in Asheville, North Carolina.

#### 2007 Annual County Tax Yield Per Acre: Asheville, North Carolina

County residential — \$1,236\* City residential — \$1,716\* City commercial — \$2,406\* 1-2 story office buildings — \$7,059 Asheville Mall — \$7,995 4-story apartments — \$18,109 4-story mixed-use condos — \$44,887 6-story mixed-use condos — \$250,125 \*Average values as per Board of Realtors

28 Planning December 2010



Sarasota generate, on average, \$8,211 per acre per year in county property taxes. The new Walmart Supercenter in the unincorporated county (above, right) generates just \$163 more. This specific house, in a close-in Sarasota neighborhood, pays \$35,067. That amount is more than four times what the Supercenter pays annually per acre in

property taxes.

 is the vibrant nearby street life that emerged after streetscape improvements were made
 in the early 1990s.

Although the building occupies just over two-thirds of an acre, it generated nearly \$1.01 million in combined city and county taxes in 2008. Extrapolating this earning power to a full-acre site, the same kind of building would generate \$1.2 million in county taxes alone. On a per acre basis, 1350 Main brings in 142 times more revenue than the new Walmart Supercenter. It would take both that development and Southgate, together occupying 55 acres, to match the property tax contribution of 1350 Main, which sits on just 0.68 of an acre.

#### Takeaway

#### The most obvious lesson from Sarasota's revenue profile is that compact mixed use developments in urbanized areas generate property tax revenue at a much higher rate than do single-use developments in more suburban locations.

Skeptics are sure to ask: What about sales taxes? It's true that a large, high-volume retailer can make a significant financial contribution to a town or city. That's why so much effort is made to lure a productive retailer across municipal boundaries and why local governments focus so much on fiscal zoning. But at the regional scale, this becomes a zero-sum game. Consider: Sarasota County's total retail sales bring in \$60 million to \$70 million a year in sales tax revenue. Barring a huge influx of wealthy residents who decide to make most or all of their purchases locally, that number is unlikely to change.

If enhancing revenue is the goal, municipalities are far better off with compact development that generates higher property taxes. A grouping of 70 buildings like 1350 Main Street (a gridded cluster measuring seven rows wide by 10 deep) would bring in as much revenue as all of the sales tax currently collected in the entire county.

A quick calculation suggests that such a cluster could easily fit in an area of about 100 acres, including the land needed for streets, alleys, and a small public square or two. (By comparison, Sarasota's existing downtown is about 700 acres.) True, a large volume of new construction in a confined area is unlikely to happen in Sarasota. Nor is it being recommended here. But the notion provides a useful point of comparison between two important revenue sources—sales tax and property tax—that are available to local government.

With a new generation of smart growth development showing that greater density can be packaged in a physical form that is compelling to a wide range of citizens, and the fiscal information that can be gleaned from a community's revenue profile, longtime opponents of infill development may

now be persuaded to consider a different, and potentially more cost-effective, approach to community building. With enough citizen buy-in, compact, walkable "smart growth districts" could be infinitely replicable, even in a suburban county such as Sarasota. Enabling them would be a far more viable strategy for increasing the county's revenue base than trying to squeeze more sales tax dollars from existing local residents, many of whom

now live on fixed incomes. Such compact development would also mean a more rapid payback on public investment. Comparing the return from a twoand three-story garden apartment complex near Interstate 75 (357 housing units on just over 30 acres) with 1350 Main Street and two other adjacent downtown buildings (a total of 197 units on 1.9 acres), one sees that residential units in the suburban development will take 42 years to pay back the county's infrastructure outlay, versus just three years for units in the downtown building. (Revenue from the commercial portions of the downtown properties was excluded to keep this an apples-to-apples comparison.)

The rapid payback is due to the fact that taller, more compact buildings require less of the horizontal infrastructure (roads, water, and sewer lines) that government typically pays for. Vertical infrastructure (elevators, stair towers, conduit, and structural steel), by contrast, are paid for by the

builder or developer. Thus, the more that government can induce the private sector to spend on a given parcel of land, the more it stands to gain long-term, when the development is complete and higher property taxes begin to flow in.

Indeed, governments have always encouraged such private sector investment with expenditures and actions of their own, ranging from the subdivision of land into salable parcels to the provision of public improvements such as streets, parks, and utilities. Citing earlier development models that may have been more economically viable, County Administrator Jim Ley remarked: "Observation points out just how far we've traveled from the basic understanding about what it takes to build a financially sustainable community—that denser urban centers produce the community wealth that sustains the less dense areas."

As municipalities become more proactive in evaluating competing development models and driving toward the models that best meet their objectives in multiple realms—quality of life, quality of place, and economic sustainability—one can expect that tools such as the revenue profile will become an increasingly important part of the community decision-making process.

Peter Katz is Sarasota County's director of Smart Growth/Urban Planning. He is the author of The New Urbanism: Toward an Architecture of Community (McGraw-Hill, 1993).



August 31, 2016

# BY E-MAIL DIST3@BOS.CCCOUNTY.US

Chair Mary Piepho and Members of the Contra Costa County Local Agency Formation Commission 651 Pine Street, 6th Floor Martinez, CA 94553

# Re: <u>Additional Comments Regarding Proposed Agricultural and Open Space</u> <u>Preservation Policy</u>

Dear Chair Piepho and Members of Contra Costa County LAFCO:

As you know, this office has previously provided written comments to LAFCO regarding the draft Agricultural and Open Space Policy ("Draft Policy") via letters dated April 7, 2016, June 20, 2016, and July 12, 2016, and previously appeared before you at your meeting on July 13, 2016. As we have previously stated, while revisions have been made to the draft policy since it was first introduced, the Draft Policy remains inconsistent with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Gov. Code, §§ 56000 *et seq.*) and the California Environmental Quality Act ("CEQA"; Pub. Resources Code, §§ 21000 *et seq.*). The issues we previously have described are summarized as follows:

- The Draft Policy exceeds the scope of LAFCO's granted authority under the Cortese-Knox-Hertzberg Act in its broad focus on all agricultural lands and direct regulation of land use;
- The Draft Policy establishes requirements such as the requirement for an Agricultural and Open Space Impact Assessment, that conflict with CEQA's mandatory environmental review requirements;
- Draft Policy 5 improperly prioritizes the preservation of agricultural and open space lands over all other land uses;
- Draft Guideline 3(a)'s mandate that an applicant must provide a land use inventory of a jurisdiction that indicates the amount of available land within a jurisdiction for the proposed land use is impractical, unreasonable and lacks any lawful connection or nexus to an individual project;

One Embarcadero Center, 30th Floor, San Francisco, California 94111 Telephone: 415.291.7400 Fax: 415.291.7474 Albany | Los Angeles | New York | Orange County | Palo Alto | Sacramento | San Francisco | Washington, D.C.



- Draft Guideline 5 is inconsistent with and preempted by Government Code Section ٠ 56856.5 of the Cortese-Knox-Hertzberg Act; and
- The "Additional Observations" serve no apparent purpose, create confusion, and should • be deleted in their entirety.

In addition to the foregoing issues, which are detailed in our prior correspondence, unless the Draft Policy is revised in a manner that ensures that it does not create new substantive mandates that conflict with the Cortese-Knox-Hertzberg Act or existing policies, it will effectively determine whether growth will occur in unincorporated areas that are agricultural and as a result, may have a foreseeable impact on the environment. Consequently, pursuant to CEQA, LAFCO must undertake and complete environmental review of the Draft Policy itself, prior to its adoption.

The Draft Policy Constitutes a Project for Purposes of CEQA. In its current form, the 1. Draft Policy constitutes a project subject to environmental review under CEQA. In pertinent part, CEQA Guidelines Section 15378(a)(1) defines "project" to mean, "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is...[a]n activity directly undertaken by any public agency including but not limited to public works construction and related activities clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100-65700."

The Draft Policy Does Not Fall Within CEQA's Exclusion for Ministerial Policy 2. Making. Section 15378(b) goes on to expressly exclude from the meaning of "project" five types of activities, including ministerial policymaking: "[c]ontinuing administrative or maintenance activities, such as purchases for supplies, personnel-related actions, general policy and procedure making (except as they are applied to specific instances covered above)" and "[o]rganizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment.

Under existing case law, the Draft Policy, in its current form, does not fall within CEOA's exclusion for ministerial policymaking because it goes beyond implementing existing legislation or policies and has a potential impact on the environment. (See City of Livermore v. Local Agency Formation Commission (1986) 184 Cal.App.3d 531 [interpreting the definition of "project" under CEQA and holding that sphere of influence guidelines adopted by Alameda County LAFCO constituted a project requiring an EIR] distinguished by Northwood Homes v. Town of Moraga (1989) 216 Cal. App. 3d 1197, 1207, "in marked contrast to the LAFCO

# manatt | phelps | phillips

Chair Mary Piepho and Members of the Contra Costa Local Agency Formation Commission August 31, 2016 Page 3

guidelines considered in *City of Livermore*, the MOSO guidelines were designed to implement the land use policy decisions already reflected in MOSO".])

The facts in *City of Livermore* involved revisions to the LAFCO's 1973 guidelines entitled: "Spheres of Influence: Policies, Guidelines, Criteria & Procedures of Alameda County," which contained information to help guide LAFCO in its later determinations of particular spheres of influence for local governmental agencies. (*Id.* at 536.) In 1983, LAFCO attempted to adopt revisions that deleted the statement, "Existing and future urban development areas belong in cities" and added language that future incorporation of urban development outside an existing sphere of influence would be based on a county plan rather than a city plan. LAFCO characterized the revisions as an incorporation of the actual policies and procedures that had evolved since 1973. It adopted a negative declaration for purposes of CEQA and adopted the revised guidelines. (*Id.* at 535-536.)

The City subsequently filed suit and the court held that LAFCO had to prepare an EIR to analyze the environmental impact of the revisions and to show that the revisions complied with the Knox-Nisbet Act. In holding that the guidelines were not excluded from CEQA's definition of a "project" pursuant to Guidelines Section 15378(b)(2), the court reasoned, "[t]he policymaking performed by LAFCO when it revises guidelines is far different than and distinguishable from the ministerial policymaking referred to in this CEQA guideline." (*Id.* at 539.) The court further explained that the guidelines revisions at issue were analogous to the amendment of a general plan. (*Id.*) Although the guidelines did not themselves directly affect any specific development, they would influence LAFCO decisions about development plans and future growth of cities and service areas:

The guidelines play a part in determining whether growth will occur in unincorporated areas and whether agricultural land will be preserved or developed. They may change the focus of urban development by promoting county plans over city plans. These potential effects will certainly impact the environment. It is true that the precise effects are difficult to assess at this stage, but it is because impact is so easily foreseen that the revisions must be considered a project under CEQA.

(*Id.* at 538.) The court pointed out that just as general plans "embody fundamental land use decisions that guide the future growth and development of cities and counties" and the adoption or amendment of general plans have a potential for resulting in ultimate physical changes in the environment, the revised guidelines at issue would also influence the future growth and development of cities by potentially promoting urbanization outside existing cities, "perhaps having an even greater impact than the amendment of one general plan." (*Id.*) The court further



determined that preparation of an EIR was required, finding that substantial evidence did not support LAFCO's conclusion that a fair argument could not be made that the project may have a significant environmental impact. (*Id.* at 541.)

Similarly, here the Draft Policy will go beyond implementing or providing guidance to implement existing policies or provisions of the Cortese-Knox-Hertzberg Act by essentially determining whether growth will occur in unincorporated areas and whether agricultural land will be preserved or developed. The stated purposes of the Draft Policy are to: (1) provide guidance to the applicant on how to assess the impacts on prime agricultural, agricultural and open space lands of applications submitted to LAFCO, and to explain how the applicant intends to mitigate those impacts; (2) provide a framework for LAFCO to evaluate and process in a consistent manner, applications before LAFCO that involve or impact prime agricultural, agricultural, agricultural and/or open space lands; and (3) explain to the public how LAFCO will evaluate and assess applications that affect prime agricultural, agricultural and/or open space lands.

Although the stated purposes and many of the proposed goals, policies and guidelines arguably constitute ministerial policymaking, there are a number of provisions that create new county-wide mandates that will determine where urbanization will occur. More specifically, the Draft Policy has the effect of prioritizing land uses, elevating agricultural and open space preservation above other land uses, and to the extent that it would prevent urban development in agricultural areas, it would have long term impacts on land use and future growth and population distribution in the region. Based on the reasoning in *City of Livermore*, the proposed policy does not fall within the exclusion from the definition of "project" for general policy and procedure-making.

We understand that to date LAFCO has taken the position that no CEQA compliance whatsoever is necessary or required. This position is contrary not only to the caselaw described in detail above, but also to the positions of other LAFCOs throughout the state. In adopting policies similar to the Draft Policy, other LAFCOs have properly conducted CEQA review. For reference, you may wish to review the staff report and supporting documentation prepared in connection with Santa Clara County LAFCO's consideration of an Agricultural Mitigation Policy on April 4, 2007. In that matter, Santa Clara County LAFCO properly determined the adoption of the proposed policy to be subject to CEQA and prepared a comprehensive initial study to evaluate the potentially significant impacts of the proposed action.

In light of the above, at a minimum LAFCO must conduct an initial study to determine whether adoption of the Draft Policy will have any potentially significant impacts on the environment. Only after such time as a proper environmental review under CEQA has been completed may the Draft Policy be scheduled for adoption by LAFCO.

# 3. Revisions to the Draft Policy Are Required to Avoid CEQA Review and Preparation

of an EIR. Under the Cortese-Knox-Hertzberg Act, LAFCO is to consider the conformity of a proposal and its anticipated effects with adopted commission policies on providing planned, orderly, efficient patters or urban development, and the policies and priorities set forth in Section 56377 of the act. (Gov. Code Sec. 56668(d).) Given that a proposal must conform to adopted commission policies, to the extent that any such policies conflict with or substantively supplement existing local land use planning, their adoption is not merely ministerial or procedural policymaking.

As currently drafted, the Draft Policy contains numerous provisions that purport to mandate new standards and requirements that are akin to a general plan amendment. They would effectively shift land use planning from reliance on city plans to reliance on LAFCO's new policy in determining urbanization. In order to avoid CEQA review (and avoid running afoul of the Act's prohibition against directly regulating land use), these provisions, and the Draft Policy as whole, must be revised to clarify that it is an advisory policy, which may serve as the basis to make recommendations and provide guidance, and does not establish new mandates that require LAFCO's denial of proposals that cannot fully conform.

As an example of the Draft Policy extending beyond implementation of existing legislation or policy, Guideline 1 requires an applicant to submit an "Agricultural and Open Space Impact Assessment" that "at a minimum" addresses as one of six topics, "how it guides development away from prime agricultural, agricultural and/or open space lands." This requirement modifies the factors prescribed in Section 56377 of the Act, which states that in reviewing and approving or disapproving proposals, the commission shall consider specified policies and priorities including the following factor: "Development or use of land for other than open-space uses shall be guided away from existing prime agricultural lands in open-space use toward areas containing nonprime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area." (Emphasis added.) By broadening the focus of the requirement to include non-prime agricultural land and narrowing or eliminating any consideration of how the proposal may nonetheless promote the planned, orderly, efficient development agricultural land and narrowing or eliminating any consideration of an area, the Draft Policy drastically alters the existing requirements.

\* \* \*



We appreciate your continued consideration of our comments and look forward to discussing this matter with you further at LAFCO's next meeting.

Very truly yours, right yours, sisting a Kristina Lawson

KXL:KXL

cc: Lou Ann Texeira, Contra Costa County LAFCO (via email LouAnn.Texeira@lafco.cccounty.us) Louis Parsons Jeanne Pavao

317520498.4



PO Box 309, Walnut Creek, CA 94597 www.wcosf.org

August 25, 2016

Hon. Mary Piepho, Chair Contra Costa LAFCO 651 Pine Street, 6th Floor Martinez, CA 94553

Dear Commissioners:

Our Walnut Creek Open Space Foundation supports Walnut Creek's Open Space through land acquisition, through habitat restoration projects and through education to help residents understand and enjoy our Open Space areas. We are concerned that loss of agricultural lands will make it more difficult to preserve and maintain public open space like Walnut Creek's Open Space, East Bay Regional Parks, Mount Diablo State Park and land owned and managed by land trusts such as Save Mount Diablo and John Muir Land Trust. We believe that requiring mitigation for the loss of ranch or farm land will be an effective tool to minimize loss of agricultural land and to keep farming and ranching in Contra Costa County.

Our County is home to a million people but it retains a large amount of undeveloped land in public and private ownership. Most residents can visit publicly owned open space areas within a few miles of where they live. Residents can also visit farmers' markets to buy locally grown produce and visit farms themselves to collect pick-it-yourselves produce. Life in Contra Costa County is richer for the mix of urban and suburban living with easy access to nature and to the sources of their food.

While residents do not have access to privately owned farms and ranches, those lands contribute directly to the health of public open space. They extend and connect public lands to make larger and more viable units that can support more diversity of plant and animal life.

Grazing is an important tool for managing public open space to manage the risk of wildfires and to control weeds. Using grazing as a management tool requires that we have ranchers living and working in the area. The viability of ranching depends on the existence of privately owned ranch land. It also depends on retaining an adequate pool of skilled labor such as cowboys and support services. Losses of ranch land and of ranchers living in the county will make managing publicly owned open space more difficult.

Farm lands also contribute to the diversity of life in the area. Insects, birds and mammals all make use of farm land and that helps ranch land and public open space retain diverse animal life.

Our Walnut Creek Open Space Foundation feels that action is needed to combat further loss of farm and ranch lands in our county. We believe that a requirement for mitigation for the loss of farm and

ranch lands will help preserve a viable level of farming and ranching activity. We urge LAFCO to enact a requirement for mitigation at the ratio of 3 to 1.

Sincerely,

1 \_ // T

Katrina Nagle President, Walnut Creek Open Space Foundation

### Jim Blickenstaff Chair, Mt. Diablo Group/Sierra Club (The Greenbelt Alliance letter referenced here was part of the July agenda packet.)

From: Jim Blickenstaff [mailto:jpblick@comcast.net]
Sent: Monday, September 05, 2016 6:16 PM
To: Lou Ann Texeira
Cc: sharon.anderson@cc.county.us; 'Joel Devalcourt'; 'Ellison Folk'; District5; 'Jim Blickenstaff'
Subject: LAFCO Hearing, Sept., 14th: Updating and Strengthening Ag and Open Space Policy.

Sept. 5, 2016

Re: Enacting Policies to prevent sprawl, and preserve agriculture and open space.

Dear Lou Ann –

Please be so kind as to see all LAFCO members, and alternates, receive this message, prior to the Sept., 14<sup>th</sup> hearing on the matter. As well as, make it part of the Sept. 14<sup>th</sup> public record.

I wanted to re-affirm the Mt. Diablo Sierra Club's support for Greenbelt Alliance's position on strong agricultural and open space protections – as expressed in their comprehensive June 20, 2016 letter to LAFCO.

Weaker, past, LAFCO policies on preservation have had the effect of encouraging a destructive sprawl dynamic. That threat is still there. It is past time to change the direction of the County; and take real steps to block sprawl, and give long term protections for agriculture and open space.

Clear, unambiguous, legally enforceable, rules and constraints on further destruction of ag and open space; will demonstrate the critical next step, needed to turn away from policies that have actually facilitated sprawl.

The criteria set forth by the Greenbelt Alliance give an excellent foundation toward accomplishing a preservation/anti-sprawl future in Contra Costa County.

Let's break forever from past policies that have led to sprawl; "dumb-growth;" and the loss of 1,000's of acres of prime ag land, vital habitat, and open space. The Road-Map is there, thanks in large part to Greenbelt Alliance, I implore LAFCO to follow it to a smarter, brighter, greener future.

Thanks to all members for consideration of this most serious matter.

Jim Blickenstaff Chair, Mt. Diablo Group / Sierra Club. July 13, 2016

I am writing to urge the Contra Costa LAFCo to adopt strong policies in support of local agriculture.

Farming and ranching contributes so much to the Bay Area food culture, economy, and environment. But Contra Costa County is losing agricultural land at alarming rates, partly due to the incentive for farmers and ranchers to sell their land to sprawl developers.

Please consider adopting a policy that does the following:

1. Prohibits the annexation of actively farmed land 2. Mitigates every acre of farmland and rangeland lost to development 3. Uses mitigation funds to permanently preserve agricultural land

These policies are critical for the success of agriculture in Contra Costa. Adopting them will protect our agricultural land and help local farmers and ranchers thrive.

Sincerely,

# **Received from:**

First Name	Last Name	Residence	Received
Teresa	Castle	Concord	7/13/16
Lynda	Deschambault	Moraga	7/13/16
Lael	Gerhart	Berkeley	7/13/16
Lukasz	Lysakowski	Berkeley	7/13/16
Cathy	Mack	Cupertino	7/13/16

August (various dates), 2016

I am writing to urge the Contra Costa LAFCo to adopt strong policies in support of local agriculture.

Farming and ranching contributes so much to the Bay Area food culture, economy, and environment. But Contra Costa County is losing agricultural land at alarming rates, partly due to the incentive for farmers and ranchers to sell their land to sprawl developers.

Please consider adopting a policy that does the following:

1. Mitigates at a three-to-one ratio each acre of farmland lost to development 2. Uses mitigation funds to permanently preserve agricultural land

These policies are critical to the success of agriculture in Contra Costa County. Adopting them will protect our agricultural land and help local farmers and ranchers thrive.

Sincerely,

# Received from:

First Name	Last Name	Residence	Received
Nancy	Boyce	San Rafael	8/12/16
Jeannie	Clements	Fremont	8/12/16
Kermit	Cuff	Mountain View	8/12/16
Richard	Fairfield	Santa Rosa	8/12/16
Jean	King	Livermore	8/12/16
Robert	Oxenburgh	Alamo	8/12/16
Carl	Stein	San Francisco	8/12/16
Stephen	Weitz	Oakland	8/12/16
Paula	Zerzan	Sonoma	8/12/16
Thomas	Carlino	San Jose	8/13/16
Gita	Dev	Woodside	8/13/16
Lukasz	Martinelli	Santa Cruz	8/13/16
Tess	Oliver	Point Richmond	8/13/16
Stefanie	Heinz	Cupertino	8/15/16
Judith	Smith	Oakland	8/16/16
Kerstin	Goldsmith	San Pablo	8/22/16



#### MEMBERS

#### EMBERS Mary N. Piepho

#### ALTERNATE MEMBERS Candace Andersen County Member

County Member Sharon Burke Public Member

> Tom Butt City Member

Stanley Caldwell Special District Member

September 14, 2016 Agenda Item 9

Lou Ann Texeira Executive Officer Public Member Federal Glover County Member Michael R. McGill Special District Member

Donald A. Blubaugh

County Member Rob Schroder City Member Igor Skaredoff Special District Member

Don Tatzin City Member

September 14, 2016 (Agenda)

Contra Costa Local Agency Formation Commission (LAFCO) 651 Pine Street, Sixth Floor Martinez, CA 94553

# West Contra Costa Health Care District – Special Study Overview

Dear Commissioners:

**BACKGROUND**: The West Contra Costa Healthcare District (WCCHD) has struggled financially since the mid-1990s, experiencing increasing costs, declining reimbursements, and growing service demand from low-income, uninsured and underinsured populations. The WCCHD emerged from bankruptcy filed in 2006; however, the District was unable to regain financial solvency and fell further into debt. Eventually, WCCHD shut its hospital – Doctors Medical Center (DMC) - a full-service acute care facility, in 2015.

The WCCHD continues to function today with limited staff as it sells its building, equipment, and other property. Over the next 10-12 years, WCCHD will focus on paying off its outstanding debts and obligations, leaving essentially no funds available for health-related programs or services.

The closure of DMC resulted in a significant loss of hospital beds and emergency department facilities, as well as the elimination of other specialized services, in an underserved community with significant healthcare needs. After WCCHD extinguishes its debts, as much as \$9 million annually could be available for healthcare-related services and facilities.

**DISCUSSION**: In April 2016, LAFCO initiated a special study of the WCCHD. As provided for in the scope of work, the consultant collected and reviewed information and interviewed affected and interesting parties, including WCCHD, Contra Costa County Health Services Department, Los Medanos Community Healthcare District, and the City of Richmond.

The study evaluates a range of governance options for the District including consolidation, reorganization and dissolution. Some options would enable the continuation of property and possibly other taxes to fund healthcare purposes in the community; while other options provide

for dissolving WCCHD and naming a successor agency to wind-up the affairs of the District. The consultant will provide details regarding the governance options at the September 14<sup>th</sup> LAFCO meeting. It should be noted that AB 2910, the annual CALAFCO omnibus bill, was recently signed by the Governor. The bill includes a number of important clean-ups and also authorizes LAFCO to approve the dissolution of a healthcare district without an election under specific conditions.

The *Public Review Draft Special Study* was released on August 26, 2016. The Draft study was posted on the LAFCO website and notices were sent to affected agencies and interested parties informing them of the availability of the Draft study. The 30-day public comment period will end on September 23, 2016.

At the September 14, 2016 LAFCO meeting, the Commission will receive an overview of the special study and be asked to provide input and direction. Based on comments received at the September 14<sup>th</sup> LAFCO meeting, the consultant will make necessary updates and edits to the report. In October 2016, LAFCO will release the Final Draft report and solicit further public input. On November 9<sup>th</sup>, the Commission will be asked to accept the Final report and consider taking action to reorganize or dissolve the WCCHD.

# RECOMMENDATION

Receive study overview, discuss and provide input and direction as appropriate.

Sincerely,

LOU ANN TEXEIRA EXECUTIVE OFFICER

c: Distribution



#### MEMBERS

Mary N. Piepho

#### ALTERNATE MEMBERS Candace Andersen

County Member Sharon Burke Public Member

> Tom Butt City Member

Stanley Caldwell Special District Member

September 14, 2016 Agenda Item 10

Lou Ann Texeira Executive Officer

Donald A. Blubaugh Public Member Federal Glover County Member Michael R. McGill Special District Member

County Member Rob Schroder City Member Igor Skaredoff Special District Member

Don Tatzin City Member

September 14, 2016 (Agenda)

Contra Costa Local Agency Formation Commission 651 Pine Street, Sixth Floor Martinez, CA 94553

# SB 272 (Hertzberg) – Enterprise System Catalog

Dear Members of the Commission:

The California Public Records Act (PRA) requires state and local agencies to make their records available for public inspection, unless an exemption from disclosure applies (Gov. Code section 6250 et seq.). The PRA declares that access to information concerning the conduct of the people's business is a fundamental and necessary right of every person in this state.

On October 11, 2015, Senate Bill 272 (Attached) was passed adding a section to the PRA requiring local agencies, by July 1, 2016, to create and annually update a catalog of "enterprise systems" and to post the catalog on the local agency's website.

An *Enterprise System* is defined as a software application or computer system that collects, stores, exchanges and analyzes information that the agency uses, such as:

- A multi-departmental system or a system that contains information collected about the • public.
- A system of record that serves as an original source of data within an agency.

Contra Costa LAFCO has complied with the requirements of SB 272 by:

- 1. Creating a catalog of Enterprise Systems containing the following information:
  - Current system vendor •
  - Current system product
  - System's purpose
  - Description of categories or types of data
  - Department that is the prime custodian of the data
  - Frequency that system data is collected •
  - Frequency that system is updated •

- 2. Making the Enterprise System catalog publicly available upon request;
- 3. Posting the Enterprise System catalog on LAFCO's website at <u>http://www.contracostalafco.org/sb272.htm;</u>
- 4. Updating the Enterprise System catalog on an annual basis, or as needed.

This is an informational item; no action by the Commission is required.

Sincerely,

LOU ANN TEXEIRA EXECUTIVE OFFICER

Attachment – Senate Bill 272

#### Senate Bill No. 272 CHAPTER 795

An act to add Section 6270.5 to the Government Code, relating to public records.

[Approved by Governor October 11, 2015. Filed with Secretary of State October 11, 2015.]

LEGISLATIVE COUNSEL'S DIGEST

SB 272, Hertzberg. The California Public Records Act: local agencies: inventory. Existing law, the California Public Records Act, requires state and local agencies to make their records available for public inspection, unless an exemption from disclosure applies. The act declares that access to information concerning the conduct of the people's business is a fundamental and necessary right of every person in this state.

This bill would require each local agency, except a local educational agency, in implementing the California Public Records Act, to create a catalog of enterprise systems, as defined, to make the catalog publicly available upon request in the office of the person or officer designated by the agency's legislative body, and to post the catalog on the local agency's Internet Web site. The bill would require the catalog to disclose a list of the enterprise systems utilized by the agency, and, among other things, the current system vendor and product, unless, on the facts of the particular case, the public interest served by not disclosing that information clearly outweighs the public interest served by disclosure, in which case the local agency may instead provide a system name, brief title, or identifier of the system. Because the bill would require local agencies to perform additional duties, it would impose a state-mandated local program.

The California Constitution requires local agencies, for the purpose of ensuring public access to the meetings of public bodies and the writings of public officials and agencies, to comply with a statutory enactment that amends or enacts laws relating to public records or open meetings and contains findings demonstrating that the enactment furthers this purpose.

This bill would make legislative findings to that effect.

Existing constitutional provisions require a statute that limits the right of public access to meetings or writings of public officials to be adopted with findings demonstrating the interest to be protected by that limitation and the need to protect that interest.

This bill would declare that it includes limitations on access, that the interest to be protected is the security of enterprise systems in public agencies, and that the need to protect that interest is that enterprise systems can contain information that, if released to the public, could result in negative consequences.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

#### The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:(a) New information technology has dramatically changed the way people search

for and expect to find information in California.

(b) This technology has unlocked great potential for government to better serve the people it represents. A recent study estimated that digitizing government data could generate one trillion dollars in economic value worldwide through cost savings and improved operational performance.

(c) California plays a vitally important role in moving our nation forward in the world of technology. Just as the state's thriving tech industry surges ahead in setting new standards for society, so too must California.

(d) As several nations, states, and cities have begun to embrace policies of online access to public sector data, they have enjoyed the benefits of increased operational efficiency and better collaboration. Here in California, cities across the state are turning internally gathered and maintained data into usable information for the public to access and leverage for the benefit of their communities.

(e) In moving government to a more effective digital future, standards should be adopted to ensure that data collection and publication are standardized, including uniform definitions for machine-readable data. Online portals should also be developed to assist with public access to collected data.

(f) With a public sector committed to success in the digital age, the residents and businesses of California will stand to benefit from the greater collaboration and integration, improved accountability, and increased productivity that will result.

(g) In making California government more accessible to the people of the state, paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution requires local governments to comply with the California Public Records Act and with any subsequent statutory enactment amending that act and furthering that purpose.

SEC. 2. Section 6270.5 is added to the Government Code, to read: 6270.5. (a) In implementing this chapter, each local agency, except a local educational agency, shall create a catalog of enterprise systems. The catalog shall be made publicly available upon request in the office of the person or officer designated by the agency's legislative body. The catalog shall be posted in a prominent location on the local agency's Internet Website, if the agency has an Internet Web site. The catalog shall disclose a list of the enterprise systems utilized by the agency and, for each system, shall also disclose all of the following:

- (1) Current system vendor.
- (2) Current system product.
- (3) A brief statement of the system's purpose.
- (4) A general description of categories or types of data.
- (5) The department that serves as the system's primary custodian.
- (6) How frequently system data is collected.
- (7) How frequently system data is updated.

(b) This section shall not be interpreted to limit a person's right to inspect public records pursuant to this chapter.

(c) For purposes of this section:

(1) "Enterprise system" means a software application or computer system that collects, stores, exchanges, and analyzes information that the agency uses that is both of the following:

(A) A multidepartmental system or a system that contains information collected about the public.

(B) A system of record.

(2) "System of record" means a system that serves as an original source of data within an agency.

(3) An enterprise system shall not include any of the following:

(A) Information technology security systems, including firewalls and other cybersecurity systems.

(B) Physical access control systems, employee identification management systems, video monitoring, and other physical control systems.

(C) Infrastructure and mechanical control systems, including those that control or manage street lights, electrical, natural gas, or water or sewer functions.

(D) Systems related to 911 dispatch and operation or emergency services.

(E) Systems that would be restricted from disclosure pursuant to Section 6254.19.

(F) The specific records that the information technology system collects, stores, exchanges, or analyzes.

(d) Nothing in this section shall be construed to permit public access to records held by an agency to which access is otherwise restricted by statute or to alter the process for requesting public records, as set forth in this chapter.

(e) If, on the facts of the particular case, the public interest served by not disclosing the information described in paragraph (1) or (2) of subdivision (a) clearly outweighs the public interest served by disclosure of the record, the local agency may instead provide a system name, brief title, or identifier of the system.

(f) The local agency shall complete and post the catalog required by this section by July 1, 2016, and thereafter shall update the catalog annually.

SEC. 3. The Legislature finds and declares that Section 2 of this act, which adds Section 6270.5 to the Government Code, furthers, within the meaning of paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution, the purposes of that constitutional section as it relates to the right of public access to the meetings of local public bodies or the writings of local public officials and local agencies. Pursuant to paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution, the Legislature makes the following findings:

Because increased information about what data is collected by local agencies could be leveraged by the public to more efficiently access and better use that information, the act furthers the purpose of Section 3 of Article I of the California Constitution.

SEC. 4. The Legislature finds and declares that Section 2 of this act limits the public's right of access to public documents within the meaning of paragraph (2) of subdivision (b) of Section 3 of Article I of the California Constitution. Pursuant to that constitutional provision, the Legislature makes the following findings to demonstrate the interest and the need for protecting that interest:

(a) The interest protected by this limitation is the security of enterprise systems in public agencies.

(b) The need for protecting that interest is that enterprise systems can contain information that, if released to the public, could result in negative consequences.

SEC. 5. No reimbursement is required by this act pursuant to Section 6of Article XIIIB of the California Constitution because the only costs that may be incurred by a local agency or school district under this act would result from a legislative mandate that is within the scope of paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution.

0



#### MEMBERS

#### VIBERS Mary N. Piepho

#### ALTERNATE MEMBERS Candace Andersen

County Member Sharon Burke Public Member

Tom Butt City Member

Stanley Caldwell Special District Member

September 14, 2016 Agenda Item 11

Lou Ann Texeira Executive Officer Donald A. Blubaugh Public Member Federal Glover County Member Michael R. McGill Special District Member

County Member Rob Schroder City Member Igor Skaredoff Special District Member

**Don Tatzin** City Member

September 14, 2016 (Agenda)

Contra Costa Local Agency Formation Commission 651 Pine Street, Sixth Floor Martinez, CA 94553

# **CALAFCO** Legislative Update

Dear Members of the Commission:

The 2015-16 Legislative session ended on August 31, 2016, which was the last day for bills to pass to the Governor. September 30, 2016 is the last day for the Governor to sign or veto bills passed by the Legislature.

Pamela Miller, the CALAFCO Executive Director, has provided an update on legislation and related matters (see below). It was another challenging year for LAFCos, with a number of successes. CALAFCO thanks members for the position letters.

# Legislative Update

# **CALAFCO Sponsored Bills**:

Both of the CALAFCO sponsored bills were signed by the Governor - <u>*AB* 2910</u> (Omnibus) and <u>*SB*</u> <u>**1266**</u> (JPAs). AB 2910 includes a number of important clean-ups and also authorizes LAFCO to approve the dissolution of a healthcare district without an election under specific conditions.

# **CALAFCO Support Bills**:

<u>AB 2032</u> (*Linder*) was signed by the Governor. The bill contains clean up language to last year's CALAFCO sponsored bill on disincorporation (AB 851).

<u>SB 817</u> (*Roth*) was passed out of the Assembly with minor amendments and is now back in the Senate. However, this bill has not yet been assigned, and is currently stalled.

# **CALAFCO Oppose Bills**:

<u>AB 2414</u> (*Garcia*), which requires Riverside LAFCo to approve the expansion of the Desert Healthcare District, passed the Senate floor on August 29<sup>th</sup> and is going back to the Assembly for concurrence of the amendments made while on the Senate side.

<u>AB 2471</u> (*Quirk*), which requires Alameda LAFCo to dissolve the Eden Healthcare District, was moved to the inactive file in August (on the Senate floor) at the request of the author. The author has indicated he would kill the bill if all parties involved were satisfied with the direction/scope of Alameda LAFCo's special study.

# **Other Bills:**

<u>AB 2470</u> (Gonzalez), which requires the expansion of water service to tribal lands in San Diego without annexation, is headed to the Governor's desk for signature.

<u>SB 1262</u> (*Pavley*), which focuses on water supply planning is headed to the Governor's desk for signature.

<u>SB 1263</u> (*Wieckowski*), which pertains to water system permitting would provide the State Water Resources Control Board (SWRCB) additional authority to deny permits for new systems. This bill contains the CALAFCO requested amendments, and is headed to the Governor's desk for signature.

<u>SB 552</u> (*Wolk*) is the clean-up bill to last year's SB 88 and adds a provision for the SWRCB to assign an administrator to a water system should the SWRCB feel it is necessary. This bill also contains CALAFCO's requested technical amendment to SB 88. The bill passed the Senate floor on August 29<sup>th</sup> and is now on its way to the Governor for signature.

# Little Hoover Commission Hearing on Special Districts – August 25

On August 25<sup>th</sup>, the Little Hoover Commission (LHC) held its first of two hearings on special districts. Pamela Miller attended the hearing on behalf of CALAFCO. The hearing covered a wide range of issues, including property taxes, LAFCos, reserve funds, public engagement, healthcare districts, State Responsibility Area fees, and more. The hearing is now available at the <u>Commission's YouTube site</u>.

According to LHC staff, the second hearing in October will focus on the climate change readiness of special districts, especially those with large infrastructure needs.

Further, the LHC is conducting a roundtable workshop in November on healthcare districts, at which the CALAFCO Executive Director and your Executive Officer have been invited to attend.

This is an informational item; no action by the Commission is required.

Sincerely,

LOU ANN TEXEIRA EXECUTIVE OFFICER



# AGENDA

September 14, 2016 Agenda Item 12

# **RETIREMENT BOARD MEETING**

SECOND MONTHLY MEETING August 24, 2016 9:00 a.m. Retirement Board Conference Room The Willows Office Park 1355 Willow Way, Suite 221 Concord, California

# THE RETIREMENT BOARD MAY DISCUSS AND TAKE ACTION ON THE FOLLOWING:

- 1. Pledge of Allegiance.
- 2. Accept comments from the public.
- 3. Approve minutes from the June 8 and 22, 2016 meetings.

## CLOSED SESSION

4. The Board will meet in closed session pursuant to Govt. Code Section 54956.9(d)(2) to confer with legal counsel regarding potential litigation (one case).

## **OPEN SESSION**

- 5. Consider and take possible action to implement forfeiture of Jon Wilmot's pension in accordance with felony forfeiture provision Government Code Section 7522.72:
  - a. Presentation by CCCERA; Board questions
  - b. Opportunity for member Jon Wilmot to present to the Board his position and any information or records relevant to the issue; Board questions
  - c. Public comment
  - d. Board deliberations and action
- 6. Review of total portfolio performance for period ending June 30, 2016.
- 7. Consider and take possible action to add or remove investment managers from the watch list.
- 8. Consider authorizing the attendance of Board and/or staff:
  - a. Annual Employee Benefits Conference, IFEBP, November 12-16, 2016, Orlando, FL.
- 9. Miscellaneous
  - b. Staff Report
  - c. Outside Professionals' Report
  - d. Trustees' Comments

The Retirement Board will provide reasonable accommodations for persons with disabilities planning to attend Board meetings who contact the Retirement Office at least 24 hours before a meeting.

# CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION PENDING PROPOSALS – SEPTEMBER 14, 2016

September 14, 2016 Agenda Item 14b

LAFCO APPLICATION	RECEIVED	STATUS
Town of Discovery Bay Community Services District (DBCSD) SOI Amendment (Newport Pointe): proposed SOI expansion of 20 <u>+</u> acres bounded by Bixler Road, Newport Drive and Newport Cove	July 2010	Incomplete; awaiting info from applicant
DBCSD Annexation (Newport Pointe): proposed annexation of 20 <u>+</u> acres to supply water/sewer services to a 67-unit single family residential development	July 2010	Incomplete; awaiting info from applicant
Bayo Vista Housing Authority Annexation to RSD: proposed annexation of 33 <u>+</u> acres located south of San Pablo Avenue at the northeastern edge of the District's boundary	Feb 2013	Continued from 11/12/14 meeting
Northeast Antioch Reorganization Area 2A: proposed annexations to City of Antioch and Delta Diablo; and corresponding detachments from County Service Areas L-100 and P-6	July 2013	Continued from 6/8/16 meeting to 9/14/16
Reorganization 186 (Magee Ranch/SummerHill): proposed annexations to Central Contra Costa Sanitary District (CCCSD) and East Bay Municipal Utility District (EBMUD) of 402 <u>+</u> acres; 9 parcels total to CCCSD (8 parcels) and EBMUD (7 parcels)	June 2014	Removed from the Commission's calendar pending further notice
Tassajara Parks Project – proposed SOI expansions to CCCSD and EBMUD of 30 <u>+</u> acres located east of the City of San Ramon and the Town of Danville	May 2016	Under review
Tassajara Parks project – proposed annexations to CCCSD and EBMUD of 30 <u>+</u> acres located east of the City of San Ramon and the Town of Danville	May 2016	Under review
West County Wastewater District Annexation 315 - proposed annexation of 1.0 <u>+</u> acres located on Hillside Drive in unincorporated El Sobrante	May 2016	Pending
Dougherty Valley Reorganization #17: Annexation to the City of San Ramon and Detachment from CSA P-6	July 2016	Under review

# East County fire district to put its governing structure on November ballot

By Rowena Coetseercoetsee@bayareanewsgroup.com Posted: 07/12/2016 04:03:27 PM PDT | Updated: about 17 hours ago

BRENTWOOD -- The fire district serving far East Contra Costa County will be asking voters in November whether they want to retain an appointed board of nine at-large directors or choose the leadership themselves.

East Contra Costa Fire District's board decided to put the matter to its constituents in a 6-1 vote this week. Director Joe Young cast the dissenting vote; Directors Joel Bryant and Cheryl Morgan were absent.

Board members currently are appointed to four-year terms by the elected officials of the cities and unincorporated areas they represent: Brentwood and Oakley city councils choose four and three directors, respectively, and the county Board of Supervisors selects two.

The new resolution replaces one the board had adopted last month that asked the public if it wanted a fire district board with five members instead of nine.

The question of how many directors it takes to run a fire district -- whether it's nine, seven or the more typical five -- might come before voters next year instead.

The district's legal counsel suggested that it let residents decide either by holding a special election or using mail-in ballots.

The idea behind proposing changes to the structure of the board in stages is to make it easier for the public to digest, said Fire Chief Hugh Henderson.

Once that's been decided, the attorney recommended that the agency wait until the 2020 U.S. Census has been completed before asking voters whether they want to continue with at-large representation or have directors represent various geographic areas by drawing boundary lines to create those divisions.

Director Steve Smith says he strongly supports the idea of at-large representation because it makes it easier to find applicants for the fire board if all of them can come from any part of the district.

Running for office has its challenges, he said, so the larger the pool of prospective candidates the better, he said.

"There's an effort and a cost involved," Smith said, noting that candidates must collect signatures from registered voters to run as well as pay for signs, mailings and any statement they want to appear on the ballot.

What's more, he said it would be costly and impossible to draw the boundaries of wards in the outlying, less populated areas of the fire district in a way that would not create an inequity in voting power between residents there and those in more populous communities.

Reach Rowena Coetsee at 925-779-7141. Follow her at <u>Twitter.com/RowenaCoetsee</u>

### East Bay Times

### Berkeley council criticizes hospital closure plans

By Tom Lochner, tlochner@bayareanewsgroup.com Posted: 07/13/2016 09:14:51 PM PDT | Updated: about 14 hours ago

BERKELEY -- The City Council on Tuesday registered its strong concern over plans to close Alta Bates hospital, calling upon owner Sutter Health to keep it running and possibly seismically retrofit it. A Berkeley institution since 1905, Alta Bates has the only remaining emergency room between Richmond and Oakland since Doctors Medical Center in San Pablo closed last year.

The vote followed a 6 p.m. rally in front of Old City Hall staged by the California Nurses Association to protest the planned closing, projected for sometime between 2018 and 2030.

Sutter Health intends to consolidate Alta Bates services at its Summit hospital in Oakland, one of three campuses that constitute Alta Bates Summit Medical Center, along with Herrick hospital in Berkeley.

Sutter CEO Chuck Prosper has said Alta Bates would shut down due in part to a 2030 state deadline requiring hospitals to be able to withstand a major earthquake.

But several speakers at Tuesday's rally said Sutter's plans to close are motivated not by seismic safety but profits, notwithstanding the corporation's nonprofit status.

Zenei Cortez, CNA co-president, noted that Sutter Health and Affiliates reported assets of more than \$14.3 billion as of December 2015, data reflected in a Sutter financial report provided by another CNA official.

Cortez dismissed the notion that urgent care could fill the gap if Alta Bates closes.

"Having a full-service hospital is critical," Cortez said.

"In order to have a safe and healthy community, we need a hospital here in Berkeley."

In San Pablo, LifeLong Medical Care opened an urgent care clinic the day before Doctors Medical Center closed in April 2015.

But LifeLong CEO Marty Lynch, in an interview that month, said, "We're not an ER; we can't offer emergency service. We'll be able to do a little bit more than a doctor's office, but by no means will it be like an emergency room."

Joining the rally were Berkeley Councilmen Kriss Worthington and Jesse Arreguin, former state Assemblyman Sandre Swanson, and aides to state Assemblyman Tony Thurmond and Berkeley Councilman Max Anderson.

Worthington read from a poem he wrote that ended with, "We must stop Sutter, Alta Bates will not shutter. Threatening closure is a Code Red, Tell Sutter to work with us instead."

Arreguin joined the nurses in contending the planned closure has nothing to do with seismic safety.

"It has to do with maximizing profits," said Arreguin, who chastised Sutter for deciding on its plan "unilaterally," without consulting Berkeley officials.

Prosper, in a letter sent Tuesday to the City Council, said the council resolution "contains numerous inaccuracies and draws conclusions about future health care delivery not supported by the facts.

"Sutter Health is committed to a strong medical presence in the City of Berkeley," Prosper said, adding, "Our target is to balance inpatient and outpatient services between Oakland and Berkeley with the goal of sustainability for Alta Bates Summit."

"Regardless of the seismic deadline, we must adapt to changes in health care if we are to remain viable in today's world," the letter continued.

"Operating two full-service hospitals (Alta Bates and Summit) less than three miles apart is inefficient and inhibits our ability to be most affordable to patients.

"In today's hypercompetitive environment, employers and consumers are choosing health services based on costs as much as quality. To excel we must be competitive and offer exceptional services."

Rebuilding on the current site is not feasible, Prosper added.

Several nurses spoke at the council meeting.

"Our community has already been devastated by the closure of Doctors Hospital," said Rochelle Pardue-Okimoto, a registered nurse in the Newborn Intensive Care unit at Alta Bates and an El Cerrito resident.

"The closure of Alta Bates will only put us in more danger."

Earlier, at the rally, Alta Bates emergency room nurse Bipin Walia said that "six-, eight- or 10hour wait times will be the norm" at other area hospitals if Alta Bates closes, and warned of "bad patient outcomes, leading to patient deaths."

"You can't have a heart attack treated at an urgent care center," he added.

#### East Bay Times

### Danville: Magee Ranch developer walks away

By Sam Richards , srichards@bayareanewsgroup.com Posted: 07/13/2016 11:26:24 AM PDT | Updated: about 18 hours ago

DANVILLE -- Four months after a judge ruled a new environmental impact report would be required for a controversial housing project off Diablo Road, its developer has pulled out and the landowning family has taken over.

What that means for the future of the proposed 69-house Magee Ranch housing development is unclear.

"It's too early to know," said Stuart Flashman, an attorney for Save Open Space, a Danville open space preservation group that sued over the project, citing among its concerns bicycle safety. "It certainly is an interesting development, that's for sure."

San Ramon-based SummerHill Homes had been the lead developer for the project, located near the main entrance to Mount Diablo State Park, since its inception in 2010.



Bicyclists travel on Diablo Road between Mt. Diablo Scenic Boulevard and Green Valley Road in Danville, Calif., on Wednesday, Feb. 4, 2015. A recent ruling by a Contra Costa County judge found that the Town of Danville acted improperly when it approved a proposal to build the 69-homes SummerHill housing development off of congested Diablo Road without first putting it to a town vote. (Doug Duran/Bay Area News Group)

But on Friday, town officials received a letter from property owner Magee Investments that said SummerHill is "no longer involved" with the project.

The project hit a major roadblock in March when Contra Costa County Superior Court Judge Barry Goode ruled the project's environmental impact report must be redone because the original one didn't sufficiently consider the safety of bicyclists along Diablo Road, an increasingly popular route for those making the climb up Mount Diablo.

Goode rejected SummerHill's assertion that a bicycle safety study could be added to the existing report, saying the issue was too important to simply add on to the existing report. The entire approval process, the judge said, would have to be redone.

It was after that admonition that SummerHill walked away from the project.

Representatives of SummerHill declined to comment Wednesday.

Jed Magee, president of Alamo-based Magee Investments, wouldn't comment on possible reasons for SummerHill's exit.

The project -- with its separate east and west components -- remains an active application with the town of Danville, said Dave Crompton, principal planner.

"We're waiting for (Jed Magee's) decision on moving forward," said Crompton, who expects the family will update the environmental impact report.

Magee said his family will take some time to decide what to do next, and that they put their company's name on the project to keep it alive while options are discussed. One decision yet to be made, he said, is whether another developer will be asked to lead the project.

"We're more ranchers than land developers," said Magee, whose family has operated that ranch since 1949. "It will take a little time for us to puzzle this out."

Save Open Space has been fighting the project since 2013, when it sued the Danville Town Council over environmental concerns. The group first sought to protect the picturesque historical farmland and later to make sure traffic created by the project would be addressed.



The Magee Ranch case has been of keen interest to bicyclist groups who hoped decisions like Goode's would help establish legal precedent for considering cyclists' safety in environmental studies for residential and commercial development.

"The March decision highlights the fact that when you raise the issue of bicycle safety, you can't just blow it off; it has to be taken seriously," Flashman said.

Maryann Cella, a member of the SOS group, said, "The group wants a solution that's fair to all concerned, including the landowners and to those that use Diablo Road" on four wheels or two.

"We're in a holding pattern here," she said. "We're hopeful that this is a positive sign, but it's too early to tell what this means."

Contact Sam Richards at 925-943-8241. Follow him at Twitter.com/samrichardsWC.

### WATER DEEPLY

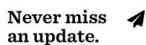
In-depth coverage of the California drought. Always noise-free, always trustworthy. Learn more about us.

<b>Executive Summaries</b>	Articles	Op-Eds	Background	Search	About	CONNECT WITH US 🕑 🕇
ARTICLES GENERAL	-		5	Share < 3	Tweet	Subscribe for updates

# Northern California Towns Are Running Out of Water

Paskenta is facing its third year in a row of water shortage because a creek, which is its sole source of water, is dropping. The town is one of more than a dozen in northern California facing water shortages.

WRITTEN BY Jane Braxton Little PUBLISHED ON Aug. 16, 2016 READ TIME Approx. 4 minutes



Sign up for our newsletter to receive weekly updates, special reports and featured insights as we cover one of the most critical issues of our time.

Enter your email addres

#### **Related Articles**



**Groups Move to Oppose** 



The drought has dropped water levels in Thomes Creek, the sole source of water for Paskenta, Calif., which may soon have to truck in water for residents again. U.S. Forest Service

**PASKENTA**, **POPULATION 112**, is an out-of-the-way place where rustic ranches grace grass-covered hills rolling west toward Mendocino Pass. Since the lumber mill closed in 1992, the Tehama County community 130 miles (210km) north of Sacramento has been settling into bucolic tranquility.

A water crisis has triggered a rude awakening.

Thomes Creek, the sole source of water for the Paskenta Community Services District, is dropping. A pump that taps the underflow from a pool in the creek is a mere 6ft (1.8m) below the current water level, said Janet Zornig, the district's manager.

"If it keeps up like this – and no rain in sight – we'll have to haul in water," she said. Rail-Water Proposition March 8th, 2016

Felicia Marcus: California's Drought Lessons March 16th, 2016

Surprising Way Climate Change Is Impacting Water June 14th, 2016

Jennifer Bowles: Building Water Literacy February 17th, 2016

How to Create Effective Groundwater Agencies June 8th, 2016

Why the Endangered Delta Smelt Needs Relief

August 16th, 2016

While the crisis Paskenta is facing is the most critical, more than a dozen communities in northern California are grappling with diminishing water supplies. Most, like Paskenta, are located along the edges of the northern Sacramento Valley, where groundwater diminishes as the elevation rises. Most, like Paskenta, rely on streams that flow into the Sacramento River.

"All of the water systems located in that bathtub ring are struggling," said Reese Crenshaw, a Redding-based district engineer with the state's Division of Drinking Water, a part of the California Department of Public Health.

Four consecutive winters with little or no snowpack, followed by four dry summers, have upended water systems from Glenn and Colusa counties, on the west side of the Sacramento Valley, to Butte County on the eastern slope. The difficulties go beyond lower levels in the creeks and reservoirs they depend upon. Among them is a drought-caused requirement, issued by the state's Division of Water Rights, that all systems on tributaries to the Sacramento River find alternative sources of water. These "drastic measures" are designed to protect fish and those who hold senior water rights, Crenshaw said.



Paskenta, Calif. is located 130 miles (210km) north of Sacramento. The town is one of about a dozen in northern California facing water shortages. (Google Maps)

Because it flows into the Sacramento River, Paskenta has been ordered to stop using Thomes Creek. It's a directive fraught with irony since the stream is already low enough to cause the current emergency.

Paskenta has been facing a water crisis for three consecutive years. In 2014, when Thomes Creek dropped to levels too low to pump, the community hauled water from Corning 20 miles (32km) to the east. The Corning City Council authorized 20,000 gallons (75,000 liters) of water per day for the Paskenta Community Services District. This approval was due to expire on June 30, 2015, but the council renewed it last year.

Last month Corning officials once again came to the rescue of their neighbors in Paskenta. Recognizing the dearth of water as a health and safety emergency, they reauthorized the Paskenta district to collect and transport up to 20,000 gallons of water daily at the rate of \$5 per 1,000 gallons.

The trucking hasn't started yet but it appears imminent. Last year, when hauled water was the only source after August 26, the 250 people on the community water system were restricted to 100 gallons per household per day, Zornig said.

This year? "I can't tell you. Right now we're not out of water," she said.

Meanwhile, state officials are planning to drill a test well east of Paskenta to develop a secondary source as an alternative to Thomes Creek. Groundwater in that area is always scarce, said Crenshaw. If they don't hit a sufficient supply they will install a storage system with a capacity of 3 million gallons. The current storage tank holds around 200,000 gallons, enough for between five and eight days, he said.

The toll that drought has taken on northern California water systems is not limited to communities along the edges of the Sacramento Valley.

In 2014, Willits, in coastal Mendocino County, was down to a 100-day supply in the reservoirs that are the water source for its 4,850 residents. Since then the city has drilled a well as an emergency backup supply, paying most of the \$1 million costs out of reserve funds, said Willits mayor Bruce Burton.

This year the reservoirs are at 80 percent capacity.

Optimistic that "days of plenty" have returned, Burton dismissed any worries about diminishing water supplies caused by long-term climate changes.

"Talking about the weather is an ice-breaker for conversation. It's another way to say hello," he said.

Officials in nearby Brooktrails Township are not as sanguine. In 2014, when drought lowered the reservoirs that supply the community of 1,550, officials imposed mandatory rationing. The 110 gallons (415 liters) per day for a four-person household was barely over the state minimum of 27 gallons per day per person.

Today the Brooktrails reservoirs are full but the rationing continues, now raised to 250 gallons a day. And the community remains under a state-imposed moratorium on new connections until it provides an alternate drinking water source, said a spokesperson for general manager Denise Rose.

To ensure a stable supply of municipal water, the Division of Drinking Water required Brooktrails Township to request a tie-in to the city of Willits water supply. The community can't afford the backup system costs, estimated at \$1 million just for the installation.

"It really needs to rain," the Brooktrails spokesperson said.

Drought is creating a different set of problems for Del Oro Water Co. in Arbuckle, northwest of Sacramento. Overpumping caused the groundwater level to drop. The subsidence that followed was severe enough to damage the district's well, said Crenshaw. In Elk Creek near Willows, lowering groundwater allowed manganese to enter the community system. Residents there drank bottled water until treatment brought the manganese to within acceptable standards, he said.

Crenshaw predicted that more communities will experience water supply problems as the drought continues. "Each community has its own set of issues and solutions to deal with," he said. "We can't move the towns. They are there."

For Paskenta, a third year of living with the strict rationing imposed by trucked-in water may be approaching. Zornig, the water district secretary, credited residents with rising to the challenge the shortages have created. "They have learned to cope. I'm proud of them," she said.

Meanwhile, she is hoping for rain: "It's a gamble every year but it has rained in the summer before."

© 2016 News Deeply. About Team Privacy Terms Contact

#### **Kate Sibley**

From: Sent: To: Subject: Delta Protection Commission <nicole.bert@delta.ca.gov> Wednesday, August 17, 2016 1:28 PM Kate Sibley Agricultural Conservation Easement Funded near Discovery Bay



### Your Weekly Delta Event Update

#### The Brentwood Agricultural Land Trust has received funding to protect farmland adjacent to Discovery Bay

The Strategic Growth Council announced funding for strategic agricultural conservation easement purchases throughout California on August 9th, including funds to the Brentwood Agricultural Land Trust for a 551 acre acquisition directly east of Discovery Bay.

The property was proposed to be developed with over 3,000 homes, but the purchase option lapsed when the developer failed to make a scheduled payment. The agricultural conservation easement will now halt any future expansion on the east side of Discovery Bay. See <u>here</u> for more information on the grant.

When completed toward the end of this year, this purchase will protect Swainson's hawk habitat, preserve vital groundwater recharging and protect the rural sunrise views



of Discovery Bay residents. It also preserves a vital source of organic produce for nearby communities.

Congratulations to Kathryn Lyddan and the Brentwood Agricultural Land Trust for their successful effort!

### East Bay Times

### San Ramon: Over objections, old Dougherty Road to close

By Sam Richards, srichards@bayareanewsgroup.com Posted: 08/19/2016 12:10:57 PM PDT | Updated: a day ago



Traffic moves on the old Dougherty Road in San Ramon, Calif., on Wednesday, Aug. 17, 2016. The old road could be closed to traffic and made into a bike trail beginning next year. Residents of Gale Ranch community in San Ramon want to keep the road open. A new 1.5-mile stretch of Dougherty Road has been opened recently. (Ray Chavez/Bay Area News Group)

SAN RAMON -- The sign at the stoplight says "(Future) Dougherty Road," but for residents in the Gale Ranch area of Tassajara Valley, the future is now for the shiny new six-lane road, which opened a few weeks ago.

Time's running out, though, for the old two-lane Dougherty Road a few hundred yards to the east, as the Contra Costa County Board of Supervisors voted Tuesday to stick with long-standing plans to close the road on Aug. 29.

Although supervisors agreed to monitor traffic congestion on surrounding roads, some residents are blasting the planned closure, saying it will create a traffic mess in the fast-growing residential area.

"In the mornings, traffic is backed up from here all the way to Bollinger, waiting to make a right turn onto the new road," said Viswanathan Ananthanarayanan, standing almost half a mile from the Bollinger Canyon Road stoplight. "They may have to make some adjustments ... their (traffic) studies were done long before all these people were here." Ananthanarayanan and several other area residents told the supervisors on Tuesday that even with completion of the 1.5-mile stretch of Dougherty Road from Crow Canyon Road south to Bollinger Canyon Road near Alamo Creek, the old road should stay open for commuters dropping kids off at nearby schools, including Quail Run Elementary near the north end of Old Dougherty.

Having to reverse through the new Gale Ranch and Windemere neighborhoods back to Bollinger Canyon Road and then to the "New Dougherty" will create a traffic mess, said Nishant Asthana of San Ramon.

"This will increase my commute time by 35 or 40 minutes each morning," he said, adding that he and other residents wish they'd learned of the plans before seeing orange closure signs along the old road in June.

Asthana started an online Change.org petition, "Keep Old Dougherty Road open to reduce traffic congestion." It had gotten 893 signatures as of Thursday.

Supervisors said keeping the old road open would defy the Dougherty Valley Specific Plan, created in the mid-1990s, which calls for the new Dougherty Road and for closing the old one between Stoneleaf Road-Ivyleaf Springs Road and Bollinger Canyon Road. According to that plan, the old two-lane road will be converted into a recreational trail.

San Ramon officials, notably Mayor Bill Clarkson, have asserted there's an obligation to create that trail because Gale Ranch-area homebuyers were told it would be built.



Nishant Asthana, resident of Gale Ranch community in San Ramon, stands next to the old Dougherty Road in San Ramon, Calif., on Wednesday, Aug. 17, 2016. (Ray Chavez/Bay Area News Group)

After the county abandons the old roadway and the trail improvements are made as planned, the trail will be transferred to the city of San Ramon.

The city supports the closure plan, and Lisa Bobadilla, the city's transportation division manager, reiterated that point to the supervisors. The bike trail, she said, is also part of the city's general plan.

Bobadilla said San Ramon can live with monitoring the traffic for a few months. "We don't anticipate any significant traffic congestion," she said.

Still, the supervisors chose to move ahead with caution, lest they "abandon a road, greenscape it and then decide, 'Oh, wait a minute, maybe the (traffic) concerns were real,' " Supervisor Mary Piepho said.

Contact Sam Richards at 925-943-8241. Follow him at Twitter.com/samrichardsWC.



### The Sacramento Bee

### California farm revenue plunges in 2015

By Dale Kasler August 30, 2016

#### dkasler@sacbee.com

Farm revenue in California dropped by more than \$9 billion last year as the drought forced farmers to scramble for water and crucial commodities declined in price, according to data released by the state and federal governments Tuesday.

The U.S. Department of Agriculture's economic research service said farm income totaled \$47.07 billion last year in California. That compared with a record \$56.61 billion in 2014.

All through the drought, which has cut off deliveries of surface water supplies to large swaths of the Central Valley, farmers have been able to <u>increase revenue</u> by pumping more groundwater and switching to high-dollar crops such as almonds. Those strategies have brought criticisms from environmentalists and others about agriculture's water use, particularly the depletion of aquifers in the San Joaquin Valley.

The figures from 2015 show the era of rising revenue has ended, at least for the time being.

"These numbers certainly reflect drought impacts in 2015, which led to the fallowing of 540,000 acres," said the California Department of Food and Agriculture in a statement on the USDA numbers.

However, the state also noted that prices fell for such key commodities as milk and tree nuts, which represent two of the most important commodities produced in California. The state's dairy business alone dropped by more than \$3 billion last year. <u>Almond sales</u> went from \$7.4 billion to \$5.3 billion. Both declines were the result of price drops after several boom years.

Dale Kasler: 916-321-1066, @dakasler



#### MEMBERS

Mary N. Piepho

#### ALTERNATE MEMBERS Candace Andersen

County Member Sharon Burke Public Member

> Tom Butt City Member

Stanley Caldwell Special District Member

September 14, 2016 Agenda Item 10

Lou Ann Texeira Executive Officer

Donald A. Blubaugh Public Member Federal Glover County Member Michael R. McGill Special District Member

County Member Rob Schroder City Member Igor Skaredoff Special District Member

Don Tatzin City Member

September 14, 2016 (Agenda)

Contra Costa Local Agency Formation Commission 651 Pine Street, Sixth Floor Martinez, CA 94553

#### SB 272 (Hertzberg) – Enterprise System Catalog

Dear Members of the Commission:

The California Public Records Act (PRA) requires state and local agencies to make their records available for public inspection, unless an exemption from disclosure applies (Gov. Code section 6250 et seq.). The PRA declares that access to information concerning the conduct of the people's business is a fundamental and necessary right of every person in this state.

On October 11, 2015, Senate Bill 272 (Attached) was passed adding a section to the PRA requiring local agencies, by July 1, 2016, to create and annually update a catalog of "enterprise systems" and to post the catalog on the local agency's website.

An *Enterprise System* is defined as a software application or computer system that collects, stores, exchanges and analyzes information that the agency uses, such as:

- A multi-departmental system or a system that contains information collected about the • public.
- A system of record that serves as an original source of data within an agency.

Contra Costa LAFCO has complied with the requirements of SB 272 by:

- 1. Creating a catalog of Enterprise Systems containing the following information:
  - Current system vendor •
  - Current system product
  - System's purpose
  - Description of categories or types of data
  - Department that is the prime custodian of the data
  - Frequency that system data is collected •
  - Frequency that system is updated •

- 2. Making the Enterprise System catalog publicly available upon request;
- 3. Posting the Enterprise System catalog on LAFCO's website at <u>http://www.contracostalafco.org/sb272.htm;</u>
- 4. Updating the Enterprise System catalog on an annual basis, or as needed.

This is an informational item; no action by the Commission is required.

Sincerely,

LOU ANN TEXEIRA EXECUTIVE OFFICER

Attachment – Senate Bill 272

#### Senate Bill No. 272 CHAPTER 795

An act to add Section 6270.5 to the Government Code, relating to public records.

[Approved by Governor October 11, 2015. Filed with Secretary of State October 11, 2015.]

LEGISLATIVE COUNSEL'S DIGEST

SB 272, Hertzberg. The California Public Records Act: local agencies: inventory. Existing law, the California Public Records Act, requires state and local agencies to make their records available for public inspection, unless an exemption from disclosure applies. The act declares that access to information concerning the conduct of the people's business is a fundamental and necessary right of every person in this state.

This bill would require each local agency, except a local educational agency, in implementing the California Public Records Act, to create a catalog of enterprise systems, as defined, to make the catalog publicly available upon request in the office of the person or officer designated by the agency's legislative body, and to post the catalog on the local agency's Internet Web site. The bill would require the catalog to disclose a list of the enterprise systems utilized by the agency, and, among other things, the current system vendor and product, unless, on the facts of the particular case, the public interest served by not disclosing that information clearly outweighs the public interest served by disclosure, in which case the local agency may instead provide a system name, brief title, or identifier of the system. Because the bill would require local agencies to perform additional duties, it would impose a state-mandated local program.

The California Constitution requires local agencies, for the purpose of ensuring public access to the meetings of public bodies and the writings of public officials and agencies, to comply with a statutory enactment that amends or enacts laws relating to public records or open meetings and contains findings demonstrating that the enactment furthers this purpose.

This bill would make legislative findings to that effect.

Existing constitutional provisions require a statute that limits the right of public access to meetings or writings of public officials to be adopted with findings demonstrating the interest to be protected by that limitation and the need to protect that interest.

This bill would declare that it includes limitations on access, that the interest to be protected is the security of enterprise systems in public agencies, and that the need to protect that interest is that enterprise systems can contain information that, if released to the public, could result in negative consequences.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

#### The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:(a) New information technology has dramatically changed the way people search

for and expect to find information in California.

(b) This technology has unlocked great potential for government to better serve the people it represents. A recent study estimated that digitizing government data could generate one trillion dollars in economic value worldwide through cost savings and improved operational performance.

(c) California plays a vitally important role in moving our nation forward in the world of technology. Just as the state's thriving tech industry surges ahead in setting new standards for society, so too must California.

(d) As several nations, states, and cities have begun to embrace policies of online access to public sector data, they have enjoyed the benefits of increased operational efficiency and better collaboration. Here in California, cities across the state are turning internally gathered and maintained data into usable information for the public to access and leverage for the benefit of their communities.

(e) In moving government to a more effective digital future, standards should be adopted to ensure that data collection and publication are standardized, including uniform definitions for machine-readable data. Online portals should also be developed to assist with public access to collected data.

(f) With a public sector committed to success in the digital age, the residents and businesses of California will stand to benefit from the greater collaboration and integration, improved accountability, and increased productivity that will result.

(g) In making California government more accessible to the people of the state, paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution requires local governments to comply with the California Public Records Act and with any subsequent statutory enactment amending that act and furthering that purpose.

SEC. 2. Section 6270.5 is added to the Government Code, to read: 6270.5. (a) In implementing this chapter, each local agency, except a local educational agency, shall create a catalog of enterprise systems. The catalog shall be made publicly available upon request in the office of the person or officer designated by the agency's legislative body. The catalog shall be posted in a prominent location on the local agency's Internet Website, if the agency has an Internet Web site. The catalog shall disclose a list of the enterprise systems utilized by the agency and, for each system, shall also disclose all of the following:

- (1) Current system vendor.
- (2) Current system product.
- (3) A brief statement of the system's purpose.
- (4) A general description of categories or types of data.
- (5) The department that serves as the system's primary custodian.
- (6) How frequently system data is collected.
- (7) How frequently system data is updated.

(b) This section shall not be interpreted to limit a person's right to inspect public records pursuant to this chapter.

(c) For purposes of this section:

(1) "Enterprise system" means a software application or computer system that collects, stores, exchanges, and analyzes information that the agency uses that is both of the following:

(A) A multidepartmental system or a system that contains information collected about the public.

(B) A system of record.

(2) "System of record" means a system that serves as an original source of data within an agency.

(3) An enterprise system shall not include any of the following:

(A) Information technology security systems, including firewalls and other cybersecurity systems.

(B) Physical access control systems, employee identification management systems, video monitoring, and other physical control systems.

(C) Infrastructure and mechanical control systems, including those that control or manage street lights, electrical, natural gas, or water or sewer functions.

(D) Systems related to 911 dispatch and operation or emergency services.

(E) Systems that would be restricted from disclosure pursuant to Section 6254.19.

(F) The specific records that the information technology system collects, stores, exchanges, or analyzes.

(d) Nothing in this section shall be construed to permit public access to records held by an agency to which access is otherwise restricted by statute or to alter the process for requesting public records, as set forth in this chapter.

(e) If, on the facts of the particular case, the public interest served by not disclosing the information described in paragraph (1) or (2) of subdivision (a) clearly outweighs the public interest served by disclosure of the record, the local agency may instead provide a system name, brief title, or identifier of the system.

(f) The local agency shall complete and post the catalog required by this section by July 1, 2016, and thereafter shall update the catalog annually.

SEC. 3. The Legislature finds and declares that Section 2 of this act, which adds Section 6270.5 to the Government Code, furthers, within the meaning of paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution, the purposes of that constitutional section as it relates to the right of public access to the meetings of local public bodies or the writings of local public officials and local agencies. Pursuant to paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution, the Legislature makes the following findings:

Because increased information about what data is collected by local agencies could be leveraged by the public to more efficiently access and better use that information, the act furthers the purpose of Section 3 of Article I of the California Constitution.

SEC. 4. The Legislature finds and declares that Section 2 of this act limits the public's right of access to public documents within the meaning of paragraph (2) of subdivision (b) of Section 3 of Article I of the California Constitution. Pursuant to that constitutional provision, the Legislature makes the following findings to demonstrate the interest and the need for protecting that interest:

(a) The interest protected by this limitation is the security of enterprise systems in public agencies.

(b) The need for protecting that interest is that enterprise systems can contain information that, if released to the public, could result in negative consequences.

SEC. 5. No reimbursement is required by this act pursuant to Section 6of Article XIIIB of the California Constitution because the only costs that may be incurred by a local agency or school district under this act would result from a legislative mandate that is within the scope of paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution.

0



#### MEMBERS

#### VIBERS Mary N. Piepho

#### ALTERNATE MEMBERS Candace Andersen

County Member Sharon Burke Public Member

Tom Butt City Member

Stanley Caldwell Special District Member

September 14, 2016 Agenda Item 11

Lou Ann Texeira Executive Officer Donald A. Blubaugh Public Member Federal Glover County Member Michael R. McGill Special District Member

County Member Rob Schroder City Member Igor Skaredoff Special District Member

**Don Tatzin** City Member

September 14, 2016 (Agenda)

Contra Costa Local Agency Formation Commission 651 Pine Street, Sixth Floor Martinez, CA 94553

#### **CALAFCO** Legislative Update

Dear Members of the Commission:

The 2015-16 Legislative session ended on August 31, 2016, which was the last day for bills to pass to the Governor. September 30, 2016 is the last day for the Governor to sign or veto bills passed by the Legislature.

Pamela Miller, the CALAFCO Executive Director, has provided an update on legislation and related matters (see below). It was another challenging year for LAFCos, with a number of successes. CALAFCO thanks members for the position letters.

#### Legislative Update

#### **CALAFCO Sponsored Bills**:

Both of the CALAFCO sponsored bills were signed by the Governor - <u>*AB* 2910</u> (Omnibus) and <u>*SB*</u> <u>**1266**</u> (JPAs). AB 2910 includes a number of important clean-ups and also authorizes LAFCO to approve the dissolution of a healthcare district without an election under specific conditions.

#### **CALAFCO Support Bills**:

<u>AB 2032</u> (*Linder*) was signed by the Governor. The bill contains clean up language to last year's CALAFCO sponsored bill on disincorporation (AB 851).

<u>SB 817</u> (*Roth*) was passed out of the Assembly with minor amendments and is now back in the Senate. However, this bill has not yet been assigned, and is currently stalled.

#### **CALAFCO Oppose Bills**:

<u>AB 2414</u> (*Garcia*), which requires Riverside LAFCo to approve the expansion of the Desert Healthcare District, passed the Senate floor on August 29<sup>th</sup> and is going back to the Assembly for concurrence of the amendments made while on the Senate side.

<u>AB 2471</u> (*Quirk*), which requires Alameda LAFCo to dissolve the Eden Healthcare District, was moved to the inactive file in August (on the Senate floor) at the request of the author. The author has indicated he would kill the bill if all parties involved were satisfied with the direction/scope of Alameda LAFCo's special study.

#### **Other Bills:**

<u>AB 2470</u> (Gonzalez), which requires the expansion of water service to tribal lands in San Diego without annexation, is headed to the Governor's desk for signature.

<u>SB 1262</u> (*Pavley*), which focuses on water supply planning is headed to the Governor's desk for signature.

<u>SB 1263</u> (*Wieckowski*), which pertains to water system permitting would provide the State Water Resources Control Board (SWRCB) additional authority to deny permits for new systems. This bill contains the CALAFCO requested amendments, and is headed to the Governor's desk for signature.

<u>SB 552</u> (*Wolk*) is the clean-up bill to last year's SB 88 and adds a provision for the SWRCB to assign an administrator to a water system should the SWRCB feel it is necessary. This bill also contains CALAFCO's requested technical amendment to SB 88. The bill passed the Senate floor on August 29<sup>th</sup> and is now on its way to the Governor for signature.

#### Little Hoover Commission Hearing on Special Districts – August 25

On August 25<sup>th</sup>, the Little Hoover Commission (LHC) held its first of two hearings on special districts. Pamela Miller attended the hearing on behalf of CALAFCO. The hearing covered a wide range of issues, including property taxes, LAFCos, reserve funds, public engagement, healthcare districts, State Responsibility Area fees, and more. The hearing is now available at the <u>Commission's YouTube site</u>.

According to LHC staff, the second hearing in October will focus on the climate change readiness of special districts, especially those with large infrastructure needs.

Further, the LHC is conducting a roundtable workshop in November on healthcare districts, at which the CALAFCO Executive Director and your Executive Officer have been invited to attend.

This is an informational item; no action by the Commission is required.

Sincerely,

LOU ANN TEXEIRA EXECUTIVE OFFICER



#### AGENDA

September 14, 2016 Agenda Item 12

#### **RETIREMENT BOARD MEETING**

SECOND MONTHLY MEETING August 24, 2016 9:00 a.m. Retirement Board Conference Room The Willows Office Park 1355 Willow Way, Suite 221 Concord, California

#### THE RETIREMENT BOARD MAY DISCUSS AND TAKE ACTION ON THE FOLLOWING:

- 1. Pledge of Allegiance.
- 2. Accept comments from the public.
- 3. Approve minutes from the June 8 and 22, 2016 meetings.

#### CLOSED SESSION

4. The Board will meet in closed session pursuant to Govt. Code Section 54956.9(d)(2) to confer with legal counsel regarding potential litigation (one case).

#### **OPEN SESSION**

- 5. Consider and take possible action to implement forfeiture of Jon Wilmot's pension in accordance with felony forfeiture provision Government Code Section 7522.72:
  - a. Presentation by CCCERA; Board questions
  - b. Opportunity for member Jon Wilmot to present to the Board his position and any information or records relevant to the issue; Board questions
  - c. Public comment
  - d. Board deliberations and action
- 6. Review of total portfolio performance for period ending June 30, 2016.
- 7. Consider and take possible action to add or remove investment managers from the watch list.
- 8. Consider authorizing the attendance of Board and/or staff:
  - a. Annual Employee Benefits Conference, IFEBP, November 12-16, 2016, Orlando, FL.
- 9. Miscellaneous
  - b. Staff Report
  - c. Outside Professionals' Report
  - d. Trustees' Comments

The Retirement Board will provide reasonable accommodations for persons with disabilities planning to attend Board meetings who contact the Retirement Office at least 24 hours before a meeting.

#### CONTRA COSTA LOCAL AGENCY FORMATION COMMISSION PENDING PROPOSALS – SEPTEMBER 14, 2016

September 14, 2016 Agenda Item 14b

		07.17110
LAFCO APPLICATION	RECEIVED	
Town of Discovery Bay Community Services District (DBCSD) SOI	July 2010	Incomplete; awaiting
Amendment (Newport Pointe): proposed SOI expansion of 20+		info from applicant
acres bounded by Bixler Road, Newport Drive and Newport Cove		
DBCSD Annexation (Newport Pointe): proposed annexation of 20+	July 2010	Incomplete; awaiting
acres to supply water/sewer services to a 67-unit single family	•••••y =• •••	info from applicant
residential development		
Bayo Vista Housing Authority Annexation to RSD: proposed	Feb 2013	Continued from
annexation of 33+ acres located south of San Pablo Avenue at the	1602010	11/12/14 meeting
		11/12/14 meeting
northeastern edge of the District's boundary		
Description 400 (Manuel Densh (Ourses and Kill)), and see al	h	Dans averal frame that
Reorganization 186 (Magee Ranch/SummerHill): proposed	June 2014	Removed from the
annexations to Central Contra Costa Sanitary District (CCCSD) and		Commission's
East Bay Municipal Utility District (EBMUD) of 402 <u>+</u> acres; 9 parcels		calendar pending
total to CCCSD (8 parcels) and EBMUD (7 parcels)		further notice
Tassajara Parks Project – proposed SOI expansions to CCCSD	May 2016	Under review
and EBMUD of 30+ acres located east of the City of San Ramon	5	
and the Town of Danville		
Tassajara Parks project – proposed annexations to CCCSD and	May 2016	Under review
EBMUD of 30+ acres located east of the City of San Ramon and		
the Town of Danville		
West County Wastewater District Annexation 315 - proposed	May 2016	Pending
annexation of 1.0+ acres located on Hillside Drive in unincorporated	101ay 2010	r chung
El Sobrante		
	h.h. 0040	
Dougherty Valley Reorganization #17: Annexation to the City of San	July 2016	Under review
Ramon and Detachment from CSA P-6		

# East County fire district to put its governing structure on November ballot

By Rowena Coetseercoetsee@bayareanewsgroup.com Posted: 07/12/2016 04:03:27 PM PDT | Updated: about 17 hours ago

BRENTWOOD -- The fire district serving far East Contra Costa County will be asking voters in November whether they want to retain an appointed board of nine at-large directors or choose the leadership themselves.

East Contra Costa Fire District's board decided to put the matter to its constituents in a 6-1 vote this week. Director Joe Young cast the dissenting vote; Directors Joel Bryant and Cheryl Morgan were absent.

Board members currently are appointed to four-year terms by the elected officials of the cities and unincorporated areas they represent: Brentwood and Oakley city councils choose four and three directors, respectively, and the county Board of Supervisors selects two.

The new resolution replaces one the board had adopted last month that asked the public if it wanted a fire district board with five members instead of nine.

The question of how many directors it takes to run a fire district -- whether it's nine, seven or the more typical five -- might come before voters next year instead.

The district's legal counsel suggested that it let residents decide either by holding a special election or using mail-in ballots.

The idea behind proposing changes to the structure of the board in stages is to make it easier for the public to digest, said Fire Chief Hugh Henderson.

Once that's been decided, the attorney recommended that the agency wait until the 2020 U.S. Census has been completed before asking voters whether they want to continue with at-large representation or have directors represent various geographic areas by drawing boundary lines to create those divisions.

Director Steve Smith says he strongly supports the idea of at-large representation because it makes it easier to find applicants for the fire board if all of them can come from any part of the district.

Running for office has its challenges, he said, so the larger the pool of prospective candidates the better, he said.

"There's an effort and a cost involved," Smith said, noting that candidates must collect signatures from registered voters to run as well as pay for signs, mailings and any statement they want to appear on the ballot.

What's more, he said it would be costly and impossible to draw the boundaries of wards in the outlying, less populated areas of the fire district in a way that would not create an inequity in voting power between residents there and those in more populous communities.

Reach Rowena Coetsee at 925-779-7141. Follow her at <u>Twitter.com/RowenaCoetsee</u>

### East Bay Times

### Berkeley council criticizes hospital closure plans

By Tom Lochner, tlochner@bayareanewsgroup.com Posted: 07/13/2016 09:14:51 PM PDT | Updated: about 14 hours ago

BERKELEY -- The City Council on Tuesday registered its strong concern over plans to close Alta Bates hospital, calling upon owner Sutter Health to keep it running and possibly seismically retrofit it. A Berkeley institution since 1905, Alta Bates has the only remaining emergency room between Richmond and Oakland since Doctors Medical Center in San Pablo closed last year.

The vote followed a 6 p.m. rally in front of Old City Hall staged by the California Nurses Association to protest the planned closing, projected for sometime between 2018 and 2030.

Sutter Health intends to consolidate Alta Bates services at its Summit hospital in Oakland, one of three campuses that constitute Alta Bates Summit Medical Center, along with Herrick hospital in Berkeley.

Sutter CEO Chuck Prosper has said Alta Bates would shut down due in part to a 2030 state deadline requiring hospitals to be able to withstand a major earthquake.

But several speakers at Tuesday's rally said Sutter's plans to close are motivated not by seismic safety but profits, notwithstanding the corporation's nonprofit status.

Zenei Cortez, CNA co-president, noted that Sutter Health and Affiliates reported assets of more than \$14.3 billion as of December 2015, data reflected in a Sutter financial report provided by another CNA official.

Cortez dismissed the notion that urgent care could fill the gap if Alta Bates closes.

"Having a full-service hospital is critical," Cortez said.

"In order to have a safe and healthy community, we need a hospital here in Berkeley."

In San Pablo, LifeLong Medical Care opened an urgent care clinic the day before Doctors Medical Center closed in April 2015.

But LifeLong CEO Marty Lynch, in an interview that month, said, "We're not an ER; we can't offer emergency service. We'll be able to do a little bit more than a doctor's office, but by no means will it be like an emergency room."

Joining the rally were Berkeley Councilmen Kriss Worthington and Jesse Arreguin, former state Assemblyman Sandre Swanson, and aides to state Assemblyman Tony Thurmond and Berkeley Councilman Max Anderson.

Worthington read from a poem he wrote that ended with, "We must stop Sutter, Alta Bates will not shutter. Threatening closure is a Code Red, Tell Sutter to work with us instead."

Arreguin joined the nurses in contending the planned closure has nothing to do with seismic safety.

"It has to do with maximizing profits," said Arreguin, who chastised Sutter for deciding on its plan "unilaterally," without consulting Berkeley officials.

Prosper, in a letter sent Tuesday to the City Council, said the council resolution "contains numerous inaccuracies and draws conclusions about future health care delivery not supported by the facts.

"Sutter Health is committed to a strong medical presence in the City of Berkeley," Prosper said, adding, "Our target is to balance inpatient and outpatient services between Oakland and Berkeley with the goal of sustainability for Alta Bates Summit."

"Regardless of the seismic deadline, we must adapt to changes in health care if we are to remain viable in today's world," the letter continued.

"Operating two full-service hospitals (Alta Bates and Summit) less than three miles apart is inefficient and inhibits our ability to be most affordable to patients.

"In today's hypercompetitive environment, employers and consumers are choosing health services based on costs as much as quality. To excel we must be competitive and offer exceptional services."

Rebuilding on the current site is not feasible, Prosper added.

Several nurses spoke at the council meeting.

"Our community has already been devastated by the closure of Doctors Hospital," said Rochelle Pardue-Okimoto, a registered nurse in the Newborn Intensive Care unit at Alta Bates and an El Cerrito resident.

"The closure of Alta Bates will only put us in more danger."

Earlier, at the rally, Alta Bates emergency room nurse Bipin Walia said that "six-, eight- or 10hour wait times will be the norm" at other area hospitals if Alta Bates closes, and warned of "bad patient outcomes, leading to patient deaths."

"You can't have a heart attack treated at an urgent care center," he added.

#### East Bay Times

### Danville: Magee Ranch developer walks away

By Sam Richards , srichards@bayareanewsgroup.com Posted: 07/13/2016 11:26:24 AM PDT | Updated: about 18 hours ago

DANVILLE -- Four months after a judge ruled a new environmental impact report would be required for a controversial housing project off Diablo Road, its developer has pulled out and the landowning family has taken over.

What that means for the future of the proposed 69-house Magee Ranch housing development is unclear.

"It's too early to know," said Stuart Flashman, an attorney for Save Open Space, a Danville open space preservation group that sued over the project, citing among its concerns bicycle safety. "It certainly is an interesting development, that's for sure."

San Ramon-based SummerHill Homes had been the lead developer for the project, located near the main entrance to Mount Diablo State Park, since its inception in 2010.



Bicyclists travel on Diablo Road between Mt. Diablo Scenic Boulevard and Green Valley Road in Danville, Calif., on Wednesday, Feb. 4, 2015. A recent ruling by a Contra Costa County judge found that the Town of Danville acted improperly when it approved a proposal to build the 69-homes SummerHill housing development off of congested Diablo Road without first putting it to a town vote. (Doug Duran/Bay Area News Group)

But on Friday, town officials received a letter from property owner Magee Investments that said SummerHill is "no longer involved" with the project.

The project hit a major roadblock in March when Contra Costa County Superior Court Judge Barry Goode ruled the project's environmental impact report must be redone because the original one didn't sufficiently consider the safety of bicyclists along Diablo Road, an increasingly popular route for those making the climb up Mount Diablo.

Goode rejected SummerHill's assertion that a bicycle safety study could be added to the existing report, saying the issue was too important to simply add on to the existing report. The entire approval process, the judge said, would have to be redone.

It was after that admonition that SummerHill walked away from the project.

Representatives of SummerHill declined to comment Wednesday.

Jed Magee, president of Alamo-based Magee Investments, wouldn't comment on possible reasons for SummerHill's exit.

The project -- with its separate east and west components -- remains an active application with the town of Danville, said Dave Crompton, principal planner.

"We're waiting for (Jed Magee's) decision on moving forward," said Crompton, who expects the family will update the environmental impact report.

Magee said his family will take some time to decide what to do next, and that they put their company's name on the project to keep it alive while options are discussed. One decision yet to be made, he said, is whether another developer will be asked to lead the project.

"We're more ranchers than land developers," said Magee, whose family has operated that ranch since 1949. "It will take a little time for us to puzzle this out."

Save Open Space has been fighting the project since 2013, when it sued the Danville Town Council over environmental concerns. The group first sought to protect the picturesque historical farmland and later to make sure traffic created by the project would be addressed.



The Magee Ranch case has been of keen interest to bicyclist groups who hoped decisions like Goode's would help establish legal precedent for considering cyclists' safety in environmental studies for residential and commercial development.

"The March decision highlights the fact that when you raise the issue of bicycle safety, you can't just blow it off; it has to be taken seriously," Flashman said.

Maryann Cella, a member of the SOS group, said, "The group wants a solution that's fair to all concerned, including the landowners and to those that use Diablo Road" on four wheels or two.

"We're in a holding pattern here," she said. "We're hopeful that this is a positive sign, but it's too early to tell what this means."

Contact Sam Richards at 925-943-8241. Follow him at Twitter.com/samrichardsWC.

### WATER DEEPLY

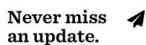
In-depth coverage of the California drought. Always noise-free, always trustworthy. Learn more about us.

<b>Executive Summaries</b>	Articles	Op-Eds	Background	Search	About	CONNECT WITH US 🕑 🕇
ARTICLES GENERAL	-		5	Share < 3	Tweet	Subscribe for updates

# Northern California Towns Are Running Out of Water

Paskenta is facing its third year in a row of water shortage because a creek, which is its sole source of water, is dropping. The town is one of more than a dozen in northern California facing water shortages.

WRITTEN BY Jane Braxton Little PUBLISHED ON Aug. 16, 2016 READ TIME Approx. 4 minutes



Sign up for our newsletter to receive weekly updates, special reports and featured insights as we cover one of the most critical issues of our time.

Enter your email addres

#### **Related Articles**



**Groups Move to Oppose** 



The drought has dropped water levels in Thomes Creek, the sole source of water for Paskenta, Calif., which may soon have to truck in water for residents again. U.S. Forest Service

**PASKENTA**, **POPULATION 112**, is an out-of-the-way place where rustic ranches grace grass-covered hills rolling west toward Mendocino Pass. Since the lumber mill closed in 1992, the Tehama County community 130 miles (210km) north of Sacramento has been settling into bucolic tranquility.

A water crisis has triggered a rude awakening.

Thomes Creek, the sole source of water for the Paskenta Community Services District, is dropping. A pump that taps the underflow from a pool in the creek is a mere 6ft (1.8m) below the current water level, said Janet Zornig, the district's manager.

"If it keeps up like this – and no rain in sight – we'll have to haul in water," she said. Rail-Water Proposition March 8th, 2016

Felicia Marcus: California's Drought Lessons March 16th, 2016

Surprising Way Climate Change Is Impacting Water June 14th, 2016

Jennifer Bowles: Building Water Literacy February 17th, 2016

How to Create Effective Groundwater Agencies June 8th, 2016

Why the Endangered Delta Smelt Needs Relief

August 16th, 2016

While the crisis Paskenta is facing is the most critical, more than a dozen communities in northern California are grappling with diminishing water supplies. Most, like Paskenta, are located along the edges of the northern Sacramento Valley, where groundwater diminishes as the elevation rises. Most, like Paskenta, rely on streams that flow into the Sacramento River.

"All of the water systems located in that bathtub ring are struggling," said Reese Crenshaw, a Redding-based district engineer with the state's Division of Drinking Water, a part of the California Department of Public Health.

Four consecutive winters with little or no snowpack, followed by four dry summers, have upended water systems from Glenn and Colusa counties, on the west side of the Sacramento Valley, to Butte County on the eastern slope. The difficulties go beyond lower levels in the creeks and reservoirs they depend upon. Among them is a drought-caused requirement, issued by the state's Division of Water Rights, that all systems on tributaries to the Sacramento River find alternative sources of water. These "drastic measures" are designed to protect fish and those who hold senior water rights, Crenshaw said.



Paskenta, Calif. is located 130 miles (210km) north of Sacramento. The town is one of about a dozen in northern California facing water shortages. (Google Maps)

Because it flows into the Sacramento River, Paskenta has been ordered to stop using Thomes Creek. It's a directive fraught with irony since the stream is already low enough to cause the current emergency.

Paskenta has been facing a water crisis for three consecutive years. In 2014, when Thomes Creek dropped to levels too low to pump, the community hauled water from Corning 20 miles (32km) to the east. The Corning City Council authorized 20,000 gallons (75,000 liters) of water per day for the Paskenta Community Services District. This approval was due to expire on June 30, 2015, but the council renewed it last year.

Last month Corning officials once again came to the rescue of their neighbors in Paskenta. Recognizing the dearth of water as a health and safety emergency, they reauthorized the Paskenta district to collect and transport up to 20,000 gallons of water daily at the rate of \$5 per 1,000 gallons.

The trucking hasn't started yet but it appears imminent. Last year, when hauled water was the only source after August 26, the 250 people on the community water system were restricted to 100 gallons per household per day, Zornig said.

This year? "I can't tell you. Right now we're not out of water," she said.

Meanwhile, state officials are planning to drill a test well east of Paskenta to develop a secondary source as an alternative to Thomes Creek. Groundwater in that area is always scarce, said Crenshaw. If they don't hit a sufficient supply they will install a storage system with a capacity of 3 million gallons. The current storage tank holds around 200,000 gallons, enough for between five and eight days, he said.

The toll that drought has taken on northern California water systems is not limited to communities along the edges of the Sacramento Valley.

In 2014, Willits, in coastal Mendocino County, was down to a 100-day supply in the reservoirs that are the water source for its 4,850 residents. Since then the city has drilled a well as an emergency backup supply, paying most of the \$1 million costs out of reserve funds, said Willits mayor Bruce Burton.

This year the reservoirs are at 80 percent capacity.

Optimistic that "days of plenty" have returned, Burton dismissed any worries about diminishing water supplies caused by long-term climate changes.

"Talking about the weather is an ice-breaker for conversation. It's another way to say hello," he said.

Officials in nearby Brooktrails Township are not as sanguine. In 2014, when drought lowered the reservoirs that supply the community of 1,550, officials imposed mandatory rationing. The 110 gallons (415 liters) per day for a four-person household was barely over the state minimum of 27 gallons per day per person.

Today the Brooktrails reservoirs are full but the rationing continues, now raised to 250 gallons a day. And the community remains under a state-imposed moratorium on new connections until it provides an alternate drinking water source, said a spokesperson for general manager Denise Rose.

To ensure a stable supply of municipal water, the Division of Drinking Water required Brooktrails Township to request a tie-in to the city of Willits water supply. The community can't afford the backup system costs, estimated at \$1 million just for the installation.

"It really needs to rain," the Brooktrails spokesperson said.

Drought is creating a different set of problems for Del Oro Water Co. in Arbuckle, northwest of Sacramento. Overpumping caused the groundwater level to drop. The subsidence that followed was severe enough to damage the district's well, said Crenshaw. In Elk Creek near Willows, lowering groundwater allowed manganese to enter the community system. Residents there drank bottled water until treatment brought the manganese to within acceptable standards, he said.

Crenshaw predicted that more communities will experience water supply problems as the drought continues. "Each community has its own set of issues and solutions to deal with," he said. "We can't move the towns. They are there."

For Paskenta, a third year of living with the strict rationing imposed by trucked-in water may be approaching. Zornig, the water district secretary, credited residents with rising to the challenge the shortages have created. "They have learned to cope. I'm proud of them," she said.

Meanwhile, she is hoping for rain: "It's a gamble every year but it has rained in the summer before."

© 2016 News Deeply. About Team Privacy Terms Contact

#### **Kate Sibley**

From: Sent: To: Subject: Delta Protection Commission <nicole.bert@delta.ca.gov> Wednesday, August 17, 2016 1:28 PM Kate Sibley Agricultural Conservation Easement Funded near Discovery Bay



### Your Weekly Delta Event Update

#### The Brentwood Agricultural Land Trust has received funding to protect farmland adjacent to Discovery Bay

The Strategic Growth Council announced funding for strategic agricultural conservation easement purchases throughout California on August 9th, including funds to the Brentwood Agricultural Land Trust for a 551 acre acquisition directly east of Discovery Bay.

The property was proposed to be developed with over 3,000 homes, but the purchase option lapsed when the developer failed to make a scheduled payment. The agricultural conservation easement will now halt any future expansion on the east side of Discovery Bay. See <u>here</u> for more information on the grant.

When completed toward the end of this year, this purchase will protect Swainson's hawk habitat, preserve vital groundwater recharging and protect the rural sunrise views



of Discovery Bay residents. It also preserves a vital source of organic produce for nearby communities.

Congratulations to Kathryn Lyddan and the Brentwood Agricultural Land Trust for their successful effort!

### East Bay Times

### San Ramon: Over objections, old Dougherty Road to close

By Sam Richards, srichards@bayareanewsgroup.com Posted: 08/19/2016 12:10:57 PM PDT | Updated: a day ago



Traffic moves on the old Dougherty Road in San Ramon, Calif., on Wednesday, Aug. 17, 2016. The old road could be closed to traffic and made into a bike trail beginning next year. Residents of Gale Ranch community in San Ramon want to keep the road open. A new 1.5-mile stretch of Dougherty Road has been opened recently. (Ray Chavez/Bay Area News Group)

SAN RAMON -- The sign at the stoplight says "(Future) Dougherty Road," but for residents in the Gale Ranch area of Tassajara Valley, the future is now for the shiny new six-lane road, which opened a few weeks ago.

Time's running out, though, for the old two-lane Dougherty Road a few hundred yards to the east, as the Contra Costa County Board of Supervisors voted Tuesday to stick with long-standing plans to close the road on Aug. 29.

Although supervisors agreed to monitor traffic congestion on surrounding roads, some residents are blasting the planned closure, saying it will create a traffic mess in the fast-growing residential area.

"In the mornings, traffic is backed up from here all the way to Bollinger, waiting to make a right turn onto the new road," said Viswanathan Ananthanarayanan, standing almost half a mile from the Bollinger Canyon Road stoplight. "They may have to make some adjustments ... their (traffic) studies were done long before all these people were here." Ananthanarayanan and several other area residents told the supervisors on Tuesday that even with completion of the 1.5-mile stretch of Dougherty Road from Crow Canyon Road south to Bollinger Canyon Road near Alamo Creek, the old road should stay open for commuters dropping kids off at nearby schools, including Quail Run Elementary near the north end of Old Dougherty.

Having to reverse through the new Gale Ranch and Windemere neighborhoods back to Bollinger Canyon Road and then to the "New Dougherty" will create a traffic mess, said Nishant Asthana of San Ramon.

"This will increase my commute time by 35 or 40 minutes each morning," he said, adding that he and other residents wish they'd learned of the plans before seeing orange closure signs along the old road in June.

Asthana started an online Change.org petition, "Keep Old Dougherty Road open to reduce traffic congestion." It had gotten 893 signatures as of Thursday.

Supervisors said keeping the old road open would defy the Dougherty Valley Specific Plan, created in the mid-1990s, which calls for the new Dougherty Road and for closing the old one between Stoneleaf Road-Ivyleaf Springs Road and Bollinger Canyon Road. According to that plan, the old two-lane road will be converted into a recreational trail.

San Ramon officials, notably Mayor Bill Clarkson, have asserted there's an obligation to create that trail because Gale Ranch-area homebuyers were told it would be built.



Nishant Asthana, resident of Gale Ranch community in San Ramon, stands next to the old Dougherty Road in San Ramon, Calif., on Wednesday, Aug. 17, 2016. (Ray Chavez/Bay Area News Group)

After the county abandons the old roadway and the trail improvements are made as planned, the trail will be transferred to the city of San Ramon.

The city supports the closure plan, and Lisa Bobadilla, the city's transportation division manager, reiterated that point to the supervisors. The bike trail, she said, is also part of the city's general plan.

Bobadilla said San Ramon can live with monitoring the traffic for a few months. "We don't anticipate any significant traffic congestion," she said.

Still, the supervisors chose to move ahead with caution, lest they "abandon a road, greenscape it and then decide, 'Oh, wait a minute, maybe the (traffic) concerns were real,' " Supervisor Mary Piepho said.

Contact Sam Richards at 925-943-8241. Follow him at Twitter.com/samrichardsWC.



### The Sacramento Bee

### California farm revenue plunges in 2015

By Dale Kasler August 30, 2016

#### dkasler@sacbee.com

Farm revenue in California dropped by more than \$9 billion last year as the drought forced farmers to scramble for water and crucial commodities declined in price, according to data released by the state and federal governments Tuesday.

The U.S. Department of Agriculture's economic research service said farm income totaled \$47.07 billion last year in California. That compared with a record \$56.61 billion in 2014.

All through the drought, which has cut off deliveries of surface water supplies to large swaths of the Central Valley, farmers have been able to <u>increase revenue</u> by pumping more groundwater and switching to high-dollar crops such as almonds. Those strategies have brought criticisms from environmentalists and others about agriculture's water use, particularly the depletion of aquifers in the San Joaquin Valley.

The figures from 2015 show the era of rising revenue has ended, at least for the time being.

"These numbers certainly reflect drought impacts in 2015, which led to the fallowing of 540,000 acres," said the California Department of Food and Agriculture in a statement on the USDA numbers.

However, the state also noted that prices fell for such key commodities as milk and tree nuts, which represent two of the most important commodities produced in California. The state's dairy business alone dropped by more than \$3 billion last year. <u>Almond sales</u> went from \$7.4 billion to \$5.3 billion. Both declines were the result of price drops after several boom years.

Dale Kasler: 916-321-1066, @dakasler