

SECTION 6.0
COUNTY SANITATION DISTRICT NO. 6
WASTEWATER SERVICE

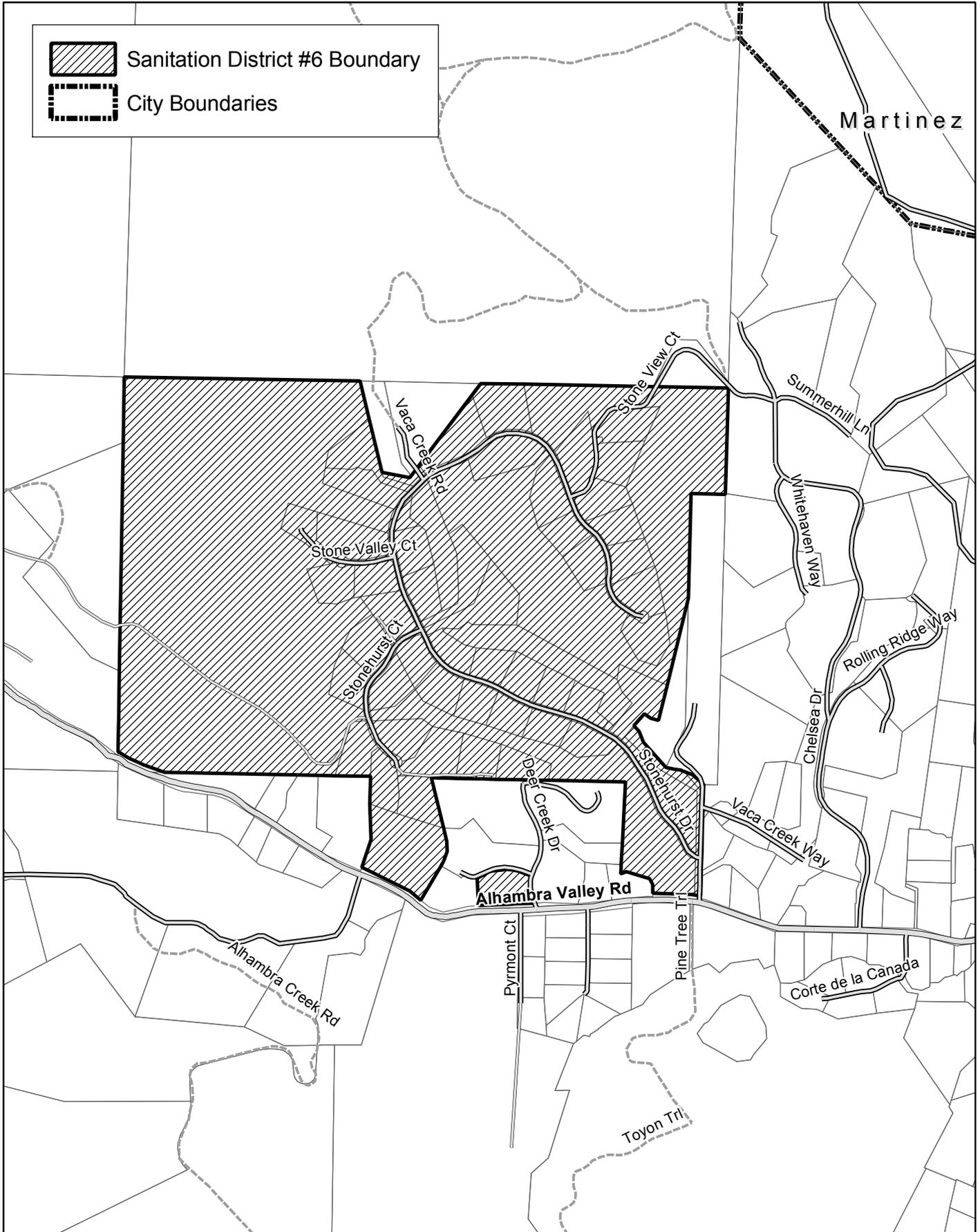
6.1 Overview

County Sanitation District (SD) No. 6 is a dependent special district that was formed in 1992 to provide wastewater service to the Stonehurst subdivision within the unincorporated Alhambra Valley area. The District’s boundaries encompass approximately 237 acres with 48 parcels; its sphere of influence (SOI) is coterminous with its boundaries. Each parcel has an individual septic system; the effluent receives secondary treatment at a community wastewater treatment plant owned by the District and is discharged through a leach field at the top of an adjacent ridge. The profile for SD No. 6 is shown in *Table 6.1* and a map of the District’s boundary and current SOI are shown in *Figure 6.1*.

Table 6.1
County Sanitation District No. 6
Wastewater Service Information

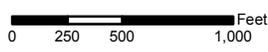
Service Area / Financial Summary	
Contra Costa County Public Works – Special Districts Section:	255 Glacier Drive Martinez, CA 94553 (925) 313-2180
Service Area:	237 acres / 48 parcels
Population:	Est. population = 100 residents
Operating Budget (FY 2007/2008):	Revenues / Expenditures:\$91,650 / \$91,650
Est. Fund Balance 06/30/2007:	\$0
Wastewater Service Data	
Services	Wastewater collection, treatment and disposal
Number of Service Connections	48 total
Miles of Sewer Main / Number of Pump Stations	3.25 miles / 1 pump station
Average Age of Collection System	16 years
Avg. Daily Flow / Permitted Flow	8,500 gpd / 14,100 gpd
Treatment / Disposal	Primary: Individual septic systems; Community Disposal System with sand filter, UV disinfection Disposal: leach field
RWQCB Region	Region 2 – San Francisco Bay
Orders	Order No. R2-1991-0096 – Waste Discharge Requirements Order No. 2006-0003 – Statewide General Waste Discharge Requirements for Sanitary Sewer Systems

County Sanitation District 6 (Alhambra Valley) and coterminous Sphere of Influence



Map created 11/28/2007
 by Contra Costa County Community Development, GIS Group
 651 Pine Street, 4th Floor North Wing, Martinez, CA 94553-0095
 37.59:48.455N 122.06:35.384W

This map was created by the Contra Costa County Community Development Department with data from the Contra Costa County GIS Program. Some base data, primarily City Limits, is derived from the CA State Board of Equalization's tax rate areas. While obligated 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 disclaimer of liability for geographic information.



6.2 Growth and Population Projections

County Sanitation District (SD) No. 6 serves the Stonehurst subdivision located in the unincorporated Alhambra Valley, approximately two miles south of the City of Martinez. The community lies within the County Urban Limit Line approved by the voters in 2006; it is surrounded by lands designated as open space and agriculture, including the Briones Hills Agricultural Preserve to the north, west, south, and east.

The development is zoned by the County as residential P-1 (Planned Development), with 20,000 square foot lot minimums. There are 48 parcels in the Stonehurst development, a majority of which are developed. The few remaining lots are developable and may connect to the system in the future. In 2001, LAFCO approved annexation of an additional parcel located at 915 Deer Creek Road, south of Cross Creek Drive (LAFCO 01-11). Future growth will be limited, occurring through development of existing undeveloped parcels.

The wastewater treatment system was designed to serve the buildout condition of this subdivision only, as specified in the Waste Discharge Requirements issued by the San Francisco Bay Regional Water Quality Control Board (RWQCB). The permit further requires that sewage flow from Stonehurst be directed to a sanitary sewer line at the earliest possible time sanitary sewer services become available in the area.

6.3 Infrastructure Needs or Deficiencies

Each parcel within the Stonehurst development has an individual septic system that provides primary treatment. The effluent receives secondary treatment through an on-site wastewater treatment facility, and is discharged through a leach field at the top of an adjacent ridge. *Table 6.2* summarizes the District’s facilities.

Table 6.2
County Sanitation District No. 6
Wastewater System Overview

Facility	Quantity
Sewer Mains/ Effluent Line	3.25 miles
Pump Stations	1 pump station
Average Age of Collection System	16 years
Average Dry Weather Flow / Permitted Flow	8,500 gpd / 14,100 gpd
Treatment /Disposal	Primary: Individual septic systems; Community Disposal System with sand filter, UV disinfection Disposal: leach field

The wastewater collection and treatment system was installed in 1991 for the development of the subdivision. It is permitted under the San Francisco Bay Regional Water Quality Control Board Order No. R2-1991-0096 – Waste Discharge Requirements. The infrastructure includes gravity and force mains, a wastewater pump station, treatment facilities, and leach field facilities. The system was originally constructed and permitted to provide recycled water that could be used for subsurface irrigation of the community landscape during dry months. During wet months, the treated effluent would be discharged through the leach field. To meet State requirements for this intended use of reclaimed water, the system includes a recirculating sand filter and ultraviolet disinfection treatment process. The system operates as permitted; however, the irrigation use has never been implemented and there are no plans to do so in the future.

In 2006, the State Water Resources Control Board adopted the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WQO No. 2006-003-DWQ) and all sanitary sewer overflows (SSOs) must now be reported to the California Integrated Water Quality System (CIWQS). The County reported one SSO for SD No. 6 in 2005 that was approximately 75 gallons. The CIWQS does not list any other SSOs for the District.

Per WQO No. 2006-003-DWQ, SD No. 6 is required to have a Sewer System Management Plan (SSMP) that provides a plan and schedule to manage, operate, and maintain all parts of the sanitary sewer system to reduce and prevent SSOs and mitigate any SSOs that do occur; this includes a Fats, Oils and Grease control program and an Overflow Emergency Response Plan. The SSMP is being prepared in accordance with State requirements, and the Emergency Response Plan is complete.

The County has assessed the condition of the infrastructure, and most components are in good condition. Two pumps, controls, and pipes/valving have recently been replaced in the pump station, and three of the four recirculation pumps and two effluent pumps in the treatment facility are new. The District budgets for annual maintenance needs but does not have any reserves for capital replacements.

6.4 Financing Constraints and Opportunities

SD No. 6 is funded through an annual service charge or assessment on each parcel. The District's fund had a deficit balance for a few years, but the County has increased the service charge and eliminated the deficit. As noted in *Section 6.3*, the District does not have reserves that could be used to address emergencies or extraordinary expenses. The financial history of the District is shown in *Table 6.3*.

Table 6.3
County Sanitation District No. 6
Fund Summary

	FY 2004/2005 Actual	FY 2005/2006 Actual	FY 2006/2007 Adj. Budget	FY 2007/2008 Budget
Beginning Fund Balance			(\$9,089)	
Charges for Service	\$89,300	\$91,650	\$91,650	\$91,650
Total Available Funding	\$89,300	\$91,650	\$82,561	\$91,650
Services and Supplies	\$51,877	\$70,988	\$66,267	\$85,117
Other Charges	\$581	\$500	\$1,790	\$1,683
Expenditure Transfers (to County for services)	\$15,893	\$8,777	\$15,000	\$4,850
Total Expenditures	\$68,351	\$80,265	\$83,057	\$91,650

The District’s largest expenses are for contract wastewater operator services, maintenance, and RWQCB fees. The District has no long term debt and has the financial resources to continue to provide adequate wastewater services for the community. However, should a major capital repair be necessary, the District does not have reserves it could draw on and would have to take on debt and/or assess the parcels accordingly.

6.5 Cost Avoidance Opportunities

The County is controlling costs for the services provided through SD No. 6 by contracting with HS Operating Services (a private firm) to provide professional management of the treatment system and by maintaining an infrastructure assessment inventory to identify maintenance and capital needs. The District has prepared a Sewer System Management Plan that includes an emergency response plan as well as a Fats, Oils and Grease control program that will improve system performance and reduce the number of overflows.

The County noted the opportunity to reduce costs by modifying the terms of the District’s Waste Discharge Requirements issued by the RWQCB. The subsurface irrigation component of the District’s wastewater system was never implemented and there are no plans to use recycled water in the future; therefore the ultraviolet disinfection is not necessary. The ultraviolet disinfection process requires significant energy and is costly to operate. The County would like to discontinue its use and has been attempting to work with the RWQCB for several years on this issue, as it would reduce costs through less energy usage, simplified maintenance, and a lower permit fee. This change in the Waste Discharge Requirements has not yet been approved by the RWQCB.

For the long term, the County noted that the system would benefit from connecting to a regional wastewater collection and treatment system.

6.6 Opportunities for Rate Restructuring

The District prepares an annual Engineer’s Report that includes the annual budget and a description of each parcel of real property receiving sewer service from the District (all parcels are assessed each year). This is used to establish the annual service charge, which is collected by the County through the tax roll. The current rate is shown in *Table 6.4*.

Table 6.4
County Sanitation District No. 6
2007 Wastewater Service Charge

Type	Residential
Wastewater Service Charge	\$1,950 / year (equates to \$162.50/month)

Since FY 2003/2004 the rate has increased \$100. Because all parcels have been paying for the wastewater services and system since inception, there is no connection fee. The current rate has been sufficient to eliminate the District’s fund deficit, and in the future may allow for reserves to accumulate.

It was noted during the preparation of this service review that the parcel annexed to the District in 2001 (LAFCO 01-11) is not being assessed for District services. The County should correct the tax roll.

6.7 Opportunities for Shared Facilities

The wastewater system for SD No. 6 is isolated and currently there are limited opportunities to share facilities with other wastewater service providers. Through the contract with HS Operating Services, SD No. 6 benefits from the expertise of its staff and certain operational efficiencies.

When constructed in 2008, CCCSD's nearest planned sewer main on Alhambra Valley Road would be about 2,200 feet east of the entrance to County Sanitation District No. 6 (Stonehurst residential development). The San Francisco Bay Regional Water Quality Control Board (RWQCB) Waste Discharge Requirements for SD No. 6 mandates connection of the development to an Alhambra Valley sanitary sewer and closure of the development's onsite wastewater treatment and disposal system. At some time in the future, it is foreseeable that CCCSD's sanitary sewer system would be extended far enough west that it would be worthwhile for the Stonehurst property owners to extend it the rest of the way to their development and connect to the CCCSD sanitary sewer system. The future provision of CCCSD sanitary sewer

service to Stonehurst was included in CCCSD's 2003 "Facilities Plan for Wastewater Utility Services to Alhambra Valley" and collection system and treatment capacity are available.

6.8 Evaluation of Management Efficiencies

SD No. 6 is managed by the County. The County Public Works Department, Special Districts Section ensures regulatory compliance and provides financial and long-term planning. The County contracts with HS Operating Services to manage the day-to-day operations and maintenance of the system.

6.9 Government Structure Options

SD No. 6 is located in an unincorporated area of Contra Costa County. This area is not within the jurisdiction of any other wastewater service provider, and currently there are no sewer facilities in the vicinity of SD No. 6 that could serve the Stonehurst subdivision. With CCCSD's latest Alhambra Valley annexation, CCCSD's service area is now less than one mile to the east. At this time, the only government structure option identified is to maintain the status quo. However, as required by the Waste Discharge Requirements issued by the RWQCB, the parcels within SD No. 6 should connect to a sanitary sewer line at the earliest possible time when services are available, and the onsite wastewater treatment and disposal system should be closed. At that time, SD No. 6 should be dissolved.

6.10 Local Accountability and Governance

SD No. 6 is a dependent special district governed by the Contra Costa County Board of Supervisors. The District was formed in 1992 to provide wastewater service to the Stonehurst subdivision in the unincorporated Alhambra Valley. The District's principal act is the County Sanitation District Law (Health and Safety Code §4700 et seq.). Services for the County's dependent special districts are addressed by the Board of Supervisors at regular meetings which are open to the public. Meeting notices and agendas are posted at least 96 hours in advance at the County's offices and on the County's website (www.co.contra-costa.ca.us). The website includes financial information on SD No. 6.

6.11 Sphere of Influence Recommendations

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires that LAFCO review and update the sphere of influence (SOI) for each of the special districts and cities within the county.¹

¹ State of California Government Code Section 56425 et seq.

SD No. 6 provides wastewater treatment and disposal services for the 48-parcel Stonehurst subdivision in the unincorporated Alhambra Valley. There is a need for managed wastewater services in this community. The County has planned to serve this need through its budgeting process and contracting with an outside contractor to operate and maintain the system.

The current SOI for SD No. 6 is coterminous with its boundaries. With CCCSD’s latest Alhambra Valley annexation, CCCSD’s service area is now less than one mile to the east. The RWQCB Waste Discharge Requirements for SD No. 6 mandates connection of the development to an Alhambra Valley sanitary sewer and closure of the development's onsite wastewater treatment and disposal system. At some time in the future, it is foreseeable that CCCSD's sanitary sewer system would be extended far enough west that it would be worthwhile for the Stonehurst property owners to extend it the rest of the way to their development and connect to the CCCSD sanitary sewer system. Therefore, it is recommended that LAFCO adopt a zero SOI for SD No. 6. This will allow the district to continue to exist until such time as it is physically and financially feasible to annex to CCCSD.

An analysis of SOI issues is included in *Table 6.5* below.

Table 6.5
County Sanitation District No. 6
SOI Issue Analysis

Issue	Comments
SOI Update Recommendation	Adopt a zero SOI
Services authorized to provide	Domestic wastewater collection, treatment and disposal
Existing and Planned Land Uses and Policies	SD No. 6 has no land use authority for the area within its boundaries. County plans include low-density residential land use that will need wastewater services. Surrounding lands are designated as Open Space and Agriculture. County policies support the provision of adequate wastewater services for residents.
Potential effects on agricultural and open space lands	Adopting a zero SOI would have no effect on surrounding agricultural and open space lands.
Opportunity for Infill Development rather than SOI expansion	The District’s boundaries encompass the Stonehurst subdivision plus one additional parcel annexed in 2001; a majority of the 48 parcels in Stonehurst are developed, and the remaining are developable. No SOI expansion is proposed.
Projected Growth in the Affected Area	The District serves 48 parcels; minimal growth is expected.
Services to be Provided to any areas added to the SOI	No areas are proposed to be added to the SOI for SD No. 6.
Service Capacity and Adequacy	The District is providing adequate service, is financially stable, and has the capacity to continue to provide services within its boundaries.
Location of Facilities, Infrastructure and Natural Features like rivers and ridgelines	The District provides services for the Stonehurst subdivision in the Alhambra Valley. The area has gently and steeply sloping hills and is drained by an

Table 6.5
County Sanitation District No. 6
SOI Issue Analysis

Issue	Comments
	intermittent, unnamed tributary to Arroyo del Hambre.
Effects on Other Agencies	CCCSD is constructing a trunk sewer in the southern Alhambra Valley, and when complete, sewer services will be available less than one mile to the east of the SD No. 6. The RWQCB Waste Discharge Requirements for SD No. 6 mandates connection of the development to an Alhambra Valley sanitary sewer and closure of the development's onsite wastewater treatment and disposal system. The future provision of CCCSD sanitary sewer service to Stonehurst was included in CCCSD's 2003 "Facilities Plan for Wastewater Utility Services to Alhambra Valley" and collection system and treatment capacity are available.
Potential for Consolidations or other Reorganizations when Boundaries Divide communities	The District's current boundaries do not divide any communities.
Social or economic communities of interest in the area	The District was formed in 1992, and the property owners funded the construction of the treatment and disposal facilities. The property owners pay an annual service charge for the system to be maintained and operated and therefore have an economic interest in receiving services from this investment.
Willingness to serve	The County plans to continue to provide services through SD No. 6, until such time as sanitary sewer service and facilities are available from CCCSD to serve the area.

6.12 Determinations

6.12.1 Growth and Population

Purpose: To evaluate service needs based upon existing and anticipated growth patterns and population projections.

County Sanitation District No. 6 serves the 48-parcel Stonehurst subdivision in the Alhambra Valley. A majority of the parcels are developed; future growth will be limited to development of existing parcels. There will continue to be a need for a managed wastewater system to serve the area.

6.12.2 Infrastructure Needs or Deficiencies

Purpose: To evaluate the infrastructure needs and deficiencies in terms of supply, capacity, condition of facilities, and service quality.

The SD No. 6 wastewater system includes a collection system, treatment facilities with a recirculating sand filter and ultraviolet disinfection treatment process. The system was designed and constructed to meet the wastewater service needs of the subdivision. The County maintains an infrastructure assessment and inventory and plans for capital replacement needs.

6.12.3 Financing Constraints and Opportunities

Purpose: To evaluate a jurisdiction's capacity to finance needed improvements and services.

SD No. 6 is funded through an annual assessment or service charge on each parcel within the District, based on the projected cost to operate the system. The District does not have reserves to address extraordinary or emergency capital needs. The District should establish reserves.

6.12.4 Cost Avoidance Opportunities

Purpose: To identify practices or opportunities that may help eliminate unnecessary costs.

The District could reduce costs if the terms of the Waste Discharge Requirements issued by the RWQCB were modified to eliminate the requirement for ultraviolet disinfection. The County has been attempting to work with the RWQCB since 1999 on this issue, as it would reduce costs through less energy usage, simplified maintenance, and a lower permit fee.

6.12.5 Opportunities for Rate Restructuring

Purpose: To identify opportunities to impact rates positively without decreasing service levels.

Each parcel is assessed an annual service charge of \$1,950 based on the projected cost to operate and maintain the system. The assessment is reviewed annually by the County Board of Supervisors; the rate has increased \$100 over the past four years.

6.12.6 Opportunities for Shared Facilities

Purpose: To evaluate the opportunities for a jurisdiction to share facilities and resources to develop more efficient service delivery systems.

The San Francisco Bay RWQCB Waste Discharge Requirements for SD No. 6 mandates connection of the development to an Alhambra Valley sanitary sewer and closure of the development's onsite wastewater treatment and disposal system. CCCSD's nearest planned sewer main on Alhambra Valley Road will be less than one mile east of the entrance to County

Sanitation District No. 6 (Stonehurst residential development). The future provision of CCCSD sanitary sewer service to Stonehurst was included in CCCSD's 2003 "Facilities Plan for Wastewater Utility Services to Alhambra Valley" and collection system and treatment capacity are available.

6.12.7 Evaluation of Management Efficiencies

Purpose: To evaluate management efficiencies of the jurisdiction.

SD No. 6 is managed through the County's Public Works Special Districts Section; the County contracts with a private firm to operate and maintain the system.

6.12.8 Government Structure Options

Purpose: To consider the advantages and disadvantages of various government structures to provide public services.

SD No. 6 provides wastewater service for the Stonehurst subdivision. Currently, there is no other wastewater system infrastructure in the vicinity, although with CCCSD's latest Alhambra Valley annexation, CCCSD's service area is now less than one mile to the east. The status quo should be maintained at this time as there is a need for managed wastewater services for this area. However, as required by the RWQCB Waste Discharge Requirements for SD No. 6, the parcels within the District should connect to a sanitary sewer line at the earliest possible time when services are available, and the onsite wastewater treatment and disposal system should be closed. At that time, SD No. 6 should be dissolved.

6.12.9 Local Accountability and Governance

Purpose: To evaluate the accessibility and levels of public participation associated with the agency's decision-making and management process.

SD No. 6 is a dependent special district governed by the Contra Costa County Board of Supervisors. The needs of the District and the annual budget are considered during public meetings of the Board of Supervisors.