

## SECTION 4.0

### CITY OF PITTSBURG

### WATER AND WASTEWATER SERVICES

---

#### **4.1 Overview**

The City of Pittsburg was incorporated in 1903 as a General Law City and has an estimated current population of 62,098. Pittsburg is bounded by Suisun Bay to the north, the unincorporated community of Bay Point to the west, the City of Antioch to the east, and the Mt. Diablo Recreation Area to the south. The City limits encompass approximately 15.5 square miles. The City's sphere of influence (SOI) encompasses an additional 18.2 square miles and includes the unincorporated community of Bay Point.

The City provides water treatment and distribution and wastewater collection services for its residents and businesses. Untreated water purchased from the Contra Costa Water District (CCWD) is treated at the City's water treatment plant; water supplies are supplemented by locally produced groundwater. Wastewater is discharged into the Delta Diablo Sanitation District (DDSD) system for treatment and disposal. The City is providing service to approximately three customers outside city boundaries: one customer on Willow Pass Road, one south of the City and the Mirant Power Plant. The City recently submitted proposals to LAFCO to annex the Mirant Power Plant to both the City and DDSD (and update the DDSD SOI). According to the SOI application, "*the Mirant Power Plant has been discharging its domestic/office flows and paying bimonthly sewer service fees to DDSD for the past 20+ years*" yet they have never received approval from LAFCO (either via out of agency service agreement nor annexation) to do so. The City is using this information to support annexation indicating that the DDSD SOI amendment and annexation "*will correct this problem.*"

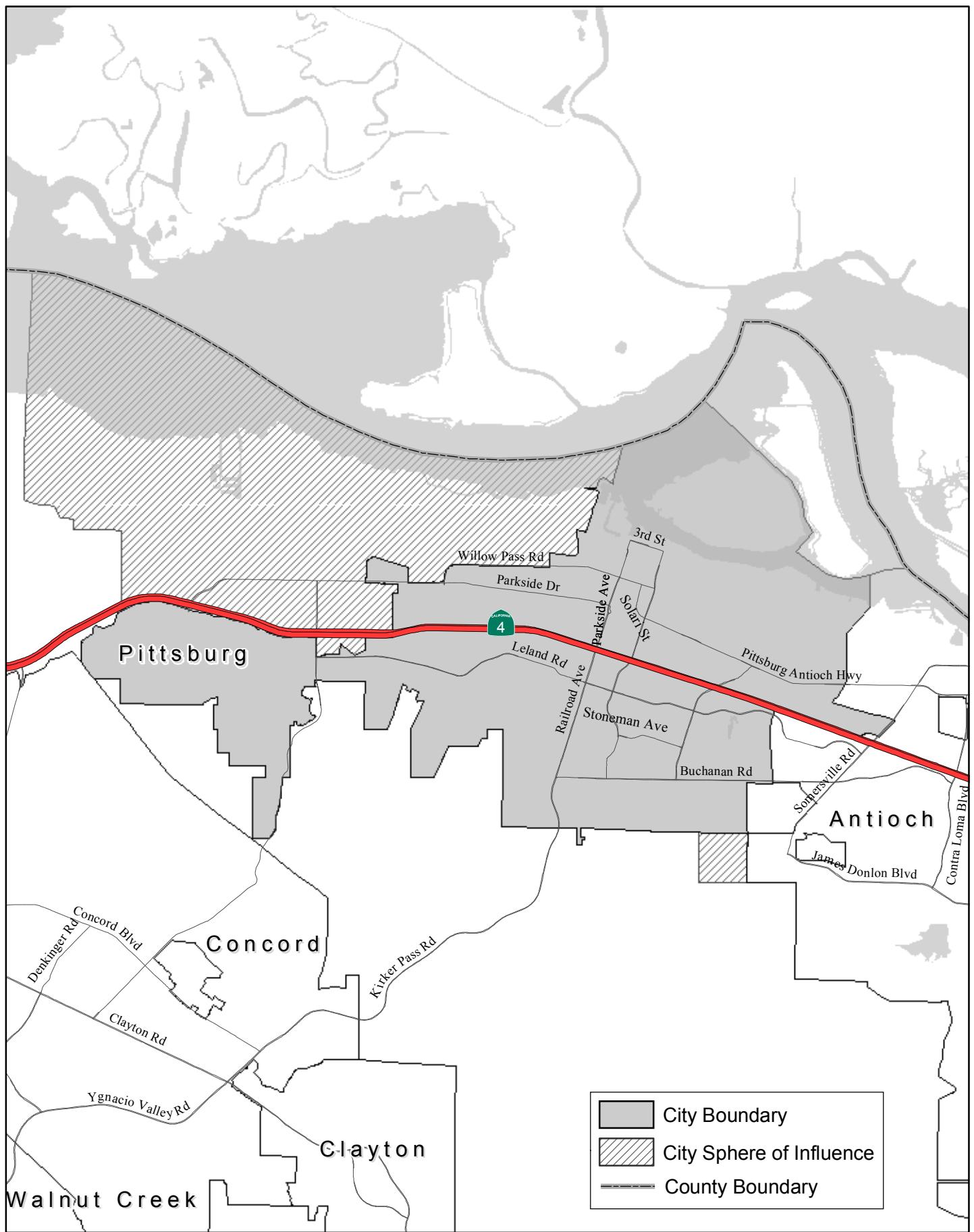
Within the Bay Point community, the Golden State Water Company (an investor owned utility) provides water service and DDSD owns and operates the wastewater collection system. The City's profile for water and wastewater service is shown in *Table 4.1* and a map of the City's boundary and current SOI are shown in *Figure 4.1*.

**Table 4.1  
City of Pittsburg  
Water and Wastewater Service Information**

Service Area / Financial Summary	
Public Works Department:	65 Civic Avenue Pittsburg, CA 94565 (925) 252-6966 <a href="http://www.ci.pittsburg.ca.us">www.ci.pittsburg.ca.us</a>
Service Area:	15.81 square miles
Population:	63,004 (Year 2007) / 78,100 (Year 2030) Average Annual Growth Rate = 1.1%
Operating Budget (FY 2007-2008): Water Enterprise Fund Sewer Enterprise Fund	Revenues / Expenditures: \$14,453,483 / \$12,829,288 Revenues / Expenditures: \$3,683,100 / \$2,483,104
Net Assets:	Water Fund Net Assets 06/30/2006: \$42,384,096 Sewer Fund Net Assets 06/30/2006: \$10,489,129
Water Service Data	
Services	Potable Water Treatment and Distribution
Number of Service Connections	~16,300
Water Main / Booster Stations	150 miles of main / 5 booster stations
Average Age of Distribution System	≥ 35 years
Treatment and Capacity	City of Pittsburg Water Treatment Plant / 32 mgd
Storage Capacity	8 distribution reservoirs / 16.9 mg
Average Day Demand / Maximum Day Demand	10.3 mgd / 17.8 mgd
Wastewater Service Data	
Services	Collection
Number of Service Connections	~15,900
Miles of Sewer Main / Number of Lift Stations	126 miles / 2 lift stations
Average Age of Collection System	38 years
Average Dry Weather Flow	6.2 mgd
Treatment	Delta Diablo Sanitation District WWTP
RWQCB Region	Region 2 – San Francisco Bay
Orders	Order No. 2006-0003 – Statewide General Waste Discharge Requirements for Sanitary Sewer Systems

Figure 4.1

# City of Pittsburg Boundary and Sphere of Influence



Map created 10/1/2007  
by 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.



0 0.5 1 2 Miles



## **4.2 Growth and Population Projections**

The current population within the City of Pittsburg is estimated at 63,004. The City anticipates a moderate annual growth rate of 1.1 percent, reaching a population of 78,100 by 2030.<sup>1</sup> The City's 2020 General Plan does not anticipate a build out year. Based on the land uses and densities incorporated into the Plan, build out of the General Plan would result in approximately 31,690 housing units located within city limits with a population of 93,340 people.<sup>2</sup>

The Growth Management Element in the 2020 General Plan includes a goal for growth and expansion that seeks to manage the City's growth to balance development of housing options and job opportunities, protect open space and habitat areas, construct transportation improvements, and preserve high quality public facilities. One policy under this goal is to allow urban development only in areas where public facilities and infrastructure (police, fire, parks, water, sewer, storm drainage, and community facilities) are available and can be provided. Accordingly, the performance standards for the water system are as follows:

- Ensure that adequate water supply, quality, and distribution infrastructure will be available to serve all proposed development projects;
- Provide an average of 180 gallons per capita per day of treated water; and
- For fire flow demands, maintain water pressure at 20 pounds per square inch. (Adequate fireflow criteria is based on adjacent land use. The City's Water System Master Plan uses three categories: 3,500 gallons per minute (gpm) in industrial areas; 3,000 gpm in commercial areas; and 2,000 gpm in residential areas.)

Similarly, the performance standards for the wastewater system in relation to growth include the following:

- Ensure that adequate sewage collection, transfer, and treatment facilities will be available to serve all proposed development projects; and
- Design and construct sewer mains to act at 60 percent capacity, and trunk lines at 100 percent capacity.

In November 2005, the Pittsburg voters approved Measure P, establishing an Urban Limit Line (ULL) that can only be changed by a vote of the people. This measure also provided for rezoning certain lands outside the city limits in preparation for potential future annexation, and it added a new General Plan goal for growth and expansion:

---

<sup>1</sup> Association of Bay Area Governments, Projections 2007.

<sup>2</sup> The number of housing units is based on the City's GIS database; population is estimated at 3.1 persons per household. The General Plan notes that approximately 11,450 housing units are proposed within City limits, including the San Marco development.

- Realize the opportunities afforded by establishment of the Voter Approved Urban Limit Line to allow the City to grow in such a way as to diversify and expand the employment base, develop a range of housing opportunities, increase the depth of municipal fiscal resources, enhance the quality of urban life for all Pittsburg residents and prohibit urban development beyond the Voter Approved Urban Limit Line.

The City uses existing land uses, the General Plan, and information on specific developments provided by the City's Community Development Department to amend the Water System Master Plan and Wastewater Collection System Master Plan to ensure that growth and the location of future development is addressed with respect to future service demands. Given the current urban land uses and anticipated growth, there will be an increased need for water and wastewater services within the City of Pittsburg.

### **4.3 Infrastructure Needs or Deficiencies**

Pittsburg provides water treatment and distribution and wastewater collection services for its residents and businesses. The City's General Plan Public Facilities Element includes goals and policies for water supply and distribution as well as wastewater collection and treatment:

- Available water supply and distribution capacity should grow proportionally with development patterns and water usage trends. Update the City's Water Master Plan to implement General Plan growth projections.
- Continue to implement water conservation policies to ensure adequate supplies of water in the future.

General Plan policies include implementing replacement and/or expansions to the existing system of water mains through the City's Capital Improvement Program (CIP); continuing conservation efforts to reduce demand; working with CCWD; planning the development of new pressure zones to ensure adequate fireflows in hillside areas; implementing a Recycled Water Ordinance requiring the installation and use of recycled water supplies from the DDSD Reclamation Plant; and ensuring that new development equitably shares in the costs associated with providing water services to areas of urban expansion.

Goals and policies for wastewater collection and treatment include:

- Plan for expansion of the City's wastewater collection system, in order to provide necessary infrastructure for projected urban growth through 2020.
- Maintain environmentally appropriate wastewater management practices.
- Reduce rainfall dependent infiltration and inflow, in order to maintain capacity of existing collection system, and prevent Sanitary Sewer Overflows (SSOs).

Policies include designing and constructing sewer mains to act at 60-percent capacity and trunk lines at 100-percent capacity; working with DDSD to plan the expansion of the wastewater treatment plant; addressing deficiencies in the capacity, safety and reliability of the collection system; and ensuring that new development equitably shares in the costs associated with providing wastewater services to areas of urban expansion.

#### **4.3.1 Water Supply and Demand**

##### *Water Supply*

Pittsburg obtains approximately 90 percent of its untreated water supply from CCWD through the US Bureau of Reclamation (USBR) Central Valley Project. CCWD's untreated water service area includes Antioch, Bay Point, Oakley, Pittsburg, and portions of Brentwood and Martinez. The untreated water is conveyed to Pittsburg through the Contra Costa Canal. CVP water includes regulated and unregulated flows from storage releases from Shasta, Folsom, and Clair Engle reservoirs into the Sacramento River. CCWD's long-term CVP contract was renewed in May 2005 for a 40-year term. The contract provides for a maximum delivery of 195,000 acre-feet per year (AF/Yr) with delivery reductions during water shortages due to regulatory restrictions and drought. The Municipal and Industrial Water Shortage Policy was developed by USBR to establish CVP water supply levels that would sustain urban areas during severe or continuing droughts. The Policy provides for a minimum allocation of 75 percent of adjusted historical use until irrigation allocations fall below 25 percent.

In addition, CCWD has water rights for filling Los Vaqueros Reservoir, water rights at Mallard Slough, and a permanent entitlement to surplus irrigation water from East Contra Costa Irrigation District (ECCID). The Los Vaqueros water rights are for water quality and emergency storage purposes and do not result in new supply. The Mallard right is for a maximum of 26,000 acre feet per year but is limited to an average of 3,100 acre feet per year due to water quality. The entitlement from ECCID is for a maximum of 8,200 acre feet per year with about 6,000 acre feet currently available for use. The agreement with ECCID also includes a dry year groundwater exchange option that provides up to 4,000 acre-feet when the CVP is in a shortage condition.

In 1996, CCWD completed the Future Water Supply Study (FWSS) to identify alternatives to ensure a reliable water supply for its wholesale and retail customers for the next 50 years, which provides drought management strategies that will be used such as enhanced conservation, water transfers, and increased use of local resources. The FWSS was updated in 2002. The FWSS, adopted by the CCWD Board of Directors, considers water demand, conservation, and existing and potential supplies for a range of service alternatives. Per CCWD's adopted 2005 Urban Water Management Plan, the District does not anticipate any supply deficits through 2030 for normal conditions or single-year droughts, and the first year of multiple year droughts. In the

near term, CCWD may experience a shortage of approximately 7 percent of demand; beginning in 2010, this increases to 15 percent in the third year of multi-year drought conditions. In periods with supply shortages, short-term water purchases and voluntary short-term conservation efforts should reduce demand to levels such that water supply and demand would be more closely balanced.

To augment the water supply purchased from CCWD, Pittsburg has two wells that have a combined yield of 1,500 AF/Yr. To improve reliability in the event of CVP delivery reductions and as a cost control measure, the City is constructing a new well with an estimated yield of 1,000 AF/Yr. This well will replace an older well with poorer water quality, and the yield of both wells should be 2,000 AF/Yr. There are no issues with groundwater quality in the Pittsburg area that require treatment beyond that which is provided at the Pittsburg Water Treatment Plant (PWTP).

#### *Water Demand*

For planning purposes Pittsburg estimates water demand at 180 gallons per capita per day. Per the City's 2005 Urban Water Management Plan, approximately 66.8 percent of water use is for residential accounts, 10.8 percent for commercial, 3.8 percent for industrial, and 18.6 for other uses.

The City's 2020 General Plan includes a number of policies related to conservation. Current water conservation programs include education and public information, municipal water management programs, regulations involving landscaping and efficient water use during shortages (Water Efficient Landscape Ordinance and Recycled Water Ordinance), the use of a tiered rate structure, plumbing code changes, and a system-wide water audit/leak detection survey and repair program. The City is signatory to the California Urban Water Conservation Council's Memorandum of Understanding Regarding Urban Water Conservation in California (MOU) and has committed to implement the applicable best management practices identified in the MOU. The City accomplishes this through partnering with CCWD.

#### *Balancing Supply and Demand*

The projected water supply and demand through 2030 for Pittsburg is shown below in *Table 4.2:*

Table 4.2  
City of Pittsburg Projected Water Supply and Demand  
(AF/Yr)

	2005	2010	2015	2020	2025	2030
Normal Conditions						
<b>Supply:</b>						
CCWD	11,622	12,669	13,872	15,271	16,701	18,260
Groundwater	1,000	1,000	1,000	1,000	1,000	1,000
<b>Total Supply</b>	<b>12,622</b>	<b>13,669</b>	<b>14,872</b>	<b>16,271</b>	<b>17,701</b>	<b>19,260</b>
<b>Demand</b>	<b>12,622</b>	<b>13,669</b>	<b>14,872</b>	<b>16,271</b>	<b>17,701</b>	<b>19,260</b>
<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Single Dry Year Conditions						
<b>Supply</b>	<b>12,662</b>	<b>13,669</b>	<b>14,872</b>	<b>16,271</b>	<b>17,701</b>	<b>19,260</b>
<b>Demand</b>	<b>12,662</b>	<b>13,669</b>	<b>14,872</b>	<b>16,271</b>	<b>17,701</b>	<b>19,260</b>
<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: Pittsburg 2005 Urban Water Management Plan

Per the City of Pittsburg's adopted Urban Water Management Plan, the City should have adequate water supplies to meet normal, single and the first year of multiple dry year periods through 2030 based on available supplies and reasonable levels of local water conservation. The projected supply deficit in the second year of a multiple dry year period ranges from 5.1 to 6.2 percent, and the deficit for the third year would be 15 percent. The City could implement additional voluntary and mandatory conservation measures during a drought to reduce demand. The City partners with CCWD on conservation programs and incentives.

### 4.3.2 Water System Infrastructure

The City's water system infrastructure includes a water treatment plant, storage facilities, and the distribution system. *Table 4.3* summarizes the existing water system facilities:

Table 4.3  
City of Pittsburg  
Water System Overview

	Quantity
Water Mains / Booster Stations	~150 miles / 5 booster stations / 7 pressure zones
Storage Capacity	8 reservoirs / 16.9 mg
Average Age of Distribution System	$\geq$ 35 years
Treatment	City of Pittsburg Water Treatment Plant – 32 mgd
Average Day Demand / Maximum Day Demand	10.3 mgd / 17.8 mgd

The City owns and operates the Pittsburg Water Treatment Plant (PWTP). The PWTP currently operates at a peak rate of approximately 22 mgd. It has a design capacity of 32 mgd but is currently permitted by the State Department of Health Services for 28 mgd.

The City serves four pressure zones and has approximately 150 miles of water mains. There are currently eight distribution reservoirs with a combined capacity of 16.9 mg. CCWD is constructing an emergency intertie between CCWD's Multi-Purpose Pipeline and Pittsburg's distribution system.

The City has prepared a Water System Master Plan (2000) that incorporates land use and demand projections based on existing land uses, the General Plan and information on specific developments provided by the City's Community Development Department. The Master Plan was amended in December 2001 (Amendment No. 1), August 2004 (Amendment No. 2) and October 2006 (Amendment No. 3) based on more specific development proposals in order to evaluate and modify proposed capital improvement projects in accordance with the stated policies in the General Plan. The Master Plan and Amendments identify system needs for distribution, storage and pump stations. Amendment No. 3 includes capital projects totaling \$72 million: \$5.6 million to correct existing system deficiencies with pipelines, \$25.2 million for expansion improvements in the Southeast Hills area and \$41.2 million for improvements in the Southwest Hills area. The estimated costs for each pressure zone are allocated between existing and new users based on the percentage of benefit. Citywide, \$11.5 million is allocated to existing users and \$60.6 million to future users.

The City's Water and Sewer Facility Reserve Charges study (2005) included analysis of water facilities with area-specific benefit and those with generalized benefit; this study establishes the basis for setting the fee structure such that funding will be adequate to address infrastructure needs for the existing system as well as any expansions. For the Southwest Hills area, the area will benefit from a planned new pump station and transmission lines along with all structures and pipelines for facilities in three pressure zones. Areas outside Southwest Hills and within Zones I and II will benefit from a planned, new transmission line and new reservoirs. Areas in Zone III outside Southwest Hills will benefit from a new transmission line. With respect to generalized benefit, the Southwest Hills area will benefit from capacity in the PWTP; Zones I, II and III will also benefit from treatment capacity and capacity in the distribution system. The specific benefits are factored into the Facility Reserve Charges discussed in *Section 4.6* below.

The City's Five-Year Capital Improvement Program (2005/2006 – 2009/2010) includes \$61.3 million in water projects, with \$49.4 million in identified funding available: \$1.8 million from the Water Enterprise Fund, \$23 million from developer funds or Facility Reserve Charges, and \$24.6 million in funding from the Redevelopment Agency and water bonds. Major projects funded with Water Enterprise funds include rehabilitation of the El Dorado Heights water line,

constructing emergency treated water interties between the Pittsburg and CCWD systems, and constructing the new well. The City has budgeted \$400,000 per year from 2008/2009 through 2010/11 for capital repairs and improvements to the PWTP, to be funded through Facility Reserve Charges. The City is also implementing an annual water main/service/valve replacement program; FY 2007/2008 is funded at \$500,000 from Facility Reserve Charges and RDA/water bonds, but funding has not yet been allocated for subsequent years. Other major capital projects that have not been funded include a 2 mg storage tank in Zone I (\$4.4 million), a 16-inch main at Central and 14<sup>th</sup> (\$1.14 million), and water line improvements in the Pittsburg-Antioch Highway (\$1.1 million).

The City's water system infrastructure is generally in good condition. No major service deficiencies were noted, such as inadequate water pressure, numerous pipeline breaks, regulatory violations, etc. The City's unaccounted for water system losses are 10 percent, which is an indicator of the integrity of the system. In general, industry standards set a benchmark at 10-percent for an acceptable level of system losses. Pittsburg has an emergency response plan for water emergencies.

#### **4.3.3 Wastewater System Infrastructure**

The City's wastewater infrastructure includes the local sewage collection system with approximately 126 miles of sewer main; DDSD owns and operates the regional interceptors and wastewater treatment plant. *Table 4.4* summarizes the City's existing sanitary system facilities:

**Table 4.4  
City of Pittsburg  
Wastewater System Overview**

Facility	Quantity
Sewer Mains	~126 miles
Lift Stations	2
Average Age of Collection System	≥ 38 years
Average Dry Weather Flow:	6.2 million gallons per day
Treatment	DDSD WWTP

The collection system has two distinct sections; the system north of Highway 4 is older while the portion south of Highway 4 is newer. The oldest portion of the system which serves the downtown area was built in the early 1900s.

Pittsburg is within the jurisdictional boundaries of the San Francisco Bay Regional Water Quality Control Board (RWQCB). From December 1, 2004 through May 2, 2007, sanitary sewer agencies within the region were required to report sanitary sewer overflows (SSOs). Pittsburg reported 15 SSOs in 2005 (total of 1,952 gallons) and 7 SSOs in 2006 (total 262

gallons). 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 Pittsburg must now report all sewer system overflows to the California Integrated Water Quality System (CIWQS). The CIWQS database currently shows three SSOs occurring since May 2, 2007, for a total of 42 gallons. The scale of these incidents are considered minor; the predominant cause has been grease blockage with only three related to infrastructure deficiencies. The deficiencies were corrected.

No other service challenges were noted. Pittsburg is partnering with the City of Antioch and DDSD in the preparation of the mandated Sewer System Management Plan in accordance with the requirements of the SWRCB's General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ). The Plan includes an Overflow Emergency Response Plan to support an orderly, effective response to SSOs.

The City has prepared a Wastewater Collection System Master Plan (April 2003) that incorporates land use and flow projections based on existing land uses, the General Plan and information on specific developments provided by the City's Community Development Department. The Master Plan was amended in May 2006 (Amendment No. 1) and February 2007 (Amendment No. 2) based on more specific development proposals in order to evaluate and modify proposed capital improvement projects in accordance with the stated policies in the General Plan.

The City's Water and Sewer Facility Reserve Charges study (2005) indicates that in some areas new development will connect to the existing wastewater infrastructure, while in other areas new infrastructure will need to be built. Capital facilities for Sewer Sub-Basins SW 101-105 located west of Oak Hills will be constructed exclusively by the developer(s) for the benefit of new development in that area and will not utilize any existing system capacity. Development within Sewer Sub-Basin DS 601-621 and SW 109 is projected to add the equivalent of 2,325 single-family dwellings. Development within this area will utilize some existing system capacity and require some system capacity improvements. Infill development in other areas of the city will utilize capacity in the existing collection system.

The Wastewater Collection System Master Plan Amendment No. 2 identifies four capital projects needed for capacity relief:

<b>Project</b>	<b>Length (ft)</b>	<b>Diameter</b>	<b>Capital Cost Est. (Oct 2006)</b>
Highway 4 Trunk	9,895	15 inches	\$3,847,300
West Leland Road	1,180	8 inches	\$295,300
Bailey Road	806	12 inches	\$648,100
Angelica	265	8 inches	\$56,900

The February 2007 Master Plan Amendment notes that after these projects are implemented, portions of the Highway 4 trunk line will still be flowing full at design peak weather flow. Any additional development above that currently envisioned will result in the need for further upsizing.

The City's Five-Year Capital Improvement Program (2005/2006 – 2009/2010) includes \$20.3 million in sewer projects, with \$16.6 million in identified funding available. Major projects include completing downtown infrastructure improvements, implementing an annual CCTV inspection and sewer replacement program (\$1 million per year), and constructing the Highway 4 Trunk Line Relief (Segment A) and Bailey Road Sewer Main project. The \$24 million Downtown Infrastructure Rehabilitation Project is being funded through Redevelopment Agency funds and water bond funds. The first phase includes rehabilitation of water, sewer and storm drain systems and is expected to be complete by March 2008. The need for the Highway 4 Trunk Line Relief and Bailey Road Sewer Project is identified in the Wastewater Collection System Master Plan. The City is preparing to contract for project design, which will be funded through sewer facility reserves. Lastly, the City is implementing the 2007/2008 Citywide Sewer System Rehabilitation project, with \$2 million in funding from the Sewer Operations Fund. Approximately 6,300 linear feet of sewer lines will be rehabilitated, which will also reduce infiltration and inflow. Unfunded CIP projects include abandoning the former wastewater treatment plant, sewer line improvements along the Pittsburg/Antioch Highway and the West Leland Road Sewer Main, and Segment B of the Highway 4 Trunk Line Relief project.

#### **4.3.4 Summary**

Pittsburg relies on water supply from the Central Valley Project and is implementing projects and programs to diversify supply and reduce demand. This includes constructing a new well, providing conservation programs, and implementing a Recycled Water Ordinance requiring the use of recycled water supplies where available. The City has planned for water and wastewater infrastructure needs through updated system master plans, the annual budget, rate structures, and five-year CIP. The City has adopted a new rate structure for water and wastewater services to meet operational needs. In addition, the Facility Reserve Charges have been updated to provide revenue for capital needs and to reduce the backlog of deferred rehabilitation projects. The City is implementing an annual water main/service/valve replacement program along with a wastewater pipeline CCTV inspection program to extend the life of the infrastructure. Policies and procedures are in place to ensure that the existing system is maintained and that adequate facilities will be available to serve approved development projects.

## 4.4 Financing Constraints and Opportunities

The City of Pittsburg accounts for its water and sewer utilities as enterprise activities, with the revenues derived from service charges. For FY 2005/2006, total revenues for the City were \$129.2 million and total expenses were \$149.6 million. For the same period water operating revenues were \$15.6 million and operating expenses were \$11.5 million. Wastewater operating revenues were \$3.7 million and operating expenses were \$1.4 million.

Tables 4.5 and 4.6 summarize the financial history of the two enterprise funds.

Table 4.5  
 City of Pittsburg  
 Water Utility Enterprise Fund Summary

	FY 2004/2005 Actual	FY 2005/2006 Actual	FY 2006/2007 Projected	FY 2007/2008 Budgeted
Operating Revenues	\$11,720,046	\$15,614,242	\$17,918,279	\$14,389,883
Operating Expenses	\$10,382,424	\$11,453,490	\$16,498,289	\$12,475,008
Net Non-operating Revenues / (Expenses)	(\$631,720)	(\$1,053,837)		
Contributions/(Transfers)	(\$273,474)	(\$307,909)		(\$290,680)
Change in Net Assets	\$432,428	\$2,799,006		
Beginning Balance	\$39,152,662	\$39,585,090	\$42,384,096	
Net Assets, End of Year	\$39,585,090	\$42,384,096		

The Water Utility Enterprise Fund has an unrestricted net asset balance of \$26.5 million at June 30, 2006.

Table 4.6  
 City of Pittsburg  
 Sewer Utility Enterprise Fund Summary

	FY 2004/2005 Actual	FY 2005/2006 Actual	FY 2006/2007 Projected	FY 2007/2008 Budgeted
Operating Revenues	\$2,602,071	\$3,668,052	\$4,346,721	\$3,683,100
Operating Expenses	\$1,254,647	\$1,439,347	\$9,201,768	\$2,078,824
Net Non-operating Revenues / (Expenses)	(\$250,658)	(\$129,547)		
Contributions/(Transfers)	(\$369,107)	(\$540,388)		(\$404,280)
Change in Net Assets	\$727,659	\$1,558,770		
Beginning Balance	\$8,202,700	\$8,930,359	\$10,489,129	
Net Assets, End of Year	\$8,930,359	\$10,489,129		

The Sewer Utility Enterprise Fund has an unrestricted net asset balance of \$5.6 million at June 30, 2006.

In December 2005, the City issued \$38,475,000 in water revenue bonds; the bonds are repayable from the net revenues of the City's water utility. Proceeds from the bonds were used to retire the 1997 water bonds and to fund certain repairs, renovations, extensions, and improvements to the water system, and to fund a reserve account as well as to pay cost of issuance for the bonds. The bonds will be repaid in 2036; average annual debt service is approximately \$2 million. The outstanding balance at June 30, 2006 was \$10,285,000; the City had 185-percent debt service coverage based on the net revenue available for debt service.

In March 2004, the City of Pittsburg Financing Authority issued \$11,950,000 in wastewater revenue bonds. The bonds bear interest at rates from 2.0 to 4.25 percent. The bonds were issued to refund the \$11,545,000 outstanding balance on the 1994 wastewater revenue bond issue. Proceeds from the 2004 bonds were placed in an irrevocable trust to provide for all future debt service payments. The outstanding balance at June 30, 2006 was \$10,285,000; the City had 259-percent debt service coverage based on the net revenue available for debt service.

The City uses a two-year budgeting cycle. On January 29, 2007 the City Council approved the extension of the FY 2005/2006 and 2006/2007 Two Year Operating Budget Plan by one additional year for FY 2007/2008. The City's budget has had a long-term structural deficit, and staff is implementing the FY 2007/2008 City Services Reduction and Support Plan approved by the Council on June 18, 2007. The City Manager's discussion in the 2005/2006-2006/2007 Adopted Budget notes that the City must analyze new funding mechanisms and/or other potential cost reduction options to reduce the \$3 million budget deficit. The deficit is related to the General Fund, not the water and wastewater utility enterprises. Future residential development will create an additional burden on City services and infrastructure maintenance. It is noted that, unless there is significant economic growth within the City to balance the service demands, the City must identify new funding mechanisms to meet increased service demands, particularly for public safety and law enforcement. As enterprise activities, the water and wastewater utilities are expected to generate adequate revenues to cover operations, maintenance and capital needs. However, it is possible for the revenues from these funds to be transferred to the General Fund to cover related services, or for General Fund costs to be assigned to the enterprise activity. This is appropriate when the services directly relate to the provision of utility services and infrastructure needs, such as personnel costs for CIP engineering, etc.

The City has restricted certain financial resources for debt service in accordance with the requirements of the water and wastewater bond issues. In addition, the City has undertaken a detailed analysis described below to set water and wastewater utility connection fees and service charges at the appropriate level with automatic annual adjustments through 2009. The City has the financial resources and fee structures in place to provide for infrastructure needs and improvements and to continue to maintain adequate service levels for water and wastewater service.

## **4.5 Cost Avoidance Opportunities**

The City is implementing programs and management practices to avoid costs related to its water and wastewater utilities. Pittsburg is partnering with the City of Antioch and DDSD in the preparation of the mandated Sewer System Management Plan and staff training in accordance with the requirements of the SWRCB's General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ). The Plan includes a Fats, Oils and Grease Control Program, which is expected to reduce the number of blockages and retain capacity within the sewer system.

The City is addressing increasing water demands by developing a new well to reduce dependence on more costly CCWD untreated water purchases. The City is also partnering with DDSD on the expansion of the DDSD recycled water system to serve Pittsburg parks and the golf course, and to reduce demand on potable water sources for irrigation purposes. In addition, the City partners with CCWD on water conservation programs. However, upon review of the City's website, there was no information provided for residents or businesses on how to conserve water or incentive programs. The City should consider incorporating water conservation information on its website as part of its public information efforts to encourage water conservation activities and provide information on additional resources.

The City indicated that it is controlling costs by sharing equipment and staff of its water/wastewater utility enterprises with its other operations and maintenance functions such as streets, storm drains, and landscape maintenance. The City believes that costs for these other services would rise if the sewer utility function were combined or outsourced to another agency.

## **4.6 Opportunities for Rate Restructuring**

The City of Pittsburg adopted its current rate structure for water and sewer services in 2004 with amendments in 2005. The rate structure includes annual increases effective through 2009; the rates for the next two years include an annual five percent increase for water service and approximately a one percent increase for wastewater services. The water rate structure includes a base fee plus consumption fees with two tiers for single family residential, three tiers for seniors, and one rate for business and other usage types. Sewer fees are a flat rate for residential and based on water usage for non-residential accounts. The current rates are shown in *Table 4.7* below:

Table 4.7  
 City of Pittsburg  
 2007 Water and Sewer Rates

Type	Residential	Non-Residential
Water Base Fee – 5/8 x ¾ inch meter	\$16.40	\$16.40
Water Consumption Fee	1-14 ccf - \$2.25 per ccf Over 14 ccf - \$3.80 per ccf	\$2.80 per ccf
Sewer Fee	\$13.20	\$1.34 per ccf

The City has also adopted water and sewer development connection fees based on the detailed study completed in 2005 for Water and Sewer Facility Reserve Charges. The ordinance provides for a rate increase each November 1<sup>st</sup>. The current water connection fees (Facility Reserve Charges) for single family residential range from \$2,450 in the Southwest Hills/Smith development area to \$6,960 in Zones I and II. The fee structure factors in needs for water treatment, distribution, storage and transmission, based on the water system needs in the area of development. Rates are incrementally lower for multi-family residential and higher for non-residential service, based on the size of the meter.

Similarly, the City's sewer connection fees (Facility Reserve Charges) are based on the recommendations of the 2005 study. There are no charges within sewer sub-basins SW101-105 as the developer is responsible for all wastewater infrastructure, which will connect directly to the DDSD system. The fees are \$2,980 for single family residential in sewer sub-basins D601-621 and SW109 as they will utilize capacity in the existing system and need an expanded collection system. In all other areas, the fee is \$1,940 for single family residential as it will be infill development and will only use capacity in the existing system. Rates are slightly lower for multi-family residential and incrementally higher for non-residential based on expected flows determined by the City Engineer.

In addition to the connection fees paid to Pittsburg, new development also pays facility reserve fees to DDSD and the Contra Costa Water District.

## 4.7 Opportunities for Shared Facilities

The City of Pittsburg shares facilities through use of the Contra Costa Canal for untreated water deliveries and the DDSD conveyance system and treatment plant. Given the service demands and system conditions in the east county, a more regional approach to wastewater treatment may offer increased benefits to service providers and ratepayers. DDSD and the Ironhouse Sanitary District could potentially share wastewater treatment capacity in the future. The City of Pittsburg should participate in these discussions to evaluate the benefits that might be available to the City's wastewater system and its ratepayers.

As noted above under Cost Avoidance Opportunities, Pittsburg is partnering with Antioch and DDSD to prepare and implement a Sewer System Management Plan required under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WQO No. 2006-003-DWQ). Similarly, Pittsburg is partnering with CCWD and its other wholesale agencies to achieve economies of scale on conservation programs.

## **4.8 Evaluation of Management Efficiencies**

The City's water and wastewater systems are managed within the Public Works Department. The City uses a number of plans to ensure that utility services are delivered in an efficient, cost-effective manner, including the Water System Master Plan (2000) and Amendments (December 2001, August 2004 and October 2006), Wastewater Collection System Master Plan (2003) and Amendments (May 2006 and February 2007), Sewer System Management Plan (under development), CIP, and the General Plan. The City identifies recent accomplishments and incorporates service goals into the bi-annual budget, such as constructing new wells, implementing the Vulnerability Assessment recommendations for security upgrades to the Water Treatment Plant, reducing sewer system overflows, and improving response times.

## **4.9 Government Structure Options**

The City is providing adequate water and wastewater utility services, with CCWD providing untreated water supplies and DDSD providing wastewater treatment and disposal services. The City has agreements in place such that annexations to the City are to occur simultaneously to CCWD and DDSD so that water supply and wastewater treatment can be provided to the annexing area. Three government structure options were identified for the City of Pittsburg with respect to water and wastewater services:

- Maintain the status quo
- Annex areas receiving service into the City boundaries (and concurrently into CCWD and DDSD boundaries)
- Consolidate sewer service with DDSD

**Maintain the Status Quo:** The City is currently providing water and wastewater collection service for its residents and businesses, as well as to some parcels outside city boundaries. The City is not experiencing infrastructure or financial challenges that require another agency to take over service to the city. The advantages of this option are continuity of service and economies associated with internal coordination with other city projects for water pipelines, street and sidewalk repairs, etc. The disadvantage to this option is that it does not clean up boundary issues for areas where service has been extended.

**Annex areas receiving service into the City boundaries:** The City is providing service to approximately three customers outside city boundaries: one customer on Willow Pass Road, one south of the City and the Mirant Power Plant. In order to clean up boundary issues associated with service areas, Pittsburg could annex these areas into the City with concurrent annexation to CCWD and DDSD. The parcels would need to be evaluated to determine their location with respect to current boundaries and the adopted Urban Limit Line for the City and the County.

**Consolidate sewer service with DDSD:** The City provides wastewater collection services, while DDSD provides conveyance, treatment and disposal services to the City. DDSD owns and operates the wastewater collection system serving the unincorporated Bay Point community, and serves other portions of unincorporated County and the City of Antioch. The advantages of this option are potential economies of scale and other efficiencies that might be available due to the single-purpose focus of DDSD. However disadvantages such as administrative costs, increased costs to other services the City provides, political opposition, and loss of local control within the city could outweigh the benefits. The City shares staff across functions, including the potable water and stormwater utilities. Further study would be needed to determine the merits of this option and level of benefit versus costs which would affect ratepayers for both the City of Pittsburg and DDSD.

## **4.10 Local Accountability and Governance**

The City of Pittsburg incorporated in 1903 as a General Law city. It operates under the oversight and guidance of the five-member City Council. Council members are elected at large. The Mayor is selected from among the Council Members, and serves a one-year term. The City also has a directly elected Clerk and Treasurer. The current City Council is identified in *Table 4.8*.

**Table 4.8  
Pittsburg City Council**

Member	Title	Term Expires
Ben Johnson	Mayor	December 2008
Will Casey	Vice Mayor	December 2008
Michael Kee	Council Member	December 2010
Nancy Parent	Council Member	December 2010
Sal Evola	Council Member	December 2010

The City Council meets the first and third Monday of the month at 7:00 PM at City Hall, located at 65 Civic Avenue, Pittsburg. Meetings are open to the public. Meeting notices, agendas, and supporting documentation are posted at least 72 hours in advance at City Hall and on the City's website.

The City's website ([www.ci.pittsburg.ca.us](http://www.ci.pittsburg.ca.us)) includes information about the water and wastewater utilities, although it does not include information on water conservation as noted above. Water conservation is a major component of the strategies within the Public Facilities Element in the City's General Plan and the City should evaluate opportunities to increase its public education efforts.

Council members also serve as the Board of Directors for the City's Redevelopment Agency. Council members are compensated \$500 per month for services to the city.

## **4.11 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 at least once every five years in order to promote logical and orderly development of areas within the sphere.<sup>3</sup> The SOI recommendations for the City of Pittsburg are included in the East County Municipal Service Review that considers the full range of services the City provides. There is a need within the City of Pittsburg for the water and wastewater services the City provides.

The City is providing adequate service and has the financial resources and rate structures in place to continue to provide services and meet infrastructure needs for existing development. In addition, the City has considered future development within its Planning Area for water and wastewater service needs. Nonetheless, the projected water demands and wastewater flows for future annexations would need to be evaluated based on the type and location of development, existing system capacity, necessary infrastructure improvements to maintain acceptable levels of service, and the means to fund the improvements. Inclusion of proposed future development projects in the City's master plans for the water and wastewater systems does not preclude the need to prepare a detailed Plan for Service as part of an annexation application.

## **4.12 Determinations**

### **4.12.1 Growth and Population**

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

The City of Pittsburg has an estimated population of 63,004 residents in 2007; this is projected to reach 78,100 by 2030, with a moderate average annual growth rate of 1.1 percent. The ultimate population at build-out is projected to be approximately 93,000 residents. As the City of

---

<sup>3</sup> Government Code Section 56425 et seq.

Pittsburg continues to develop over the next twenty years through infill and expansion, there will be an increased need for water and wastewater services.

#### **4.12.2 Infrastructure Needs or Deficiencies**

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

The City provides water treatment and distribution services. It obtains a majority of its untreated water supply from the Contra Costa Water District through the Central Valley Project, and supplements it with locally produced groundwater. The CCWD's contract for CVP water includes provisions for delivery reductions due to regulatory requirements or drought conditions. Per the adopted 2005 Urban Water Management Plan for CCWD, water supplies are adequate to meet expected demand through 2030 in normal years, single year droughts, and the first year of multi-year droughts. Per the City of Pittsburg's adopted 2005 Urban Water Management Plan, the City should have adequate water supplies to meet normal, single-dry and the first year of multiple dry year periods through 2030 based on available supplies. The projected supply deficit in the second year of a multiple dry year period ranges from 5.1 to 6.2 percent, and the deficit for the third year would be 15 percent.

The City's water system infrastructure includes a water treatment plant and distribution system that includes storage facilities, pump stations, and water lines. The water treatment plant has a design capacity of 32 mgd, and is currently permitted for 28 mgd. Current average day demand is 10.3 mgd; projected demand in 2030 is 17.2 mgd. The City will need to increase permitted capacity as demand increases.

Pittsburg's wastewater infrastructure includes a collection system; wastewater is discharged into the Delta Diablo Sanitation District (DDSD) system for treatment and disposal. The City currently has average dry weather flow flows of 6.2 mgd. The City is implementing sewer main rehabilitation projects to address system deficiencies and improve system performance.

No infrastructure needs or deficiencies were identified that are not being addressed in the City's Water Master Plan and Wastewater Collection System Master Plan, capital improvement plans and operations and maintenance plans.

#### **4.12.3 Financing Constraints and Opportunities**

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

The City funds water and wastewater services, including capital improvements, through service charges and Facility Reserve Charges. The City has existing outstanding debt related to its water and wastewater system, and maintains debt service coverage in accordance with the requirements

of the bond issues. With the adoption in 2005 of updated rate structures, the water and wastewater utilities have adequate funding for operations and maintenance and capital needs.

#### **4.12.4 Cost Avoidance Opportunities**

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

The City is leveraging opportunities to control costs by partnering with the City of Antioch and DDSD in the preparation of the Sewer System Management Plan and with CCWD on conservation programs. The City is also developing a new well to reduce dependence on CCWD untreated water purchases that are more costly. The City is also partnering with DDSD on the expansion of the DDSD recycled water system to serve Pittsburg parks and the golf course, and to reduce demand on potable water sources for irrigation purposes.

The City is controlling costs by sharing equipment and staff of its water/wastewater utility enterprises with its other operations and maintenance functions such as streets, storm drains, and landscape maintenance.

The City should identify opportunities to provide more education and information on water conservation, including providing information on the City's website in order to reduce demand and avoid the cost of additional untreated water purchases and treatment.

#### **4.12.5 Opportunities for Rate Restructuring**

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

The City uses a tiered rate structure for water service for residential accounts and a flat rate structure for non-residential accounts. Residential accounts pay a flat fee for sewer service while the fee for non-residential accounts is based on water consumption. The service fees are structured to cover the cost of providing service and to provide for continued maintenance of the existing system.

The City evaluated its water and sewer rates, including Facility Reserve Charges, in 2004 and 2005 and adopted updated rate structures. The Facility Reserve Charges are structured such that fees will continue to pay for new infrastructure and infrastructure improvements needed due to increased capacity impacts on the existing system.

#### **4.12.6 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 City shares facilities with DDSD, which also provides treatment and disposal services for the City of Antioch. There may be opportunities to develop a regional approach to sharing treatment capacity between DDSD and the Ironhouse Sanitary District. The City of Pittsburg should participate in the discussions and evaluate the benefits to city services.

#### **4.12.7 Evaluation of Management Efficiencies**

*Purpose:* *To evaluate management efficiencies of the jurisdiction.*

The City's water and wastewater utilities are managed by the Public Works Department. The City uses a number of plans to ensure that utility services are delivered in an efficient, cost-effective manner, including the master plans for the water and wastewater systems, Sewer System Management Plan (under development), CIP, and the General Plan.

#### **4.12.8 Government Structure Options**

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

The City is providing adequate water and wastewater collection services to its residents and businesses, and is providing service to approximately three accounts outside city boundaries. The City is not experiencing infrastructure or financial challenges that require another agency to take over service to the City. Three government structure options were identified for the City of Pittsburg:

**Maintain the Status Quo:** The advantages of this option are continuity of service and economies associated with internal coordination with other city projects for water pipelines, street and sidewalk repairs, etc. Disadvantage is that it does not clean up boundary issues for areas where service has been extended.

**Annex areas receiving service into the City boundaries:** The City is providing service to approximately three customers outside city boundaries. Pittsburg could annex these areas into the City with concurrent annexation to CCWD and DDSD. The advantages of this option are to clean up boundary issues associated with service areas. The parcels need to be evaluated to determine their location with respect to current boundaries and the adopted Urban Limit Line for the City and the County.

**Consolidate sewer service with DDSD:** The City provides wastewater collection services, while DDSD provides conveyance, treatment and disposal services to the City. The advantages of this

option are potential economies of scale and other efficiencies that might be available due to the single-purpose focus of DDSD. Disadvantages include a potential increase in administrative costs, political opposition, and loss of local control for the services and infrastructure management within the city. In addition, City staff is shared across public works programs, an efficiency that would be impacted if the City no longer provided wastewater services. Further study would be needed to determine the merits of this option and benefit/costs which would affect ratepayers for both the City of Pittsburg and DDSD.

#### **4.12.9 Local Accountability and Governance**

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

Water and wastewater services provided by the City are addressed by the City Council. The City Council meetings are open and accessible to the public. Information on the City's water and wastewater services, including facilities, capital improvements, financing, and service rates is available on the City's website.