4.8 PUBLIC SERVICES, RECREATION, AND UTILITIES

Introduction

The Public Services, Recreation and Utilities chapter of this Draft EIR summarizes setting information and identifies potential new demands resulting from the proposed project on water supply, wastewater systems, solid waste disposal, law enforcement, fire protection, schools, parks and recreation, and energy utilities. Information for this chapter was drawn from project information provided by the *Water Supply Assessment for Tuscany Meadows EIR* (See Appendix J),[1] the *Pittsburg General Plan 2020*,[2] the *Pittsburg General Plan 2020 EIR*,[3] the *City of Pittsburg Water System Master Plan*,[4] the *City of Pittsburg 2010 Urban Water Management Plan*,[5] the Delta Diablo *Conveyance System Master Plan Update*,[6] the *City of Pittsburg Five Year Capital Improvement Program*,[7] the City of Pittsburg *Development of Water and Sewer Facility Reserves Charges* study,[8] the technical memorandum *Tuscany Meadows Off-site Sewage Impacts Evaluation* (see Appendix K),[9] and information from local service providers.

Existing Environmental Setting

The environmental setting section describes the existing water supply, wastewater conveyance and treatment, solid waste, fire protection, law enforcement, schools, parks and recreation facilities, library services, and electricity and natural gas.

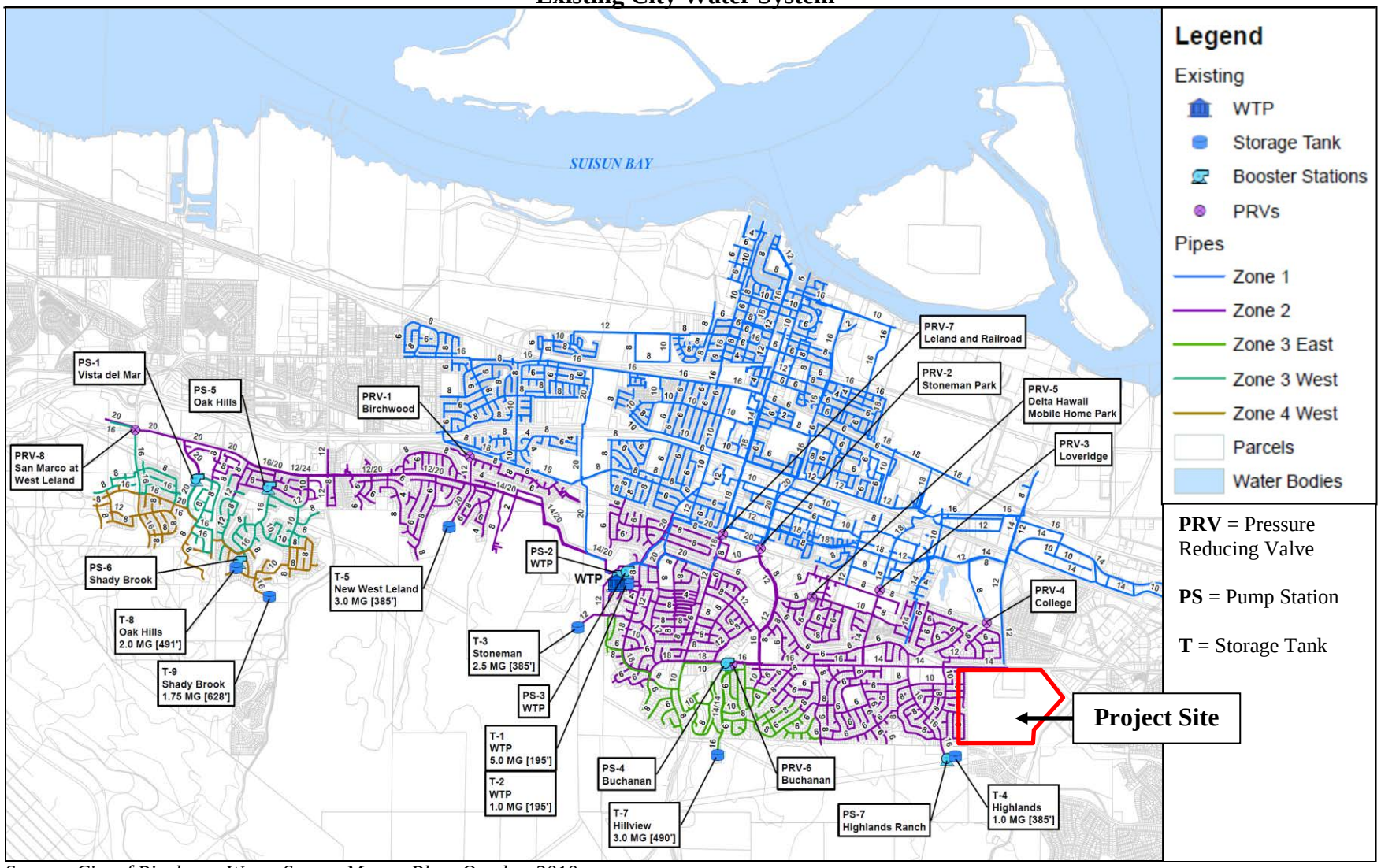
Water Supply and Treatment

Water Supply

The Pittsburg Water Service Area comprises all of the area within the incorporated City limits, around 10,000 gross acres (15.6 square miles) (see Figure 4.8-1). The City's water supplies include local groundwater, recycled water, and purchased surface water from the Contra Costa Water District (CCWD). The Tuscany Meadows project site is located outside of CCWD's current service area.[10] As a result, the project site needs to be annexed to CCWD's service area and included into the Central Valley Project (CVP) area.

The City's current and projected water supplies are shown in Table 4.8-1, which is based on Table 4-1 of the City's 2010 Urban Water Management Plan (UWMP).

Figure 4.8-1
Existing City Water System



Source: City of Pittsburg. Water System Master Plan. October 2010.

Table 4.8-1
City of Pittsburg Normal Year Water Supplies (AFY) – Current and Projected

Water Supply Source	2010	2015	2020	2025	2030	2035
CCWD Surface Water	7,815	9,248	10,078	10,973	11,937	12,976
Supplier-produced Groundwater	1,061	1,500	1,500	1,500	1,500	1,500
Supplier-produced Surface Water	0	0	0	0	0	0
Transfers In	0	0	0	0	0	0
Exchanges In	0	0	0	0	0	0
Recycled Water	459	465	465	479	479	498
Total	**9,335**	**11,213**	**12,043**	**12,952**	**13,916**	**14,974**

AFY = Acre-Feet per Year

Source: Table 4-1 from City of Pittsburg 2010 UWMP.

Surface Water

The City is within the CCWD service area and purchases CVP water pumped from the Sacramento-San Joaquin Delta by CCWD, its wholesale supplier. CCWD has a contract with the United States Bureau of Reclamation (USBR) for 195,000 AFY of CVP water. In March 2005, CCWD renewed their water service contract with the USBR for a period of 40 years through February 2045.

The City obtains 85 percent to 95 percent of its water supply from CCWD, pursuant to a contractual arrangement allowing the City to obtain such quantity of water as is necessary to meet its needs, subject to rationing restrictions in the event of drought or other extraordinary circumstances. CCWD's future supply projections indicate adequate availability of surface water sources delivered through its contract with the USBR, along with other available sources and short-term purchases under normal conditions.

Groundwater

The following section describes the groundwater basin underlying the Pittsburg area, as well as the City's two existing groundwater wells.

Basin Description

Groundwater is pumped from two wells in the central part of the City. The City overlies the Pittsburg Plain Groundwater Basin (Groundwater Basin Number 2-4 as presented in the Department of Water Resources (DWR)'s Bulletin 118). This groundwater basin is not adjudicated and is under a groundwater management plan. The basin is bounded by Suisun Bay on the north, the Tracy Sub-basin of the San Joaquin Valley Groundwater Basin on the east, and the Clayton Valley Groundwater Basin on the west. The southern boundary of the basin extends inland from Suisun Bay by approximately one to three miles. The basin lies within the two major surface drainage basins of Kirker Creek and Willow Creek, both of which discharge into Suisun Bay.

The water-bearing units in the basin are Pleistocene to recent age alluvium deposits. The Pleistocene deposits consist of consolidated and unconsolidated sediments characterized by expansive clays. The modern alluvial sediments are characterized by soft, water saturated muds, peat and loose sands. The maximum thickness of these deposits is 400 feet. The aquifers in the basin area are hydrologically connected to the Sacramento River. Limited data exist regarding the occurrence and movement of groundwater in the basin.

Hydrographs created from DWR well data in the Pittsburg Plain Groundwater Basin indicate that groundwater levels have remained fairly stable over the period of record, with the exception of static water level drops and subsequent recovery associated with the 1976-1977, and 1987–1992 drought periods. DWR has not identified that overdraft conditions will occur if present groundwater conditions continue.

The East County Water Management Association is developing a Pittsburg Plain Groundwater Management Program (GWMP) as part of its Integrated Regional Water Management Plan update. Funding for this project will come from a Proposition 84 Planning Grant. The GWMP will establish a groundwater monitoring network and coordinate data collection, providing a framework for basin management to protect the groundwater resources.

Well Description

The City has two municipal wells, Rossmoor and Bodega, which together are currently producing about 1,500 acre-feet of groundwater per year. In 2010, the City completed the Bodega Well Pump Station Project. The Bodega well was installed to replace the Ballpark well, which experienced frequent shut downs and performed inconsistently.

The relatively shallow wells (approximately 200 feet deep) deliver approximately 600 (Rossmoor) and 1,200 (Bodega) gallons per minute, respectively. The total amount of groundwater pumped from the Pittsburg Plain Groundwater Basin in 2010 was 1,061 acre-feet per year (AFY). Groundwater use was less in 2009 and 2010 because of the removal of one well (Ballpark) from service in October 2008. The replacement well (Bodega) was placed into service in January 2010.

The City conducts regular tests of the water pumped from the two wells in compliance with State of California water quality standards (Administrative Code, Title 22) to make sure that the utilization of the water source is consistent with applicable State water standards.

Recycled Water

The recycled water supply for the City comes from the Delta Diablo, a California Wastewater Resources Recovery, Recycled Water Facility (RWF). The RWF ensures a consistent water quality standard is met for the City's recycled water supply. Use of recycled water is not proposed for the project.

Water Treatment Plant

Surface water and groundwater are conveyed to the City's water treatment plant, treated, and then conveyed via the City's potable distribution system. The City operates a domestic water distribution system that consists of a water treatment plant, storage reservoirs, pump stations, pressure reducing valves, and over 211 miles of transmission and distribution pipelines.

The City owns and operates the Pittsburg Water Treatment Plant (PWTP). The plant has a design capacity of 32 million gallons per day (MGD), and is currently permitted by the State Department of Health Services. The PWTP currently operates at six to 18 MGD.[4]

Wastewater Conveyance and Treatment

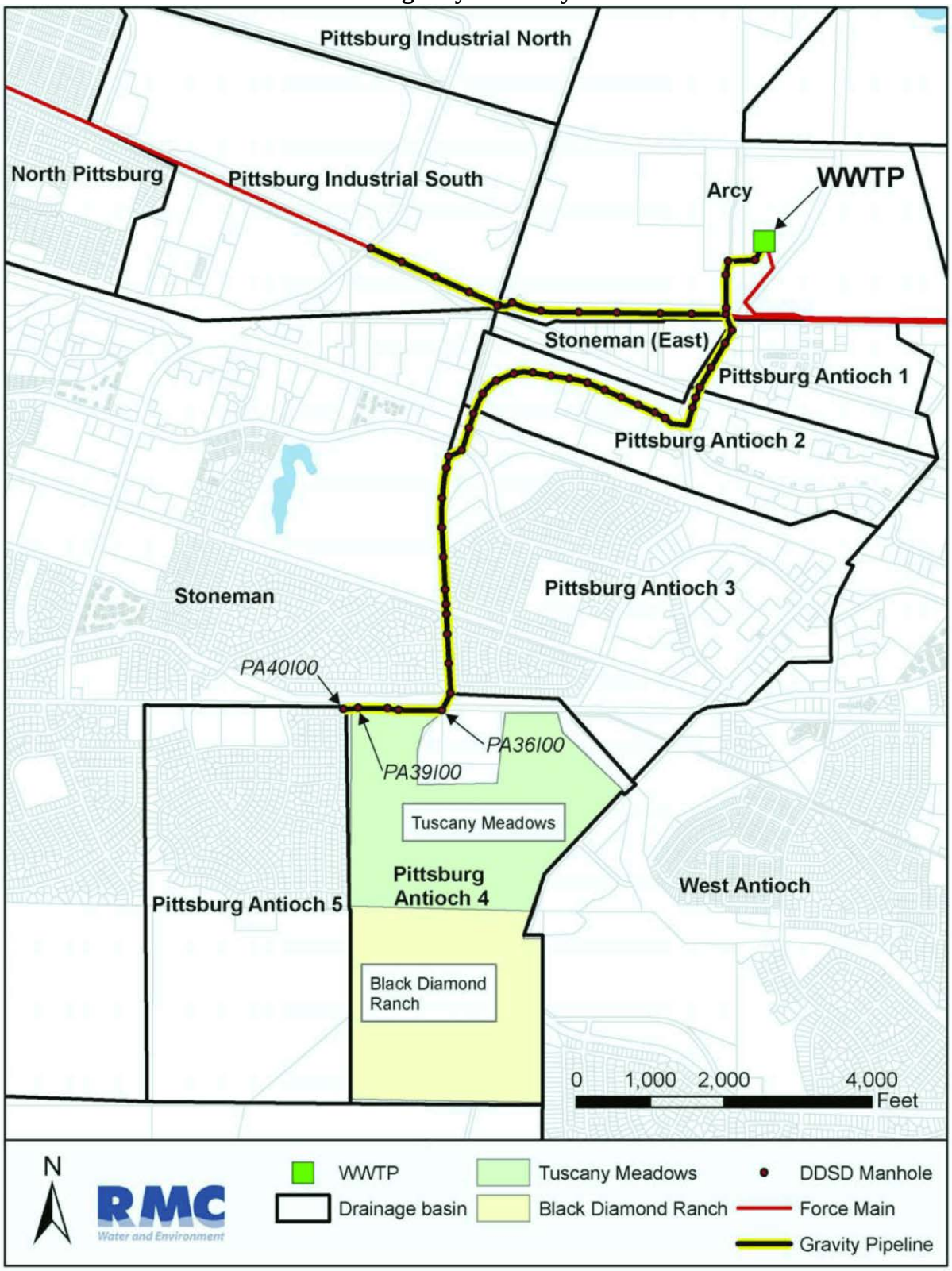
Conveyance

The City maintains and owns the local sewage collection system and is responsible for the collection and conveyance of wastewater to the Delta Diablo Wastewater Treatment Plant (WWTP). Delta Diablo owns and operates the regional interceptors and wastewater treatment plant. The project site is located within the Delta Diablo sphere of influence (SOI), but is not located within the Delta Diablo service area. The project would need to be annexed to the Delta Diablo service area prior to receiving service. As proposed, the City of Pittsburg is responsible for the wastewater collection system from the project site to the designated Delta Diablo regional wastewater conveyance facility, the Pittsburg-Antioch Interceptor, which is located along Buchanan Road (see Figure 4.8-2). The regional conveyance facilities transport wastewater to the Delta Diablo WWTP located at 2500 Pittsburg-Antioch Highway, Antioch. After secondary treatment, the effluent is either discharged through a deep-water outfall to New York Slough, or further processed through the Delta Diablo's RWF to tertiary Title 22 recycled water standards and distributed for reuse.

Wastewater Treatment Plant (WWTP)

As discussed above, regional conveyance facilities transport wastewater to the Delta Diablo WWTP. After secondary treatment, the effluent is either discharged through a deep-water outfall to New York Slough or further processed through the RWF. The Delta Diablo WWTP National Pollutant Discharge Elimination System (NPDES) Permit allows an average dry weather flow of 16.5 MGD. An EIR for the expansion of the wastewater treatment plant capacity to an average dry weather flow of 22.7 MGD was completed in April 1988. During the most recent reporting period, 2012, the average dry weather flow influent to the treatment plant was 12.7 MGD. In 2000 and 2005, the average dry weather flow influent to the treatment plant was 13.5 MGD and 14.2 MGD, respectively.[11]

Figure 4.8-2
Existing City Sewer System



Source: RMC, Tuscany Meadows Off-site Sewerage Impacts Evaluation, January 30, 2013.

Solid Waste

Pittsburg Disposal Service is a private firm that provides solid waste collection under a City franchise agreement. Residential rates are $22.75 per month for curbside service ($25.75 with use of a provided 96-gallon "toter"). Both residential and commercial solid waste is currently transported to, and disposed of at the Potrero Hills Landfill east of Suisun. The Potrero Hills Landfill has a maximum permitted capacity of 83,100,000 cubic yards with a remaining fillspace capacity of 58,794,478 cubic yards and an effective remaining refuse capacity of 39,073,830 tons.[12] The total acreage of the Landfill is approximately 525 acres, with a disposal acreage of 340 acres. The most recent solid waste permit was issued for the Landfill on February 14, 2012. According to the Permit, the estimated closure date is 2048.[13]

Keller Canyon Landfill disposes of industrial non-recyclable waste from Pittsburg. Mount Diablo Recycling Center provides recycling service through their Recycling Center and Transfer Station at 1300 Loveridge Road.

The Public Works Department's Environmental Affairs Division, in conjunction with Pittsburg Disposal, coordinates the curbside recycling, and green waste programs. Pittsburg Disposal provides both a container for cardboard and newspaper, and one for cans and bottles while the homeowner provides either a container, or bag for green waste to be picked up twice a month.

Fire Protection

The entirety of the Tuscany Meadows project site is currently within the service boundaries of the Contra Costa County Fire Protection District (CCCFPD). The CCCFPD boundaries encompass the central and northern portions of Contra Costa County (CCC), extending from the City of Antioch in the east to the eastern border of the City of Richmond in the west, and as far south as the northern border of the City of Moraga. The CCCFPD has a boundary area of approximately 257 square miles. The CCCFPD provides fire suppression (structural, vehicle, and vegetation fires) and prevention, Advanced Life Support (ALS) for medical emergencies, rescue, dispatch, initial hazardous materials response, fire inspection, plan review, and education.

The CCCFPD has six (6) fire stations that could provide fire protection services to the project site. The station numbers, addresses, equipment, and distances to the project site are shown in Table 4.8-2. Stations 83 and 85 would be the primary responding stations to the project site, while additional response may be provided by Stations 81, 82, 84, and 87.[14] Each fire station is staffed with three (3) personnel 24 hours a day. A 24-hour shift includes one (1) Captain, one (1) Engineer, and one (1) firefighter.

In 2011, the CCCFPD received a total of 41,457 emergency and non-emergency calls for service. The CCCFPD's current response time goal for emergency and non-emergency calls is five (5) minutes to 90 percent of all calls received. According to CCCFPD, actual response times vary; however, the average CCCFPD response time, as of December 2012, is approximately 6 minutes and 36 seconds.[15] Due to future stations closures, the District's average response time is expected to increase.

Table 4.8-2 CCCFPD Fire Stations Serving the Project Site			
Station Number	**Address**	**Distance to Project Site**	**Equipment**
Station 81	315 W. 10th Street, Antioch	3 miles	1 Type 1 Engine 1 Type 3W Engine
Station 82	196 Bluerock Drive, Antioch	4.6 miles	1 Type 1 Engine 1 Type 3 Engine
Station 83	2717 Gentrytown Drive, Antioch	1.1 miles	1 ladder truck 1 Type 3 Engine
Station 84	1903 Railroad Avenue, Pittsburg	3.8 miles	1 ladder truck 1 Swift Water Rescue Boat
Station 85	2331 Loveridge Road, Pittsburg	1.9 miles	1 Type 1 Engine 1 Type 3 Engine
Station 87	800 West Leland Road, Pittsburg	4.5 miles	1 Type 2 Engine 1 Water Tender
Source: Mr. Ted Leach, Fire Inspector, Contra Costa County Fire Protection District, December 5, 2012.			

The Insurance Service Office (ISO), an advisory organization, classifies fire service in communities from 1 to 10, indicating the general adequacy of coverage. Communities with the best systems for water distribution, fire department facilities, equipment and personnel and fire alarms and communications, receive a rating of 1. CCCFPD has a current ISO rating of 3.

Law Enforcement

The Pittsburg Police Department (PD) is responsible for providing law enforcement services in the City, including patrol, crime prevention, parking and traffic control, community awareness, investigations, and temporary holding facilities. The Department is responsible for community policing, has a Special Weapons and Tactics (SWAT) Team, and conducts Emergency Preparedness training. Similar to other cities, the PD relies on the Sheriff's Office for search and rescue services and long-term holding facilities, County Animal Control for animal services, and the City of Walnut Creek for bomb squad services. Additionally, Pittsburg PD contracts with the Sheriff's Office for dispatch services.

Pittsburg PD patrols 17.2 square miles which are divided into nine beats. In addition, the PD provides services outside of its boundaries through mutual aid agreements. These joint mutual aid agreements include: 1) the Contra Costa Mutual Aid Mobile Field Force, which provides police services of all types for calls to other counties on request; 2) the California Law Enforcement Mutual Aid Plan; 3) the County Wide Mutual Aid Program, which is a countywide agreement to provide law enforcement services to any other provider when needed; and 4) Crowd/Riot Control with a contribution of two to four officers.

Pittsburg PD operates out of the police headquarters at 65 Civic Avenue, which was built in 2000. Plans do not exist for significant capital improvements to the police headquarters before 2014, based on the City's Capital Improvement Plan. In addition, plans for additional facilities do not exist. Pittsburg PD provides law enforcements services with 61 vehicles – 43 sedans, four

SUVs, seven motorcycles, and seven trucks/vans. According to Contra Costa LAFCo's Municipal Service Review (MSR) for Law Enforcement Services (September 7, 2011), the Department has not reported any needs related to vehicles or equipment, nor do any areas exist within the City's boundaries that are particularly challenging to serve.[16] Regarding law enforcement personnel, the PD currently employs 72 people, as follows: 1 chief, 1 captain, 8 sergeants, 4 lieutenants, and 58 officers.[17] While General Plan Policy 10-P-39 states that the City should strive to maintain a ratio of 1.8 sworn police officers per 1,000 residents, the PD has indicated that it has no adopted staffing standard and that the current ratio is 1.1 officers per 1,000 residents.[18] The PD receives approximately 5,900 emergency and non-emergency calls per month, or approximately 70,000 per year. A total of 2.3 violent crimes per 1,000 residents occurred in 2011, which is similar, or in some cases lower than surrounding jurisdictions.[19]

Schools

The project site is within the Antioch Unified School District (AUSD) boundaries. The AUSD has 13 elementary schools serving students in grades kindergarten through five. An additional school, Orchard Park, serves students in grades kindergarten through eight. The AUSD has four middle schools serving grades 6-8 and five high schools, two of which are continuation high schools. As of 2012, all elementary schools within the District have been operating below capacity, though Orchard Park Elementary School is very near capacity.[20] In addition, the middle and high schools within AUSD have recently been operating below capacity as evidenced by the fact that the 2012 enrollment numbers are below the 2008-2009 enrollment levels, for which adequate classroom capacity existed in 2009 according to the District's 2009 Facilities Master Plan.[21] It should be noted that the project site is located within the Community Facilities District (CFD) No. 2004-1 and would be subject to paying AUSD fees.

The AUSD student generation rates for single- and multi-family homes are shown in Table 4.8-3.

Table 4.8-3
Student Generation Rates

Grade Levels	Student Generation Factor per Household
Elementary	0.30
Middle	0.15
High	0.20

Source: Antioch Unified School District Comment Letter Addressed to Leigha Schmidt, June 7, 2012.

Parks and Recreation

Pittsburg's Parks and Recreation Department manages the maintenance of the City's park facilities, while the Recreation Department manages the operation of the parks. The Development Services Department is responsible for acquisition and development of park facilities. Pittsburg's current park and recreation facilities (including parks currently under construction) are listed in Table 4.8-4.

Table 4.8-4
City of Pittsburg Parks

	Name	Location	Acres	Type
1	8th St. Greenbelt	8th St.	4.7	LP
2	Americana Park	N. Parkside Dr.	2	NP
3	Buchanan Park	4150 Harbor St.	16	CP
4	California Seasons Park	Seasons Way	2.5	NP
5	Central Park	Pittsburg / Antioch Highway	8	NP
6	City Park	17th & Railroad Ave.	28	CP
7	Columbia Linear Park	Columbia Ave.	4.4	LP
8	De Anza Park	Trident Dr.	3.5	NP
9	Heritage Park Plaza	East 4th St.	0.1	NP
10	Highland Park	Golden Hill Dr. & St. Paul Cir.	4.5	NP
11	Highlands Ranch Park	Buchanan Rd.	10	CP
12	Hillsdale Park	Doffodil & Jacqueline Dr.	3.5	NP
13	John Henry Johnson Picnic Area	John Henry Johnson Pkwy.	3	NP
14	Larry Lasater Park	San Marcos Blvd.	3	NP
15	Marina Walk Park	W. 6th & Cutter	1.7	NP
16	Mariner Park	8th St. & Herb White Way	3.6	NP
17	Oak Hills Park	Southwood Dr.	5	NP
18	Riverview Park	Bayside Dr.	4	SF
19	Small World Park	2551 Harbor St.	8	SF
20	Stoneman	South of Stoneman Park (North)	190	CP
21	Stoneman Park (North)	W. Leland & John Henry Johnson Pkwy.	8	CP
22	Santa Fe Linear Park	Santa Fe Ave.	2.6	LP
23	Woodland Hills Park	Crestview & Alta Vista Dr.	2.4	NP
24	Village Park at New York Landing	Cambria Dr.	2	NP
25	Old Town Park	Railroad Avenue between East Fifth and East Sixth Street	1.8	NP
26	San Marco Park	San Marco Blvd at West Leland Road	6	CP

Note: CP = Community Park; NP = Neighborhood Park; MP = Mini Park; LP = Linear Park; SF = Special Facility

Source: City of Pittsburg Parks and Recreation Department website: http://www.ci.pittsburg.ca.us/index.aspx?page=585, accessed October 26, 2012; and email communication with Mr. Don Buchanan, Manager, Pittsburg Parks and Recreation Department, October 29, 2012.

Community parks are developed primarily to meet the recreational needs of a large portion of the City. Community parks range in size according to purpose, and often feature one-of-a-kind community facilities or natural resources. For example, Riverview Park offers paths and amenities along the Delta waterfront, while Small World Park features small replicas of a fort, mission, railroad ride, lagoon, riverboat, and a full-scale carousel. Community parks, such as Buchanan Park, may also contain a greater variety of recreational facilities, such as swimming

pools, community centers, public rest rooms, bocce ball and horseshoe areas, trails, athletic fields, and pond fishing.

Neighborhood parks primarily serve a small portion of the City, usually within one-half mile radius of the park. These parks are generally oriented toward the recreational needs of children and youth. For example, Marina Park provides playground equipment, as well as softball, baseball, and soccer fields.

All of the City's neighborhood parks are located near collector streets in residential neighborhoods, while community parks lie along arterial roadways to serve the larger City population. The parks located closest to the project site include Highlands Ranch Park, located within the Highlands Ranch Subdivision to the west of the project site in the City of Pittsburg, and Markley Creek Park, located within the Black Diamond Estates residential development to the south of the project site in the City of Antioch.

The primary source of funding for park maintenance comes from the Citywide Landscaping and Lighting Assessment District. Rates are $102 for a single-family residence.[22] Park maintenance is also provided by developer fees and the General Fund.

In addition to City parks, regional trails provide opportunities for hiking, biking, and jogging along open space corridors throughout the region. The Delta De Anza Regional Trail is a paved multi-use hiking, bicycling and equestrian trail currently spanning over 15 miles of the planned 25-mile length. When completed, the Delta De Anza Regional Trail would generally follow the East Bay Municipal Utility District's corridor and the CCWD's canal. The trail intersects Antioch's Mokulumne Trail and the Marsh Creek Regional Trail in Oakley. The trail also connects the cities of Concord, Bay Point, Pittsburg, Antioch, and Oakley and provides access to Contra Loma Regional Park (and Black Diamond Mines Regional Preserve) through Antioch Community Park. As the Delta De Anza Trail follows the Contra Costa Canal, which borders the project site to the northeast and runs along Buchanan Road to the north of the project site, the trail is within close proximity to the project site. The Black Diamond Mines Regional Preserve is located approximately one mile south of the project site in CCC and offers tours of abandoned coal mining tunnels and many miles of hiking trails. The Delta De Anza Regional Trail and the Black Diamond Mines Regional Preserve are under the jurisdiction of the East Bay Regional Park District (EBRPD).

Library System

The 10,000 square foot Vincent A. Davi Memorial Library is the Pittsburg branch of the County Library system. The building at 80 Power Avenue adjacent to the Civic Center is owned by the City but the library is operated by the CCC Library with $88,000 in funding annually from the City. The branch remains open 35 hours per week, Tuesday through Saturday. In April 2014, an adjoining café opened for business. The Vincent A. Davi Memorial Library currently has 80 reader seats, and based on national averages, a standard of 5 reader seats per 1,000 residents is optimal, but is not consistently achieved county wide. Approximately 48 percent of Pittsburg citizens have a library card and approximately 49 people visit the Pittsburg Library per hour.[23]

Electricity and Natural Gas

Pacific Gas & Electric (PG&E) provides energy services to the City of Pittsburg. The GenOn/Mirant Delta LLC, Pittsburg Generating Station generates energy at the Pittsburg Power Plant (696 West 10th Street, Pittsburg, CA), and PG&E distributes the energy to users within the region through overhead transmission lines. The Pittsburg Generating Station has seven natural gas burning, steam generating turbines, but four out of the seven units are inactive leaving the combined capacity at 1,332 MW.[24]

REGULATORY CONTEXT

Existing public service and utility policies, laws, and regulations that would apply to the proposed project are summarized below.

Federal Regulations

Federal Clean Water Act (CWA)

The Federal CWA establishes the basic structure for regulating discharges of pollutants into surface waters of the U.S., and sets water quality standards for all contaminants in surface waters. Water quality standards are intended to protect public health, enhance the quality of water, and serve the purposes of the CWA. The Act defines water quality standards as federal or state provisions or laws that designate the beneficial uses of water and establish water quality criteria to protect those designated uses.

National Pollutant Discharge Elimination System (NPDES)

The NPDES permit system was established in the federal CWA to regulate municipal and industrial discharges to surface waters of the U.S. Each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that EPA must consider in setting effluent limits for priority pollutants.

Section 402 of the CWA mandates that certain types of construction activities comply with the requirements of the NPDES stormwater program. The Phase II Rule, issued in 1999, requires that construction activities that disturb land equal to or greater than one acre require permitting under the NPDES program. In California, permitting occurs under the General Permit for Stormwater Discharges Associated with Construction Activity, issued to the State Water Resources Control Board (SWRCB), implemented and enforced by the nine Regional Water Quality Control Boards (RWQCBs). As of July 1, 2010, all dischargers with projects that include clearing, grading or stockpiling activities expected to disturb one or more acres of soil are required to obtain compliance under the NPDES Construction General Permit Order 2009-0009-DWQ.

Safe Drinking Water Act (SDWA)

The federal SDWA, which was enacted in 1974, gives the United States Environmental Protection Agency (EPA) the authority to set standards for contaminants in drinking water supplies. The EPA was required to establish primary regulations for the control of contaminants that affected public health and secondary regulations for compounds that affect the taste, odor, and aesthetics of drinking water. Accordingly, the EPA set a maximum contaminant level or treatment technique for each of the 83 contaminants in drinking water listed in the SDWA. Under the provisions of SDWA, the California Department of Health Services (DHS) has the primary enforcement responsibility. Title 22 of the California Administrative Code establishes DHS authority, and stipulates State drinking water quality and monitoring standards.

Federal Emergency Management Agency (FEMA)

In March 2003, FEMA became part of the U.S. Department of Homeland Security. FEMA's continuing mission within the new department is to lead the effort to prepare the nation for all hazards and effectively manage federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages the National Flood Insurance Program and the U.S. Fire Administration.

Disaster Mitigation Act of 2000

In 2000, the Disaster Mitigation Act was signed into law to amend the Robert T. Stafford Disaster Relief Act of 1988. Among other things, the legislation reinforces the importance of pre-disaster infrastructure mitigation planning to reduce disaster losses nationwide, and is aimed primarily at the control and streamlining of the administration of federal disaster relief and programs to promote mitigation activities. Some of the major provisions of the Disaster Mitigation Act of 2000 include the following: funding for pre-disaster mitigation activities; developing experimental multi-hazard maps to better understand risk; establishing State and local government infrastructure mitigation planning requirements; defining how states can assume more responsibility in managing the Hazard Mitigation Grant Program (HMGP); and adjusting ways in which management costs for projects are funded. Mitigation planning provisions are outlined in Section 322 of the Act, which establishes performance based standards for mitigation plans and requires states to have a public assistance program to develop county government plans. The consequence of failure to develop an infrastructure mitigation plan is the chance of a reduced federal share of damage assistance from 75 percent to 25 percent if the damaged facility has been damaged on more than one occasion in the preceding 10-year periods by the same type of event.

State Regulations

Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code §560000 et seq.)

According to Contra Costa LAFCo, a MSR will be required prior to processing a substantial SOI amendment in accordance with Section 56430 of the Cortese-Knox-Hertzber Local Government

Reorganization Act of 2000 (hereafter referred to as "CKH"). Section 56430, which concerns MSRs, states the following (as amended in 2011):

> 56430. (a) In order to prepare and to update spheres of influence in accordance with Section 56425, the commission shall conduct a service review of the municipal services provided in the county or other appropriate area designated by the commission. The commission shall include in the area designated for service review the county, the region, the subregion, or any other geographic area as is appropriate for an analysis of the service or services to be reviewed, and shall prepare a written statement of its determinations with respect to each of the following:
>
> 1. Growth and population projections for the affected area.
> 2. The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the SOI.
> 3. Present and planned capacity of public facilities, adequacy of public services, and infrastructure needs or deficiencies including needs or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the SOI.
> 4. Financial ability of agencies to provide services.
> 5. Status of, and opportunities for, shared facilities.
> 6. Accountability for community service needs, including governmental structure and operational efficiencies.
> 7. Any other matter related to effective or efficient service delivery, as required by commission policy.
>
> (b) In conducting a service review, the commission shall comprehensively review all of the agencies that provide the identified service or services within the designated geographic area. The commission may assess various alternatives for improving efficiency and affordability of infrastructure and service delivery within and contiguous to the SOI, including, but not limited to, the consolidation of governmental agencies.
>
> (c) In conducting a service review, the commission may include a review of whether the agencies under review, including any public water system as defined in Section 116275, are in compliance with the California Safe Drinking Water Act (Chapter 4 (commencing with Section 116270) of Part 12 of Division 104 of the Health and Safety Code). A public water system may satisfy any request for information as to compliance with that act by submission of the consumer confidence or water quality report prepared by the public water system as provided by Section 116470 of the Health and Safety Code.
>
> (d) The commission may request information, as part of a service review under this section, from identified public or private entities that provide

> wholesale or retail supply of drinking water, including mutual water companies formed pursuant to Part 7 (commencing with Section 14300) of Division 3 of Title 1 of the Corporations Code, and private utilities, as defined in Section 1502 of the Public Utilities Code.
>
> (e) The commission shall conduct a service review before, or in conjunction with, but no later than the time it is considering an action to establish a SOI in accordance with Section 56425 or Section 56426.5 or to update a SOI pursuant to Section 56425.

Water

SB 610

The California Water Code requires coordination between land use lead agencies and public water purveyors. The purpose of this coordination is to ensure that prudent water supply planning has been conducted and that planned water supplies are adequate to meet both existing demands and the demands of planned development.

Water Code Sections 10910 – 10915 (inclusive), sometimes referred to as SB 610, require land use lead agencies: 1) to identify the responsible public water purveyor for a proposed development project, and 2) to request from the responsible purveyor, a "Water Supply Assessment" (WSA). The purposes of the WSA are (a) to describe the sufficiency of the purveyors' water supplies to satisfy the water demands of the proposed development project, while still meeting the current and projected water demands of customers, and, (b) in the absence of a currently sufficient supply to describe the purveyor's plans for acquiring additional water. Water Code Sections 10910-10915 delineate the specific information that must be included in the WSA.

According to CEQA Guidelines Section 15155, a "water-demand project" means:

(A) A residential development of more than 500 dwelling units.
(B) A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
(C) A commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
(D) A hotel or motel, or both, having more than 500 rooms.
(E) An industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
(F) A mixed-use project that includes one or more of the projects specified in subdivisions (a)(1)(A), (a)(1)(B), (a)(1)(C), (a)(1)(D), (a)(1)(E), and (a)(1)(G) of this section.
(G) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

(H) For public water systems with fewer than 5,000 service connections, a project that meets the following criteria:

1. A proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of a public water system's existing service connections; or
2. A mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

The Tuscany Meadows Project meets criterion (A).

SB 221

SB 221 principally applies to the Subdivision Map Act, conditioning a tentative map on the applicant verifying that the public water supplier has sufficient water supply available to serve the project. SB 221 applies to any subdivision, which is defined as:

- A proposed residential development of more than 500 dwelling units, if the public water supplier has more than 5,000 service connections; or
- Any proposed development that increases connections by 10 percent or more, if the public water supplier has fewer than 5,000 connections.

SB 221 does not apply to any residential project proposed for a site that is within an urbanized area and has been previously developed for urban uses or housing projects that are exclusively for very low and low-income households. Per SB 221, the public water supplier is required to provide written verification of sufficient water supplies for a project. Sufficiency per SB 221 requires consideration of the following:

- Availability of water over the past 20 years;
- Applicability of any urban water shortage contingency analysis prepared per Section 10632 of the Water Code;
- Reduction in water supply allocated to a specific use by an adopted ordinance; and
- Amount of water that can be reasonably relied upon from other water supply projects, such as conjunctive use, reclaimed water, water conservation and water transfer.

The written verification must also provide evidentiary proof of the water supply, and the standard for that proof is largely similar to SB 610, as described above. In most cases, the water supply assessment prepared under SB 610 would meet the SB 221 requirement.

SB X7-7

The Water Conservation Act of 2009, commonly known as SB X7-7, requires all water suppliers to increase water use efficiency. The legislation divides water conservation into two sectors, urban water conservation and agricultural water conservation. SB X7-7 also requires that the DWR, in consultation with other State agencies, develop a single standardized water use reporting form, which would be used by both urban and agricultural water agencies. For the urban water conservation sector, SB X7-7 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. The State intends to make incremental progress towards the overall goal by reducing per capita water use by at least 10 percent by December 31, 2015. Other requirements of SB X7-7 include, but are not limited to, the following:

- An urban retail water supplier shall include in its water management plan the baseline daily per capita water use, water use target, interim water use target, and compliance daily per capita water use. The DWR, through a public process and in consultation with the California Urban Water Conservation Council, shall develop technical methodologies and criteria for consistent implementation of this requirement;
- The DWR shall adopt regulations for implementation of the provisions relating to process water;
- A Commercial, Institutional, Industrial (CII) task force is to be established that would develop and implement urban best management practices for statewide water savings; and
- Effective 2016, urban retail water suppliers who do not meet the water conservation requirements established by SB X7-7 are not eligible for State water grants or loans.

Schools

California Law

The California Code of Regulations, Title 5 and Education Code govern all aspects of education within the State.

Proposition 1A/Senate Bill 50

Proposition 1A/Senate Bill (SB) 50 (Chapter 407, Statutes of 1998) is a school construction measure authorizing the expenditure of State bonds totaling $9.2 billion through 2002, primarily for modernization and rehabilitation of older school facilities and construction of new school facilities. $2.5 billion is for higher education facilities and $6.7 billion is for K-12 facilities. Proposition 1A/SB 50 implemented significant fee reforms by amending the laws governing developer fees and school mitigation, including the following:

- Establishes the base (statutory) amount (indexed for inflation) of allowable developer fees at $1.93 per square foot for residential construction and $0.31 per square foot for commercial construction.
- Prohibits school districts, cities, and counties from imposing school impact mitigation fees or other requirements in excess of or in addition to those provided in the statute.

- Suspended for a period of at least eight years a series of court decisions allowing cities and counties to deny or condition development approvals on grounds of inadequate school facilities when acting on certain types of entitlements.

Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[…] legislative or adjudicative act […] involving […] the planning, use, or development of real property." (Government Code 65996[b]) Additionally, a local agency cannot require participation in a Mello-Roos for school facilities; however, the statutory fee is reduced by the amount of any voluntary participation in a Mello-Roos. Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation." The law identifies certain circumstances under which the statutory fee can be exceeded, including preparation and adoption of a "needs analysis," eligibility for State funding, and satisfaction of two of four requirements (post-January 1, 2000) identified in the law including year-round enrollment, general obligation bond measure on the ballot over the last four years that received 50 percent plus one of the votes cast, 20 percent of the classes in portable classrooms, or specified outstanding debt. Assuming a district qualifies for exceeding the statutory fee, the law establishes ultimate fee caps of 50 percent of costs where the State makes a 50 percent match, or 100 percent of costs where the State match is unavailable. District certification of payment of the applicable fee is required before the city or county can issue the building permit.

Proposition 55

Proposition 55 is a school construction measure passed in 2004 authorizing the sale of approximately $12.3 billion in bonds to fund qualified K-12 education facilities to relieve overcrowding and to repair older schools. Funds target areas of the greatest need and must be spent according to strict accountability measures. These bonds would be used only for eligible projects. Approximately ten billion dollars would be allocated to K-12 schools, with the remaining 2.3 billion allocated to higher education facilities.

Department of Education Standards

The California Department of Education published the Guide to School Site Analysis and Development to establish a valid technique for determining acreage for new school development. Rather than assigning a strict student/acreage ratio, this guide provides flexible formulas that permit each district to tailor its ratios as necessary to accommodate its individual conditions. The Department of Education also recommends that a site utilization study be prepared for the site, based on these formulas.

Local Regulations

Contra Costa LAFCo

In carrying out its responsibilities, each LAFCo must conduct studies and review and make determinations on changes of organization, reorganizations and SOIs. Contra Costa LAFCo is a Responsible Agency for the proposed project and approval by LAFCo would be required for the

proposed reorganization. In addition, annexation to the CCWD and Delta Diablo and amendment of service boundaries would require approval by LAFCo in conjunction with the CCWD and Delta Diablo. Policies and standards have been adopted by the Contra Costa LAFCo to assist in the review of proposals and the preparation of studies as necessary. The following policies pertain to public services and utilities and are directly applicable to the proposed project.[25] It should be noted that the Contra Costa LAFCo would utilize this EIR to aid in their determination and actions regarding the proposed project.

F. Policy for Evaluating Applications Requesting the Provision of Water Service for Urbanizing Areas

In addition to the factors the Commission is required to evaluate and review pursuant to §56668, the following criteria also apply to ensure greater consistency in LAFCo's decision-making process:

1) Any proposal for a change of organization that includes the provision of water service shall provide information sufficient to address the following: water supply, storage, treatment, distribution, and waste recovery; and to determine that adequate services, facilities, and improvements can be provided and financed by the agency responsible for the provision of such services, facilities and improvements.

2) Any proposal for reorganization (two or more changes of organization) will be evaluated based on each component organizational change. The Commission will then balance the overall benefits against the costs and adverse impacts in deciding on the reorganization as a whole.

3) In evaluating the capability of an annexing agency to provide the required service, the Commission shall take into account the agency's ability to acquire the resources necessary to provide the needed service (i.e., water rights necessary to provide the water services needed by an area proposed for annexation).

4) The Commission requires evidence that water service will be available. Such evidence may include, but is not limited to, the following: 1) A Plan for Service pursuant to §56653; 2) a legally binding "will serve" letter by the agency; or 3) legally binding agreement between the developer and the agency or other service provider, or all.

5) The Commission may determine that a need for service exists if there is a public health or safety threat or if the area's growth patterns indicate that the area is likely to be developed for urban uses within five years provided it is designated for urban uses in the appropriate land use authority's General Plan (§56133(c)).

6) Lands to be annexed shall be within the adopted SOI of the affected agency at the time LAFCo approves the boundary change.

7) The annexation must be a reasonable and logical expansion of the agency's boundaries. Further, territory to be annexed must be contiguous to the annexing agency unless otherwise provided by the principal act under which the agency operates.

G. School Capacity

In addition to the factors and determinations required by state law, LAFCo may consider whether or not the affected territory (i.e., change of organization or reorganization) can be served by affected school districts, and whether or not there is or will not be sufficient existing school capacity to serve the affected territory at the time of development.

H. Service Plans

Requests for boundary changes must include a plan for providing municipal services (§56653). This section provides guidelines to assist in the review of service plans and facilitate consistency with LAFCo's stated purposes and objectives.

1. The plan for services shall include the following information:

   a) An enumeration and description of the services to be extended to the affected territory;
   b) The level and range of those services;
   c) A plan and timeline of when those services can feasibly be extended to the affected territory;
   d) A plan for improvement, or upgrading of structures, roads, sewer or water facilities, or other conditions the local agency would impose or require within the affected territory;
   e) A plan for how the services will be financed if the change of organization is approved; and
   f) A description of whether the affected area is or will be proposed for inclusion within an existing improvement zone, redevelopment area, and assessment district or community facilities district.

2. The plan for services shall be prepared and submitted for all proposed changes of organization including those initiated by resolution of a local agency and those initiated by petition.

3. In the case of a proposed annexation, the plan for services should demonstrate that the range and level of services currently available within the area proposed for annexation will be maintained or exceeded by the annexing agency.

4. In the case of a proposed annexation, the plan for services should demonstrate that the cost of services to existing residents will not increase as a result of the annexation, unless a corresponding increase in the level of service also occurs.

5. The plan for services should demonstrate that proposed services will not result in any unnecessary duplication of services.

6. The plan for services should demonstrate that each service provider represents the most efficient and cost effective source of service delivery.

7. In the case of a proposed reorganization consisting of annexations to multiple agencies, the plan for services shall address each of the items specified above for each annexing agency.

I. Municipal Services Review Guidelines

4) When Prepared - LAFCo will determine when MSRs are necessary. Generally, reviews will be prepared in conjunction with SOI studies or updates; however, MSRs may also be conducted independent of SOI updates based on a number of factors to be determined by the Commission. Such factors may include public health or safety issues, service provision issues associated with areas of potential growth or development, etc.

Minor amendments to a SOI, as determined by LAFCo, will not require an MSR.

5) Services Addressed - MSRs will address identified services within the service review boundary of those agencies under LAFCo's jurisdiction and are associated with growth and development. Target services include, but are not limited to, water, sewer, drainage, libraries, roads, parks, police, and fire protection. General government services such as courts, social services, human resources, treasury, tax collection and administrative services will not be included.

6) Agencies Included - Local agencies whose boundary changes are subject to LAFCo review, or are required to have an SOI, are subject to MSRs, and LAFCo shall encourage those local agencies to fully participate in the service review process. Services provided by other agencies (i.e., federal, state, private) may be included in the service review in order to provide a comprehensive overview of service and provide context.

12) Factors for Analysis - As part of its review of municipal services, LAFCo must prepare a written statement of its determination with respect to the following factors. [§56430]

Determination 1: Growth and population projections for the affected area.

The efficient provision of public services is linked to an agency's ability to plan for future needs. Such factors as projected growth in and around the agency's service areas and impact of land use plans and growth patterns on service demands may be reviewed. In making a determination on growth and population projections, LAFCo may consider an agency's ability to plan for future need.

Determination 2: Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies.

The present and planned capacity of public facilities and services is linked to an agency's ability to plan for future needs, including infrastructure. The term "infrastructure needs and deficiencies" refers to the status of existing and planned infrastructure and its relationship to the quality of levels of service that can or need to be provided. In making a determination on infrastructure needs or deficiencies, LAFCo may consider ways in which the agency has the ability and capacity to provide service.

Determination 3: Financial ability of agencies to provide services.

LAFCos must weigh a community's public service needs against the resources available to fund the services. In making a determination on the financial ability of an agency to provide services, LAFCo may review such factors as an agency's potential for shared financing and/or joint funding applications, cost avoidance opportunities, rate structures, and other fiscal constraints and opportunities.

Determination 4: Status of, and opportunities for, shared facilities.

If service providers develop strategies for sharing resources, public service costs may be reduced and service efficiencies increased. In making a determination on opportunities for shared facilities, LAFCo may consider if an agency's facilities are currently being utilized to capacity and whether efficiencies can be achieved by accommodating the facility needs of adjacent agencies.

Determination 5: Accountability for community service needs, including governmental structure and operational efficiencies.

The service review may include options to provide more logical service boundaries to the benefit of customers and regional planning goals and objectives. In making a determination on government structure, LAFCo may consider possible consolidations, mergers and/or reorganizations. The service review may also consider the agency's management efficiencies in terms of operations and practices in relation to the agency's ability to meet current and future service demands.

Determination 6: Any other matter related to effective or efficient service delivery, as required by Commission policy.

City of Pittsburg General Plan

Public Facilities Element

Goal 11-G-1 Available water supply and distribution capacity should grow proportionally with development patterns and water usage trends. Update City's Water Master Plan to implement General Plan growth projections.

Goal 11-G-2 Continue to implement water conservation policies to ensure adequate supplies of water in the future.

Policy 11-P-1 Continue using the Urban Water Management Plan as the mechanism for detailed water supply planning, implementation, and conservation.

Policy 11-P-2 Implement, as needed, replacements and/or expansions to the existing system of water mains through the City's Capital Improvement Program.

Policy 11-P-3 Continue water district and user conservation efforts to help reduce demand in light of recent CCWD raw water reductions.

In an attempt to preserve Delta species and habitat, the CVP mandated reductions in the amount of raw water available to the CCWD. Current water conservation efforts in the City include:

- Implementation of a water rate structure that encourages conservation;
- Implementation of plumbing code changes requiring ultra-low-flow toilets in new construction;
- Continuance of public education on water conservation;
- Passage of a Water-Efficient Landscape Ordinance for new large-scale landscaping;
- Study of expanded reclaimed water usage; and
- System-wide water audit/leak detection survey and repair program.

Policy 11-P-7 Ensure that new residential, commercial, and industrial development equitably shares costs associated with providing water services to areas of urban expansion within the Planning Area.

Policy 11-P-9 Cooperate with CCWD to ensure compliance with District regulations and State law for new development requiring annexation to the CCWD service area. Cooperate with CCWD in processing all necessary information to allow a determination if

Los Vaqueros facilities can be used to service new annexation areas.

Policy 11-P-10 Cooperate with federal agencies to ensure that new development requiring inclusion in the CCWD CVP contract service area addresses all requirements of federal statutes and regulations, including the National Environmental Policy Act and Endangered Species Act. Encourage project developers to provide all required information for consultation purposes, if necessary, under Endangered Species Act Sections 7 or 10, or a Habitat Conservation Plan.

Goal 11-G-3 Plan for expansion of the City's wastewater collection system, in order to provide necessary infrastructure for projected urban growth through 2020.

Goal 11-G-4 Maintain environmentally appropriate wastewater management practices.

Goal 11-G-5 Reduce rainfall-dependent infiltration and inflow, in order to maintain capacity of existing collection system, and prevent Sanitary Sewer Overflows (SSO).

Policy 11-P-12 Pursue replacement and/or expansion of the City's trunk sewer system, as demand increases, particularly in newer portions of the system south of State Route 4.

New development south of State Route 4 places increased demand on the City's aging sewer collection system. The expansion of the trunk sewer system would ensure adequate capacities for future growth, particularly during heavy rainfall when inflow/infiltration levels are high.

Policy 11-P-13 Address deficiencies in the capacity, safety and reliability of the collection system as identified in the 1990 and subsequent Collection System Master Plans.

Policy 11-P-14 Restrict construction of sensitive receptors, such as residential units, schools or churches, within 1000 feet of wastewater treatment units. Prohibit construction of sensitive receptors within 0.5 miles of the wastewater treatment plant.

This policy maintains the District's current buffer for both safety and odor impacts. Although not currently in use, the District stores large volumes of acutely hazardous materials on-site for potential use in wastewater treatment that could cause extensive harm to receptors upon accidental release. Furthermore, this policy will contribute to the reduction of costs the District pays for extensive odor control.

Policy 11-P-17 Require that all wastewater dischargers within the City conform to the ordinances of the Delta Diablo Sanitation District.

Policy 11-P-18 Ensure that new residential, commercial, and industrial development equitably share costs associated with providing wastewater services to areas of urban expansion within the Planning Area.

Policy 11-P-19 Promote the importance of recycling industrial and construction wastes.

Goal 11-G-6 Continue reduction and recycling efforts within the City to divert increasingly larger portions of the waste stream from local landfills.

Goal 11-G-7 Manage solid waste so that State diversion goals are met.

Policy 11-P-23 Encourage builders to incorporate interior and exterior storage areas for recyclables into new or remodeled residential, commercial, and industrial structures.

Goal 11-G-8 Require development in areas of high fire hazard to be designed and constructed to minimize potential losses and maximize the ability of fire personnel to suppress fire incidents.

Policy 11-P-25 Review and amend ordinances that regulate development in potentially hazardous locations to require adequate protection, such as fire-resistant roofing, building materials, and landscaping.

Using fire-resistant construction materials and landscaping will both slow the pace at which fire spreads and improve the likelihood that the structure will survive a fire incident.

Policy 11-P-29 Ensure adequate road widths in new development for fire response trucks, per the subdivision regulations.

Goal 11-G-9 Assess the adequacy of public utilities in existing developed areas, and program needed improvements to coordinate with developing portions of the Planning Area.

Goal 11-G-10 Encourage buffer landscaping and multi-use of utility sites and rights-of-way to harmonize with adjoining uses.

Policy 11-P-30 Continue to rely on the five-year Capital Improvement Program to provide for needed utilities in relation to the City's financial resources.

Policy 11-P-32 Ensure the designation of service corridor easements or routes when required for tentative map or specific plan approval.

Ensure the provision of public utilities to all new urban development by requiring utility corridor easements in development plans.

Policy 11-P-33 As a condition of approval, ensure that all new and redevelopment projects underground utility lines on and adjacent to the site.

Undergrounding of all utilities in new and redeveloped areas will significantly improve the appearance of City streets and views.

Health and Safety Element

Goal 10-G-11 Ensure emergency response equipment and personnel training are adequate to follow the procedures contained within the Emergency Response Plan for a major earthquake, wildland fire, or hazardous substance event.

Policy 10-P-36 Maintain, modernize, and designate new sites for emergency response facilities, including fire and police stations, as needed to accommodate population growth.

Policy 10-P-39 Strive to maintain a ratio of 1.8 sworn police officers per 1,000 residents.

Open Space, Youth and Recreation Element

Goal 8-G-10 Ensure that school facilities maintain adequate capacity to provide for current and projected enrollment.

Policy 8-P-41 As part of development review for large residential subdivisions (greater than 100 units), evaluate the need for new school sites. If needed, encourage subdivision design to accommodate school facilities and cooperate with the school districts in acquisition of those sites.

Policy 8-P-42 Cooperate with local school districts to develop joint school/park facilities, which provide an increased variety of recreational opportunities close to many residential areas. Additionally, work with school districts to develop public parks adjacent to school facilities.

Joint school/park planning provides more opportunity for recreational uses near residential areas with reduced design, construction, and maintenance costs to both parties.

Goal 8-G-1 Develop a high-quality public park system for Pittsburg that provides varied recreational opportunities accessible to all City residents.

Goal 8-G-2 Provide parks that reflect the diversity of Pittsburg's natural setting, including creeks and waterways, tree stands, rock outcroppings, and topography.

Policy 8-P-1 Maintain a neighborhood and community park standard of 5 acres of public parkland per 1,000 residents.

Policy 8-P-2 Pursue the development of park and recreation facilities within reasonable walking distance of all homes.

Policy 8-P-3 Develop public parks and recreational facilities that are equitably distributed throughout the urbanized area, and provide neighborhood recreation facilities in existing neighborhoods where such facilities are presently lacking.

Policy 8-P-4 Consider park accessibility, use and character as more valuable than size in the acquisition and development of new parks.

The City's current park classification system (see above) is based more on the use and character of park facilities than their size. For example, many community parks that fulfill important community needs, such as shoreline access, are smaller than those proposed by national and regional recreation agencies.

Policy 8-P-5 Maintain park and recreation facility standards for new development to serve both residents and employees, attainable through dedication of parkland or payment of in-lieu fees.

The demand by new residential development for parks and open space facilities is a well-known calculation among Californian cities, but the additional demands on park facilities by employees of local businesses (for example, eating lunch in a park or jogging along the waterfront after work) who are not residents must also be considered.

Policy 8-P-6 Revise the City's Park Dedication Ordinance to define useable area for parkland dedication requirements. Proposed park sites should be:

- Designed such that 80 percent of the site has slopes of less than 3 percent that are suitable for active recreational play;
- Sized according to the City's park standard of 5 acres per 1,000 residents (for example, a 200-unit subdivision would yield about 600 residents, and a dedication requirement of 3 acres);
- Available for year-round use, so that detention basins are not designated as parkland or shared park facilities; and
- A minimum of 2 contiguous acres in new residential neighborhoods.

Policy 8-P-7 Encourage the development or provision of facilities that cater to diverse recreational interests.

These facilities could provide hard-surface courts in-lieu of turf areas, which include but are not limited to activities such as tennis, skateboarding, hand/racquetball, bocce ball, basketball, volleyball, badminton, and roller hockey. These may be provided within existing parks or constructed as specific-use facilities.

Policy 8-P-11 Encourage dedication of fully developed parks rather than in-lieu fees. When in-lieu fees are collected, ensure that they are spent acquiring and developing new park sites or enhancing existing park facilities.

Due to significant increases in land values over time, the City's purchasing power can be diminished as time lapses between the collection of in-lieu fees and the actual acquisition of parkland. Dedication of usable parkland prevents the potential depreciation of park fees while the City searches for appropriate and affordable parkland.

Policy 8-P-12 Ensure that all parks acquired through dedication are at least 2 acres in size within new residential developments (target 5 acres). Accept smaller visual open space areas in new commercial and industrial development for parkland dedications.

Several of the newer mini-parks contained within residential developments lack necessary park amenities, such as benches. The provision of visual open space as parkland dedication in commercial developments is reasonable. However, residential developments must provide more usable open space areas.

Policy 8-P-13 Limit parkland dedications to flat, usable parcels within new residential neighborhoods (see Policy 8-P-6 above). Ensure that

such park sites provide open, grassy areas for informal recreational play (such as football or soccer).

Policy 8-P-14 Develop a maintenance-funding plan for all City parks. Consider participation in parkland maintenance districts as a condition of development approval for new residential subdivisions.

Maintenance of existing and new parks is essential in the on-going use of developed parkland. A citywide plan for funding the maintenance and improvement of all City parks will ensure that the citizens of Pittsburg derive the full benefits of City parkland. Requiring new residential development to secure funding sources for the maintenance of new parks will allow the City to continue developing and maintaining recreational facilities on a limited budget.

Policy 8-P-16 Encourage dedication of public parks in new residential developments with more than 150 units.

Current and proposed parks are not sufficient to meet City's park standard (See Policy 8-P-1). The City should consider new sites to add to its park system.

Pittsburg Municipal Code (PMC)

Section 17.32.020. Park dedication

Section 17.32.020 of the PMC specifies park land dedication requirements for new residential development. According to subsection (D)(2), the amount of land to be dedicated shall be determined according to the following standards and formula:

Dwelling Type	Density per DU	Park Acres per 100 Units
Single-Family (detached)	3.46 persons/ unit	1.73 acres

In addition, according to subsection (H)(2), land dedicated for a park must be available for year-round use.

Fees in lieu of land dedication are permissible under certain conditions according to subsection (E)(1), as follows:

1. If (a) there is no park or recreation facility designated in the general plan within a proposed subdivision, or (b) the dedication of land under subsection (D) of this section is not feasible or compatible with the general plan, or (c) the city has previously acquired the necessary park property, or (d) the city

otherwise determines that in-lieu fees will be required, the subdivider shall pay a fee instead of land dedication.

Per subsection G. Combination of Fees and Dedication, the Planning Commission may approve a combination of fee payment and land dedication when:

1. Only a portion of a proposed and accepted park falls within a subdivision. That portion shall be dedicated for park purposes and a fee is required for any additional amount of land that would otherwise be required for dedication; or
2. A major part of the park or recreation site has already been acquired and only a small portion of land is needed from the subdivision to complete the site. The needed portion shall be acquired by dedication and a fee required for any additional amount of land that would otherwise be required for dedication; or
3. The planning commission determines that a combination of fees and dedication will best serve the public interest.

The Planning Commission's determination as to fees, dedication, or a combination of both may be appealed to the City Council by the party responsible for the dedication of land or the payment of in-lieu fees or by the City Manager.

Section 17.32.090. Other public facilities

Section 17.32.090 of the PMC specifies a condition of approval of a tentative map. The subdivider may be required to dedicate land, pay fees, or both, for fire stations, library sites, child day care, public art, or any other public facilities pursuant to, and in order to implement, the provisions of the general plan regarding such facilities. [Ord. 09-1315 § 3 (Exh. A), 2009; Ord. 962 § 2 (Exh. A), 1989.

City of Pittsburg 2010 Urban Water Management Plan

The City's UWMP was prepare in compliance with the Urban Water Management Planning Act and SB7-7, and includes all information necessary to meet the requirements of California Water Code, Division 6, Part 2.6. The City intends to implement the UWMP, including the water demand reduction plan outlined in within, in accordance with State requirements. The water demand reduction plan includes, recycled water projects, conservation efforts and ongoing collaboration with the CCWD and the Delta Diablo. The outreach efforts highlighted in the water demand reduction plan are expected to reduce urban water use, particularly irrigation use, in the public. The City has already taken various measures to help ensure that urban water use continues to meet the 2020 target.

City of Pittsburg 2010 Water System Master Plan

The City of Pittsburg recognizes the importance of planning, developing, and financing the City's domestic water system facilities. In order to continue to provide reliable and enhanced domestic water service to existing customers and to serve anticipated future developments, the 2010 Water System Master Plan was prepared. The City's Water System Master Plan is intended

to serve as a tool for planning and phasing the construction of future water transmission and distribution facilities, through the project horizon year of 2030.

The City's Water System Master Plan summarizes the City's existing distribution system infrastructure, and documents the City's acceptable design criteria and current growth assumptions. In addition, a capacity evaluation of the existing system is documented, including a list of facility improvements needed to meet the water demand needs of existing users, as well as the needs of planned future developments. Included in the Water System Master Plan is a capital improvement program and a cost allocation analysis. The proposed project site is addressed within the Capital Improvement Program Table (Table ES.4) and is described as part of the Southeast Hills planning area.

Impacts and Mitigation Measures

This section describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential impacts related to public services, recreation, and utilities. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines a public services, recreation, and utilities impact may be considered to be significant if any potential effects of the following conditions, or potential thereof, would result with the proposed project's implementation:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new water or wastewater delivery, collection or treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Result in insufficient water supply available to serve the project from existing entitlements and resources, or new or expanded entitlements needed;
- Require sewer service that may not be available by the area's wastewater treatment provider;
- Be served by a landfill exceeding the permitted capacity to accommodate the project's solid waste disposal needs in compliance with all applicable laws;
- Increase the demand for additional law enforcement or fire protection services beyond the ability of the existing departments to provide adequate service;
- Increase the total number of students beyond the capacity of local school districts;
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated;
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment; or

- Increase the demand for additional governmental services, including library, electricity, and natural gas services.

Method of Analysis

The Public Services, Recreation, and Utilities chapter identifies any impacts of the proposed project on the existing public services and utilities that could occur if the project as currently proposed is approved and implemented. The standards of significance listed above were used to delineate the significance of any potential impacts associated with the public services, recreation, and utilities of the proposed project. The general methodology employed for the various technical reports is summarized below.

Water Supply Assessment (WSA)

The WSA prepared for the proposed project by West Yost Associates, documents the projected water demands associated with the proposed Tuscany Meadows Property development, the existing and projected water demands within the City boundaries and General Plan Study Area, past water supplies received by the CCWD, and projected supplies available from-long term sources.

It is important to note that the WSA was based on a conservative 917 single-family and 365 multi-family dwelling units for the proposed project.

Water Code Sections 10910-10915 delineate the specific requirements of a WSA. The WSA for the Tuscany Meadows development is structured according to those requirements. The purpose of this WSA is to provide an analysis of whether the CCWD has sufficient projected water supplies to meet the anticipated demands of the Tuscany Meadows development and other future development. The WSA prepared for the proposed project evaluates whether the total projected water *supply* estimated to be available for the project would meet the projected water *demand* associated with the proposed project, in addition to existing and planned future water uses.

The project's WSA does not reserve water or function as a "will serve" letter or any other form of commitment to supply water. The provision of water service would continue to be undertaken in a manner consistent with applicable CCWD policies and procedures, consistent with existing law. If there are changes in the Tuscany Meadows development, the WSA shall be reviewed in order to assess if a subsequent WSA is required.

Wastewater System Evaluation

RMC Water and Environment consultants prepared an evaluation of the Tuscany Meadows Off-site Sewerage Impacts under future "buildout" conditions. The evaluation analyzed the impacts of proposed Tuscany Meadows development on sewerage conveyance through the Delta Diablo conveyance system and the capacity of the Pittsburg-Antioch Interceptor to handle the projected wastewater flows with the proposed project. The capacity evaluation was conducted using an existing hydraulic model of Delta Diablo's conveyance system. Model loads from the site of the

proposed Tuscany Meadows development were estimated based on general plans and other information provided at the time by the City of Pittsburg.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance identified above.

4.8-1 Result in insufficient water supply available to serve the project from existing entitlements and resources, or require the construction of new water delivery, collection, or treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Based on the analysis below and with the implementation of mitigation, the impact is *less than significant.*

The following impact discussion addressed both water supply and water distribution as related to the proposed project.

Water Supply

The projected water demand for the proposed project is based on the City's standard water demand factors, which were presented in the City of Pittsburg Water System Master Plan (WSMP). These factors would assist the City in complying with the provisions of SB X7-7, which establishes target per capita water demands to be met by the year 2020.

A comparison of the City's projected water supplies and demands is presented in Table 4.8-5 for normal, single dry, and multiple dry years, which are based on Table 5-1 from the City's UWMP. The surface water supply and demand projections are based on the CCWD's projected drought supply conditions. As indicated in the table, in average precipitation years, the City is anticipated to have sufficient water supplies to meet the demand needs through 2035.

The City's 2010 UWMP indicated a 2020 city-wide per capita water demand target of 136 gallons per capita per day (gpcd). The total projected annual water demand for the proposed project is 731.9 acre-feet per year (AFY), which equates to an average daily demand of 652,932 gallons per day (see Table 4.8-6). Based on the average City occupancy of approximately 3.29 persons per household, the proposed project would be expected to result in a total population of 4,218 persons. Using the aforementioned assumptions, the proposed project would be expected to result in a total per capita water demand of just under 155 gpcd (652,932 gallons per day / 4,218 persons = 154.8 gpcd). As shown in the table, the total water demand values include 12-percent unaccounted for water. Because the project is required by Pittsburg's Water Conservation Program and City Municipal Code Chapter 13.18, Water Conservation, to use low water use fixtures, drip irrigation, and other water efficient features, the actual water demand would likely be less than the City standard water demand factors. Furthermore, Pittsburg Municipal

Code Section 13.18.030 prohibits the waste of water by requiring controllable irrigation leaks to be repaired.

In addition, as stated in the WSA for the proposed project, the City's growth projections (an additional 43,000 people from 2010 to 2035) and water demand projections (an additional 3,900 AFY from 2010 to 2035) accommodate the project's potential population of 4,218 people and water demand of 731.9 AFY, including an unaccounted for water factor of 12 percent.

Table 4.8-5
City of Pittsburg Water Supply and Demand Comparison

		2015	2020	2025	2030	2035
Supply and Demand Comparison – Normal Year						
Supply Totals (from Table 4); AFY		11,213	12,043	12,952	13,916	14,974
Demand Totals (from Table 3) AFY		11,213	12,043	12,952	13,916	14,974
Difference, AFY		0	0	0	0	0
Difference as % of Supply		0.0%	0.0%	0.0%	0.0%	0.0%
Difference as % of Demand		0.0%	0.0%	0.0%	0.0%	0.0%
Supply and Demand Comparison – Single Dry Year[1]						
Supply Totals(b), AFY		11,213	12,043	12,842	13,439	14,325
Demand Totals, AFY		11,213	12,043	12,952	13,916	14,974
Difference, AFY		0	0	(110)	(477)	(649)
Difference as % of Supply		0.0%	0.0%	-0.9%	-3.6%	-4.5%
Difference as % of Demand		0.0%	0.0%	-0.8%	-3.4%	-4.3%
Supply and Demand Comparison – Multiple Dry-Year Events[2]						
Multiple-Dry Year First Year Supply	Supply Totals, AFY	11,213	12,043	12,952	13,916	14,974
	Demand Totals, AFY	11,213	12,043	12,952	13,916	14,974
	Difference, AFY	0	0	0	0	0
	Difference as % of Supply	0.0%	0.0%	0.0%	0.0%	0.0%
	Difference as % of Demand	0.0%	0.0%	0.0%	0.0%	0.0%
Multiple-Dry Year Second Year Supply	Supply Totals, AFY	11,213	12,043	12,842	13,439	14,325
	Demand Totals, AFY	11,213	12,043	12,952	13,916	14,974
	Difference, AFY	0	0	(110)	(477)	(649)
	Difference as % of Supply	0.0%	0.0%	-0.9%	-3.6%	-4.5%
	Difference as % of Demand	0.0%	0.0%	-0.8%	-3.4%	-4.3%
Multiple-Dry Year Third Year Supply	Supply Totals, AFY	10,473	11,237	11,635	12,126	13,027
	Demand Totals, AFY	11,213	12,043	12,952	13,916	14,974
	Difference, AFY	(740)	(806)	(1,317)	(1,791)	(1,946)
	Difference as % of Supply	-7.1%	-7.2%	-11.3%	-14.8%	-14.9%
	Difference as % of Demand	-6.6%	-6.7%	-10.2%	-12.9%	-13.0%

Notes:
1. CCWD anticipates the following supply shortfalls in a single-year drought: 2015, (0%), 2020 (0%), 2025 (1%), 2030 (4%), 2035 (5%).
2. CCWD anticipates the following supply shortfalls in a three-year drought scenario: 2015 (0%, 0%, 8%), 2020 (0%, 0%,8%), 2025 (0%,1%,12%), 2030 (0%,4%,15%), 2035 (0%,5%,15%).

Source: Table 5-1 from City of Pittsburg 2010 UWMP.

During drought years, the City would meet demand through water conservation efforts. The City adopted Resolution No. 09-11195 establishing a Water Conservation Program including using a Water Conservation Advisory and establishing penalties for non-compliance. In addition, the City adopted a water conservation landscape ordinance (PMC 18.84.300 et. seq.) on December 20, 2010 to which the proposed project would be subject.

As shown in the tables and discussed above, although the proposed project is not specifically called out in the City's 2010 UWMP, the City's water demand projections indicated that sufficient water supplies exist to accommodate the proposed project's potential water demand.

Table 4.8-6
Projected Water Demand for Tuscany Meadows Subdivision

Land Use Type	Units	Quantity	Water Demand Factor	Average Day Demand, gpd	Annual Water Demand, AFY
Single-Family Residential	Dwelling Units	917	440 gpd/du	403,480	452.3
Multi-Family Residential	Dwelling Units	365	340 gpd/du	124,100	139.1
Parks and Irrigated Landscape	Acres	18.8	2,500 gpd/AC	47,000	52.7
Sub-Total Water Demand				574,580	644.1
Unaccounted-for Water[1]				78,352	87.8
Total Water Demand				**652,932**	**731.9**

Note:
1. Based on 12-percent of total water production.

Source: Water Supply Assessment for Tuscany Meadows EIR. 2013.

Conveyance

According to the Pittsburg WSMP, the City's water treatment plant has a hydraulic design capacity of 32 MGD. The treatment plant is currently limited by the California Department of Public Health to 12 MGD when the water temperature is less than 10 degrees Celsius, which has not occurred, and 28 MGD when the water temperature is less than 20 degrees Celsius, which usually occurs between the months of November and April. The City's water treatment plant currently operates at 6 MGD to 18 MGD. Therefore, the plant has a capacity for new development of 14 MGD. The existing treatment plant has the capacity to serve the project's projected total average daily water demand of 0.65 MGD; however, upgrades to the City's transmission pipes, pump stations, and storage system were identified that would be required in order to provide treated water to the project site. According to the Pittsburg WSMP, the following

improvements and upgrades would be required in order to adequately service the proposed project:

- Transmission Pipes - Extending service to the proposed project would require upgrading the size of the proposed new Buchanan Road transmission pipeline. The new pipe size requirements would increase as follows:
    - Segment 2E needs to be upsized from 20 inches to 24 inches;
    - Segment 4E needs to be upsized from 18 inches to 20 inches;
    - Segment 5E needs to be upsized from 16 inches to 18 inches; and
    - Segment 6E needs to be upsized from 12 inches to 16 inches.
- Pump Stations - Extending service to the proposed project would require a reserved firm capacity of approximately 550 gallons per minute at the water treatment plant high level booster station.
- Storage - Extending service to the proposed project would require increasing Pressure Zone 2 storage by 0.8 million gallons, which would be most economically achieved by increasing the size of the planned Pressure Zone 2 storage tank by 0.8 million gallons.

The required upgrades would either be built on the project site or within existing right-of-way. The proposed project includes installation of all required on-site improvements during project development, while the City of Pittsburg would install required upgrades off-site prior to project occupancy. In addition, the developer shall be required to pay impact fees to cover the proposed project's proportional share of the required off-site upgrades identified in the Water Master Plan. The off-site water improvement projects are included in the City's Capital Improvement Program; and thereby, the construction costs for said improvements are accounted for in the City's impact fees under Pittsburg Municipal Code Section 13.08.040, Connection Fees.

Conclusion

Based on the analysis described above, the WSA demonstrates that the CCWD has the capacity to serve the proposed project as accounted for in the WSMP and the UWMP. The conveyance of water to the proposed project would be sufficient with the new and upgraded connections to the existing pipeline within the Buchanan Road ROW. In addition, the proposed project would be required to pay the development impact fees for the proposed project's proportional share of the required off-site upgrades towards the city-wide water supply system as part of the Capital Improvement Program (CIP) for the City. While adequate capacities exist, the project site is not currently within the CCWD service district. Therefore, the proposed project could have a ***potentially significant*** impact to water supply and delivery.

Mitigation Measure(s)
Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

4.8-1 *The developer shall provide all necessary documentation required by the CCWD for its application for inclusion of the project site in the CVP. No grading or building permits shall be issued for the Tuscany Meadows Subdivision until the project site has been annexed into the CCWD service area and the developer provides the City with a "Will Serve" letter from the CCWD verifying that the project site has been included in the CVP.*

4.8-2 Exceed wastewater treatment requirements of the applicable RWQCB, require the construction of new wastewater delivery, collection, or treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, or require sewer service that may not be available by the area's waste water treatment provider. Based on the analysis below, the impact is *less than significant*.

Conveyance

The proposed project includes construction of 8-inch and 12-inch sewer pipes within the proposed internal street system. Sewer flows from the proposed 356 lots west of Tuscany Meadows Drive would be routed through the existing Highlands Ranch Subdivision (Delta Diablo Basin 2-18) and then to the Delta Diablo's Pittsburg-Antioch Interceptor manhole number PA40100 (see Figure 4.8-2). All other project flows would connect to the Delta Diablo system at the Pittsburg-Antioch Interceptor manhole number PA36100. The Pittsburg-Antioch Interceptor gravity pipeline is located in Buchanan Road, north of the project site.

Delta Diablo relied on planning data for the project site provided by the City of Antioch, when preparing its 2010 Conveyance and Treatment Master Plans. The planning data for the 261-acre sewershed, which includes both the proposed project and the development to the south (Black Diamond Estates), projected an additional 652 residential units and 1,360,960 square feet of non-residential development at buildout. The 917 single-family and 365 multi-family units proposed for the project is a significant change from that which was modeled for the 2010 Conveyance and Treatment Master Plan; therefore, Delta Diablo determined that an offsite sewer analysis would be necessary. Delta Diablo retained the services of RMC Water and Environment to analyze the impacts of the proposed land use changes for the proposed project and the Black Diamond Estates to the south on sewage conveyance through Delta Diablo's system.

Projected average base wastewater flow (ABWF) for the proposed land uses was estimated based on the number of proposed dwelling units in the proposed project and Black Diamond Estates developments, and loading factors presented in the Delta Diablo 2010 Conveyance System Master Plan Update. Per the WSMP, ABWF is estimated to be 220 gallons per day per single-family dwelling unit, and 170 gallons per day per multi-family dwelling unit. Table 4.8-7 and Table 4.8-8 show the model loads for the proposed project and Black Diamond Estates projects as compared to the original model estimates.

The flow projections summarized in the tables were used to simulate new wastewater flow rates from the proposed project and Black Diamond Estates, which are presented in Table 4.8-9. Table 4.8-9 shows the resulting new peak wastewater flowrates from the proposed developments and the resulting increase in peak wet weather flow (PWWF) of approximately 0.13 MGD (0.57 MGD – 0.70 MGD = 0.13 MGD).

Table 4.8-7
Original and Proposed Flow Projections from the Proposed Project

Model Load Point		Proposed Land Use		Original Model Loads
		# Units	ABWF (gpd)[1]	ABWF (gpd)[1]
PA39I00	Residential	-	-	98,340
	Non-Residential	-	-	100,000
PA36100	Single Family Residential	729 Dwelling Units	220,420	-
	Multi-Family Residential	365 Dwelling Units		
	Non-Residential	-	-	-
PA40100	Single Family Residential	365 Dwelling Units	78,320	-
	Non-Residential	-	-	-
		TOTAL	**298,740**	**198,340**

[1] Per Master Plan Update, ABWF is estimated to be 220 gpd per single family dwelling unit, 170 gpd per multi-family dwelling unit, and 0.1 gpd per square foot of non-residential floor space.
[2] 1,085 single family dwelling units less 356 units west of Tuscany Meadows Drive routing to manhole PA40I00.

Source: RMC, 2013.

Table 4.8-8
Original and Proposed Flow Projections from the Black Diamond Estates

Model Load Point		Proposed Land Use		Original Model Loads
		# Units	ABWF (gpd)[1]	ABWF (gpd)[1]
PA39I00	Residential	-	-	81,620[2]
	Non-Residential	-	-	10,000
PA36100	Single Family Residential	346 Dwelling Units	76,120	-
	Non-Residential	10,000 square feet	1,000	-
		TOTAL	**77,120**	**91,620**

[1] Per Master Plan Update, ABWF is estimated to be 220 gpd per single family dwelling unit, 170 gpd per multi-family dwelling unit, and 0.1 gpd per square foot of non-residential floor space.
[2] 371 Future EDUs modeled based on general plan designations for undeveloped parcels.

Source: RMC, 2013.

Table 4.8-9 Total Modeled Wastewater Flowrates				
	Original Model (MGD) PA39I00	Proposed Land Use (MGD)		
		PA36I00	PA40I00	Total
Average Base Wastewater Flow (ABWF)	0.29	0.30	0.08	0.38
Peak Dry Weather Flow (PDWF)	0.49	0.48	0.12	0.60
Peak Wet Weather Flow (PWWF)	0.57	0.56	0.14	0.70
Source: RMC, 2013.				

The original capacity analysis indicated improvements were not needed along the Pittsburg-Antioch Interceptor. Some surcharge at the lower end of the interceptor was noted in the model due to backup from the WWTP influent sewer. Since that analysis was performed, model elevations for the sewers at the downstream end of the Pittsburg-Antioch Interceptor have been adjusted to match new data provided by Delta Diablo, resulting in lower rim elevations. As a result of new pipe data, the model now predicts an overflow at the downstream end of the Pittsburg-Antioch Interceptor under buildout flow conditions due to the backup from the WWTP influent sewer. However, the model does not predict any capacity deficiencies in the Pittsburg-Antioch Interceptor itself. Delta Diablo has reported that solution recommendations for the projected future deficiency in the WWTP influent sewer would be developed as part of the WWTP Headworks Improvements Project predesign.[26]

As a result of the change in land use at the proposed project site and Black Diamond Estates, new capacity deficiencies were not identified, either under peak dry weather or peak wet weather conditions. The model predicted backup surcharge and resulting overflow at the downstream end of the Pittsburg-Antioch Interceptor would not be significantly affected by the increase in flows from the two developments. In addition, Delta Diablo collects Capital Facilities Capacity Charges to build capacity as needed based on new connections.

Treatment Capacity

The project site would be served by the regional Delta Diablo WWTP located in Antioch, upon annexation and subsequent project development. The WWTP can accommodate an average dry weather flow of 16.5 MGD. In 2012, the average dry weather flow influent to the treatment plant was 12.7 MGD. According to the Off-site Sewerage Impacts Evaluation prepared for the project site, the proposed project, in addition to the Black Diamond Estates residential development to the south under future "buildout" conditions, would result in a 0.13 MGD increase in PWWF and a 100,400 gallons per day increase in ABWF. Therefore, adequate sewer treatment capacity exists at the current treatment facility to accommodate the sewage generated by the project's additional population of 4,218 new residents.

Conclusion

Development of the proposed project would not result in any new capacity deficiencies at buildout, or significantly worsen the backup surcharge condition at the downstream end of the Pittsburg-Antioch Interceptor. In addition, any increase in wastewater production would be mitigated by the fee assessed to developments for sewer use, as established in the City's *Development of Water and Sewer Facility Reserve Charges* study. As a result, buildout of the proposed project would have a ***less-than-significant*** impact on Delta Diablo's wastewater management facilities.

Mitigation Measure(s)
None required.

4.8-3 Be served by a landfill exceeding the permitted capacity to accommodate the project's solid waste disposal needs in compliance with all applicable laws. Based on the analysis below, the impact is *less than significant*.

The 2010 per capita disposal rate per resident in the City of Pittsburg was 4.3 pounds per day (ppd) per resident.[27] Utilizing an average persons per household of 3.29 for the City of Pittsburg, the project would generate approximately 4,218 new residents (1,282 units X 3.29 persons per household). Accordingly, the total daily solid waste generation resulting from the project would be approximately 18,137 lbs/day (4,218 new residents X 4.3 ppd per resident). This would equate to approximately 9.07 tons per day and 3,311 tons per year.

As discussed above, the Potrero Hills Landfill has a maximum permitted capacity of 83,100,000 cubic yards with an effective remaining refuse capacity of 39,073,830 tons. According to the recently issued Solid Waste Permit, the estimated closure date for the Potrero Landfill is 2048. According to the City's General Plan EIR, although recycling efforts will reduce the amount of waste sent to local landfills by new development, only 16 percent of the Keller Canyon Landfill is currently being used. Therefore, the Potrero Hills Landfill and the Keller Canyon Landfill would be able to support the solid waste generated by the proposed project and impacts related to increased demand for solid waste disposal services would be ***less-than-significant***.

Mitigation Measure(s)
None required.

4.8-4 Increase the demand for additional fire protection services beyond the ability of the existing department to provide adequate service. Based on the analysis below, the impact is *less than significant.*

The Tuscany Meadows Project is located within the jurisdiction of the CCCFPD. Buildout of the proposed project would result in the development of approximately 1,282 dwelling units, which would introduce an estimated 4,218 new residents to the City of Pittsburg (1,282 units X 3.29 persons per household). Based on an added population of

approximately 4,218 residents, CCCFPD would experience an increase in demand for its fire protection services. However, the CCCFPD has indicated that Fire Facility Impact Fees would cover any additional District needs resulting from the implementation of the proposed project.[28] Impact fees for the District are collected by the Building Department at the time of application for a building permit. The current Fire Facility Impacts Fees are as follows:

Residential	Nonresidential
$591 per single-family unit	$219 per 1000 square feet of Industrial
$285 per each multi-family dwelling unit	$329 per 1000 square feet of Commercial
	$376 per 1000 square feet of Office

Given that the proposed project would be required to pay Fire Facility Impact Fees in effect at the time of building permit issuance, and the CCCFPD has indicated these fees would be adequate to cover any costs associated with additional equipment and/or personnel needed to serve the proposed project, the project would have a ***less-than-significant*** impact related to CCCFPD's ability to adequately serve the project.

Mitigation Measure(s)
None required.

4.8-5 Increase the demand for additional law enforcement protection services beyond the ability of the existing department to provide adequate service. Based on the analysis below, the impact is *less than significant*.

Upon annexation to the City of Pittsburg, the Tuscany Meadows Project would be located within the jurisdiction of the Pittsburg PD. Buildout of the proposed project would result in the development of approximately 1,282 dwelling units, which would introduce an estimated 4,218 new residents to the City (1,282 units X 3.29 persons per household). Based on an added population of approximately 4,218 residents, the City of Pittsburg PD would experience an increase in demand for its law enforcement services. Standard conditions of approval require that the developer annex new development into the CFD 2005-1 to collect fees to fund increased police protection services needed due to the population increase within the project area. The rate of the CFD fee is subject to City Council Ordinance No. 05-1246. While the project would require additional sworn officers to serve the project, no new police facilities would be required in order to provide police services to the proposed project. With annexation to the CFD, the Pittsburg PD has indicated that it could adequately serve the proposed project.[29] As a result, the project would have a ***less-than-significant*** impact related to the Pittsburg PD's ability to adequately serve the project.

Mitigation Measure(s)
None required.

4.8-6 Increase the total number of students beyond the capacity of local school districts. Based on the analysis below and with the implementation of mitigation, the impact is *less than significant.*

The proposed project includes the development of up to 917 low density residential single-family units and up to 365 multi-family units. Using the District's student generation rates (see Table 4.8-3), the proposed project's single- and multi-family units would generate an estimated 361 new elementary school students, 180 new middle school students, and 240 new high school students for a total of 781 new students (see Table 4.8-10).

Table 4.8-10
Students Generation Projections for Tuscany Meadows Project

Grade Levels	Student Generation Factor per Household	# of Units	New Students
Single-Family			
Elementary	0.30	917	275.1
Middle	0.15	917	137.6
High	0.20	917	183.4
Total			**596.1**
Multi-Family			
Elementary	0.30	284.7[1]	85.4
Middle	0.15	284.7	42.7
High	0.20	284.7	56.9
Total			**185**
Overall Total (SF and MF)			**781.1**

[1] This multi-family unit count was utilized by the AUSD to calculate the number of new students that could be generated by the project's multi-family units. According to the District, although multi-family homes have historically had a lower generation rate than single-family homes, in the current economy, these rates are increasing. Therefore, the District averaged the allowable high and low multi-family densities for the 14.6-acre multi-family parcel to allow for potential variations in multi-family generation rates.

Source: Antioch Unified School District Comment Letter Addressed to Leigha Schmidt, June 7, 2012.

According to AUSD, the new students generated by the proposed project could be accommodated at the middle school and high school levels under existing conditions as well as in future projections. However, the elementary school students generated by the project would require expansion or changes to existing elementary school facilities.[30] As noted above, the project site is located within the CFD No. 2004-1, which requires the payment of AUSD fees for expansions and changes to existing school facilities. As a result, the project would have a ***less than significant*** impact to schools.

Mitigation Measure(s)
None required.

4.8-7 Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Based on the analysis below and with the implementation of mitigation, the impact is *less than significant.*

The proposed project includes 18.6 acres of parks/detention basins divided among three on-site locations (see Figure 3-3, Vesting Tentative Map, in the Project Description chapter of this EIR). An approximately 6.6-acre park would be located in the northwestern portion of the project site, along Buchanan Road and Tuscany Meadows Drive. The park would provide recreational opportunities as well as an area for stormwater detention. A 5.4-acre park would be located at the southwestern border of the Chevron facility property. In addition, an approximately 6.6-acre park/detention basin would be located in the northeastern portion of the project site, southeast of the high density residential area, and would include a baseball diamond and playground.

According to Section 17.32.020 (D)(2) of the PMC, the amount of land to be dedicated for parks shall be determined according to the following standards and formula:

Dwelling Type	Park Acres per 100 Units
Single-Family (detached)	1.73 acres
Multiple-Family (including condos/ townhomes/apartments)	1.325 acres

At 917 single family dwelling units, a minimum of 15.86 acres of parkland shall be included in the proposed project. While the project includes a total of 18.6 acres of parks and detention basins, 13.2 acres are combined park/detention areas. According to Section 17.32.020 (H)(2) of the PMC, land dedicated for a park must be available for year-round use. The only area identified for year-round park use is the 5.4-acre centrally located park. As a result, the project falls short of the required single family park acreage by 10.4 acres (5.4 acre park – 15.86 acre requirement).

In addition, while the high density residential area would be entitled at a later time and on-site recreational facilities would be provided at that time, at 365 potential multi-family units, the parkland dedication requirement for Parcel A could reach approximately 4.836 acres (365 du/100 x 1.325 acres).

Per PMC Sections 17.32.020 (G) and (K), a combination of fee payment and land dedication is acceptable under certain circumstances, subject to approval by the Planning Commission. Therefore, the possibility may exist for the applicant to dedicate a portion of the required park acreage on-site and pay in-lieu fees to the City for the remaining park acreage shortfall. The final determination with respect to how the project shall satisfy the City's park dedication requirements is subject to Planning Commission approval. Should

the applicant not comply with park dedication requirements set forth in PMC Section 17.32.020, a ***potentially significant*** impact would occur.

Mitigation Measure(s)
Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

4.8-7 *The subdivider shall dedicate the amount of park land required for dedication at the time of the filing of the final or parcel map for the subdivision; or subject to approval by the Pittsburg Planning Commission, the subdivider shall provide a combination in-lieu fees and park dedication. Payment of in-lieu fees is required at a time consistent with subsections (E)(2)(b) and (c) of PMC Section 17.32.020.*

4.8-8 Increase the demand for library services. Based on the analysis below, the impact is *less than significant.*

The proposed project would construct up to 917 low density single-family units and 356 high density multi-family units. Buildout of the proposed project would result in the development of approximately 1,282 dwelling units, which would introduce an estimated 4,218 new residents to the City (1,282 units X 3.29 persons per household).The population growth associated with the proposed project would increase the demand on library services for the City of Pittsburg.

The CCC Library system has indicated the Vincent A. Davi Memorial Library in Pittsburg currently adequately serves the needs of the City and the population increase from the proposed project at buildout would not create a deficiency in library services.[31] Therefore, the Pittsburg Library branch would be able to serve the proposed project, resulting in a ***less-than-significant*** impact.

Mitigation Measure(s)
None required.

4.8-9 Increase the demand for electricity and natural gas services. Based on the analysis below, the impact is *less than significant.*

Development of the project would occur in a location that is near to electricity and gas service. The proposed project would increase electricity and natural gas consumption, but not to a level that would be considered substantial in relation to regional or statewide energy supplies. In addition, PG&E, the electricity and natural gas provider for the City of Pittsburg, regularly conducts load studies to determine whether additional facility upgrades are needed to meet growing energy demands.

The residential and commercial components of the project would be subject to the standards of Title 24, California's Energy Efficiency Standards. Title 24 measures consist of developing an energy budget for structures and designing the structures to use less than

or equal to the energy that is budgeted. Improved site planning and building design as well as energy conservation measures, as outlined in Title 24, would minimize the potential for wasteful, inefficient, or unnecessary consumption of energy. The project would be subject to the minimum energy conservation requirements of Title 24 of the California Code of Regulations, which are applicable to all building construction.

The proposed project would also include the construction of the necessary infrastructure in order to connect to existing electrical and gas lines in the project vicinity. With installation of the necessary infrastructure, PG&E would be able to serve the project, resulting in a ***less-than-significant*** impact.

Mitigation Measure(s)
None required.

Cumulative Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in combination with other proposed and pending projects in the region. Other proposed and pending projects in the region under the cumulative context would include buildout of the City of Pittsburg General Plan, as well as development of the most recent planned land uses within the vicinity of the project area, including the Black Diamond, Sky Ranch, and Montreux developments.

4.8-10 Development of the proposed project, in combination with future buildout in the City of Pittsburg, could result in inadequate public services and utilities. Based on the analysis below, the impact is *less than significant*.

Water

Implementation of the proposed project would contribute to an increased demand for public services and facilities in the City of Pittsburg. The City's water use for 2010 was 7,784 AFY, which was a 13-percent reduction from the 2005 water use of 8,969 AFY. However, the City's future demand projections assume a long-term increase of 1.5-percent annually, which is slightly less than the projected annual population increase of 1.7-percent because new development is expected to be more water efficient.

The City's future water demand is anticipated to continue to increase as approved projects build out and new developments are approved and constructed within the City's water service area. Based on the 2010 UWMP, the City is planning for a potential population increase of 34,000 persons (equivalent to over 10,000 dwelling units based on current occupancy of 3.29 persons per dwelling unit) from 2010 to 2035. With the projected year 2035 population of 99,019 and the projected total City water demand of 14,531 AFY, the City is projecting an average per capita water demand of 131 gpcd by 2035.

The City currently has an extensive water conservation program in place, as described in the City's 2010 UWMP. The projected future water demand, as presented in Table 4.8-5 above, includes continued implementation of the City's existing water conservation program, and is based on future normal hydrologic conditions. Because of the City's water conservation plan, the projected future dry-year water demand is similar for both single dry- and multiple dry-years. Therefore, existing water supplies are sufficient to meet the City's existing and projected future water demands, including those future demands associated with the proposed project, to the year 2035.

Wastewater

Delta Diablo has reported that solution recommendations for the projected future deficiency in the WWTP influent sewer would be developed as part of the WWTP Headworks Improvements Project predesign. The proposed land use changes would not significantly impact any potential projects that might be required to address this issue. The project's incremental increase in wastewater generation has been anticipated and would not represent a cumulatively considerable increase in the demand for wastewater treatment services.

Solid Waste

The Potrero Hills Landfill is expected to have adequate capacity to serve the regional waste disposal needs until the anticipated closure date of approximately 2048. As noted above, although recycling efforts will reduce the amount of waste sent to local landfills by new development, only 16 percent of the Keller Canyon Landfill is currently being used. In addition, similar to water supply demands, as standards and regulations regarding solid waste reduction and recycling programs become more stringent, the overall demand for solid waste services would likely reduce compared to baseline conditions. Furthermore, Pittsburg's General Plan EIR concluded that impacts related to solid waste would be less than significant with implementation of Policies 11-P-18, 11-P-19, and 11-P-23, mentioned above.

Law Enforcement, Fire Protection, Schools, Park and Recreation Facilities

The proposed project would comply with all applicable City goals and policies, including payment of development impacts fees to support adequate provisions for fire facilities, staffing, and equipment, developer fees per SB 50 for schools (Mitigation Measure 4.8-6), established community facilities district fees for police services and the necessary in lieu fees for park and recreation facilities. Similar to the proposed project, other future development projects would be required by the City to pay their fair-share fees toward the provision of adequate public services and facilities, including towards the necessary upgrades and expansions of facilities and equipment.

Therefore, the proposed project's increase in demand for public services and facilities would not be cumulatively considerable, and cumulative impacts would be considered ***less than significant***.

Mitigation Measure(s)
None required.

Endnotes

[1] West Yost Associates. *Water Supply Assessment for Tuscany Meadows EIR. September* 2013.
[2] City of Pittsburg. *Pittsburg General Plan 2020 Policy Document*. November 16, 2001.
[3] City of Pittsburg. *Pittsburg General Plan 2020 Environmental Impact Report*. January, 2001.
[4] City of Pittsburg. *Water System Master Plan*. October 2010.
[5] City of Pittsburg. *City of Pittsburg 2010 Urban Water Management Plan.* August 2011.
[6] Delta Diablo Sanitation District. *Conveyance System Master Plan Update*. April 2010.
[7] City of Pittsburg. *Five Year Capital Improvement Program 2012/13 Through 2016/17*. July 2012.
[8] City of Pittsburg. *Development of Water and Sewer Facility Reserve Charges*. April 2005.
[9] RMC Water and Environment. *Technical Memorandum: "Tuscany Meadows Off-site Sewage Impacts Evaluation*." January 30, 2013.
[10] Contra Costa Water District. *Comments on the NOP for the Proposed Tuscany Meadows Project (Project No. 12-843)*. December 21, 2012.
[11] According to Patricia Chapman, Associate Engineer, Delta Diablo Sanitation District. *Proposed Tuscany Meadows Subdivision Letter Addressed to Nick Pappani.* October 3, 2013.
[12] Email communication with Marcy Hannum, Senior REHS, Solano County Environmental Health Division. October 31, 2012.
[13] Solano County Department of Resource Management, Solid Waste Facility Permit (Potrero Hills Landfill), February 14, 2012.
[14] Personal communication with Fire Inspector Ted Leach, Contra Costa County Fire Protection District. December 5, 2012.
[15] *Ibid.*
[16] Baracco & Associates and Policy Consulting Associates, LLC. *Report to the Contra Costa Local Agency Formation Commission, Municipal Service Review: Law Enforcement Services*. September 7, 2011, 194.
[17] Personal communication with Captain Brian Annington, Pittsburg Police Department. October 10, 2012.
[18] *Ibid.*
[19] *Ibid.*
[20] Per AUSD Enrollment Projections provided by Mary Wilson, Administrative Assistant, Facilities Department, Antioch Unified School District, via email, dated February 6, 2013.
[21] Antioch Unified School District. *2009 Facilities Master Plan*. October 14, 2009.
[22] Contra Costa LAFCo. *Contra Costa LAFCo: East County Sub-Regional Municipal Services Review*. Adopted December 10, 2008, page VI-22.
[23] Email communication with Jessica Hudson, Contra Costa County Librarian. April 29, 2014.
[24] Personal communication with Vanessa Xie, City of Pittsburg. July 25, 2014.
[25] Contra Costa County LAFCo. *Contra Costa County LAFCo Commissioner Handbook, Policies and Standards*. Available at: http://www.contracostalafco.org/documents.htm. Accessed on: October 8, 2012.
[26] RMC Water and Environment. *Technical Memorandum: "Tuscany Meadows Off-site Sewage Impacts Evaluation*." January 30, 2013.
[27] CalRecycle website. Available at: http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx. Accessed on: October 29, 2012.

[28] Personal communication with Fire Inspector Ted Leach, Contra Costa County Fire Protection District. December 5, 2012.
[29] Personal communication with Captain Brian Annington, Pittsburg Police Department. October 10, 2012.
[30] According to Timothy R. Forrester, Associate Superintendent, *Antioch Unified School District Comment Letter Addressed to Leigha Schmidt.* June 7, 2012.
[31] Email communication with Jessica Hudson, Contra Costa County Librarian. April 29, 2014.