

## 3.16 Utilities and Service Systems

This chapter assesses potential environmental impacts from future development under the Proposed Project as related to public utilities, including water, wastewater, and stormwater systems, and solid waste services. This chapter describes existing water, wastewater, stormwater, solid waste, energy, natural gas, and telecommunications infrastructure and services in the Planning Area, as well as relevant federal, State, and local regulations and programs.

The City received no comments in response to the Notice of Preparation (NOP) and recirculated NOP regarding topics covered in this section.

### Environmental Setting

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#### PHYSICAL SETTING

##### Water System

Fairfield's Municipal Water System ('Water System') operates within the corporate limits of the City of Fairfield excluding Travis Air Force Base. The Water System's service area encompasses approximately 32 square miles. The Water System's treatment, storage and distribution system consists of 2 treatment plants (Waterman and North Bay Regional (NBR) water treatment plants), 12 reservoirs, and nearly 400 miles of distribution lines. The Water System treats and delivers an average of 21 million gallons per day, with a rated treatment capacity of 56.7 million gallons per day to accommodate high use periods. The peak use day for the Water System to date has been 37.6 million gallons. The City presently has approximately 78 million gallons of treated water storage capacity (City of Fairfield, 2024).

##### *Water Supply*

The City's current raw water supply is exclusively from surface water that is treated and distributed to meet the demands of the City's water customers. The City's raw water supply is derived from three sources: (1) Solano Project, (2) State Water Project (SWP), and (3) Settlement Water obtained through negotiations with the California Department of Water Resources (DWR) in 2003.

In total, the City has an annual water supply of approximately 53,696 acre-feet per year (AFY) (approximately 17,500 million gallons per year, MG/yr). However, because the full supply is not always available, the typical water supply is 47,837 AFY (approximately 15,587 MG/yr), according to the draft 2024 Public Utility Master Plan (PUMP) and the adopted 2020 Urban Water

Management Plan (2020 UWMP). On an average daily basis, this supply is approximately 43 million gallons per day (mgd).

The contracts for the water are administered by the Solano County Water Agency (SCWA), who acts as the wholesaler of raw water for the Solano Project and SWP.

### ***Water Treatment and Distribution***

The raw water from the Solano Project and SWP is treated at the Waterman Water Treatment Plant (Waterman WTP) and the North Bay Regional Water Treatment Plant (NBR WTP), according to the draft 2024 PUMP. The NBR WTP has the ability to treat both supply sources, but the Waterman WTP can only treat Solano Project water. Though settlement water is not legally SWP water, it comes from the SWP facilities and is treated at the NBR WTP. The combined nominal treatment capacity of the WTPs is 52.7 mgd.

As outlined in the draft 2024 Public Utility Master Plan (2024 PUMP), the anticipated treatment capacity required to meet future maximum day demands across the system is estimated to be 54.7 mgd, resulting in a 2 mgd treatment capacity deficit. As described in the 2024 PUMP, it is anticipated that the deficit would be addressed through expansion of the City's North Bay Regional Water Treatment Plant (NBR WTP). In addition, Fairfield's neighbor, the City of Vacaville, also currently receives treated water from the NBR WTP and has expressed interest in contributing to further expansion of the NBR WTP, so that they may also receive additional water in the future. As a result, several different expansion alternatives have been considered.

The City's potable water distribution system consists of nearly 400 miles of City-owned and maintained transmission mains and distribution piping located primarily in the streets throughout the City, which conveys treated water to approximately 37,000 (as of 2022) water service connections located in five primary pressure zones that are named numerically (Zones 1, 2, 3, 4, and 5). The zones are created to supply water to meet the required pressure range, including fire flow requirements. Each pressure zone generally reflects an approximately 100-foot interval of service elevations. The City operates 17 pump stations and 12 storage reservoirs, with a total storage capacity of 78.5 MG.

Due to the available storage reservoirs and water treatment plant capacities, the City can provide continued water service in the event of a temporary interruption to any single supply source. The City has installed approximately two days of treated water storage reservoirs. The distribution system is pressurized, almost entirely gravity-fed water from the reservoirs. Additionally, in the event of a regional power outage or other supply interruption, the City is prepared to deploy portable generators to critical pumping facilities to provide backup power to the water system pumps.

### **Recycled Water**

To prepare for the potential impact of drought and climate change on Fairfield's water supply, the City is exploring the use of recycled water for cooling towers and non-potable irrigation at the Fairfield-Suisun Sewer District (FSSD). As described in the City's 2020 Urban Water Management

Plan, recycled water is not currently used within the city, but it is planned in limited amounts for the far end of the planning horizon, as Fairfield's potable water supplies are able to meet demands for the foreseeable future. Water could be taken from FSSD effluent for non-potable use. This would displace the potable uses with non-potable supply within the area served by recycled distribution facilities. Wastewater from the Fairfield-Suisun area is treated at the FSSD Wastewater Treatment Plant.

Due to requirements for discharge to the environmentally sensitive Suisun Marsh, FSSD has produced tertiary effluent since the 1970s, according to the 2020 UWMP. In 2002, Fairfield entered an agreement with FSSD and Solano Irrigation District that provided the City with up to 12 million gallons per day of effluent for a recycled water supply. FSSD presently provides some recycled water to sites near the FSSD plant site for irrigation and industrial uses. However, this arrangement became cost prohibitive since it required distribution facilities (such as purple pipes and pump stations) to be constructed to serve additional non-potable sites. Moreover, the marginal cost of installing an extra pipeline to divert water from the Suisun March discharge is high and would necessitate a CEQA report to justify taking water out of the marsh. There is an environmental benefit from this discharge at present as the marsh is a habitat to several wildlife species.

### **Water Demand**

The 2020 UWMP provides projected demands for potable and non-potable use within Fairfield's service area, as shown in **Table 3.16-1**. In total, the City has an annual water supply of approximately 53,696 acre-feet per year (AFY) (approximately 17,500 million gallons per year, MG/yr). However, because the full supply is not always available, the typical water supply is 47,837 AFY (approximately 15,587 MG/yr), according to the 2024 PUMP. On an average daily basis, this supply is approximately 43 million gallons per day (mgd).

**Table 3.16-1: DWR Retail: Use for Potable and Non-Potable Water - Projected**

Use Type	Projected Water Use (MG)				
	2025	2030	2035	2040	2045 (opt)
Single Family	3,667	3,946	4,013	4,173	4,270
Multi-Family	319	343	349	363	371
Commercial	669	720	732	762	779
Industrial	798	859	874	909	930
Institutional/Government	85	92	93	97	99
Landscape	1,005	1,082	1,100	1,144	1,171
Sales/Transfers/Exchanges to other agencies	3	3	3	3	3
Losses	535	578	588	613	627
Other Potable	25	25	25	25	25
<b>Total</b>	<b>7,106</b>	<b>7,657</b>	<b>7,776</b>	<b>8,088</b>	<b>8,275</b>

Notes:

- I. Volume of potable demands are net of indirect potable reuse for groundwater recharge.

Source: Kennedy/Jenks Consultants, 2021; Dyett & Bhatia, 2024

### Supply Reliability in Normal Water Year, Single Dry Year, and Multiple Dry Years

According to the 2020 UWMP, Fairfield has adequate water supply capacity for normal years, single-dry years, and multiple dry years, as shown in Tables 3.16-2, 3.16-3, and 3.16-4.

**Table 3.16-2: DWR Retail: Normal Year Supply and Demand Comparison**

	2025	2030	2035	2040	2045 (opt)
Supply Totals	15,588	15,588	15,588	15,588	15,588
Demand Totals	7,106	7,647	7,776	8,152	8,339
<b>Difference</b>	<b>8,482</b>	<b>7,974</b>	<b>7,812</b>	<b>7,436</b>	<b>7,249</b>

Notes:

- I. Units in MG.

Source: Kennedy/Jenks Consultants, 2021; Dyett & Bhatia, 2024

**Table 3.16-3: DWR Retail: Single Dry Year Supply and Demand Comparison**

	2025	2030	2035	2040	2045 (opt)
Supply Totals	11,786	11,786	11,786	11,786	11,786
Demand Totals	7,106	7,647	7,776	8,152	8,339
<b>Difference</b>	<b>4,680</b>	<b>4,139</b>	<b>4,009</b>	<b>3,634</b>	<b>3,446</b>

Notes:

- I. Units in MG.

Source: Kennedy/Jenks Consultants, 2021; Dyett & Bhatia, 2024

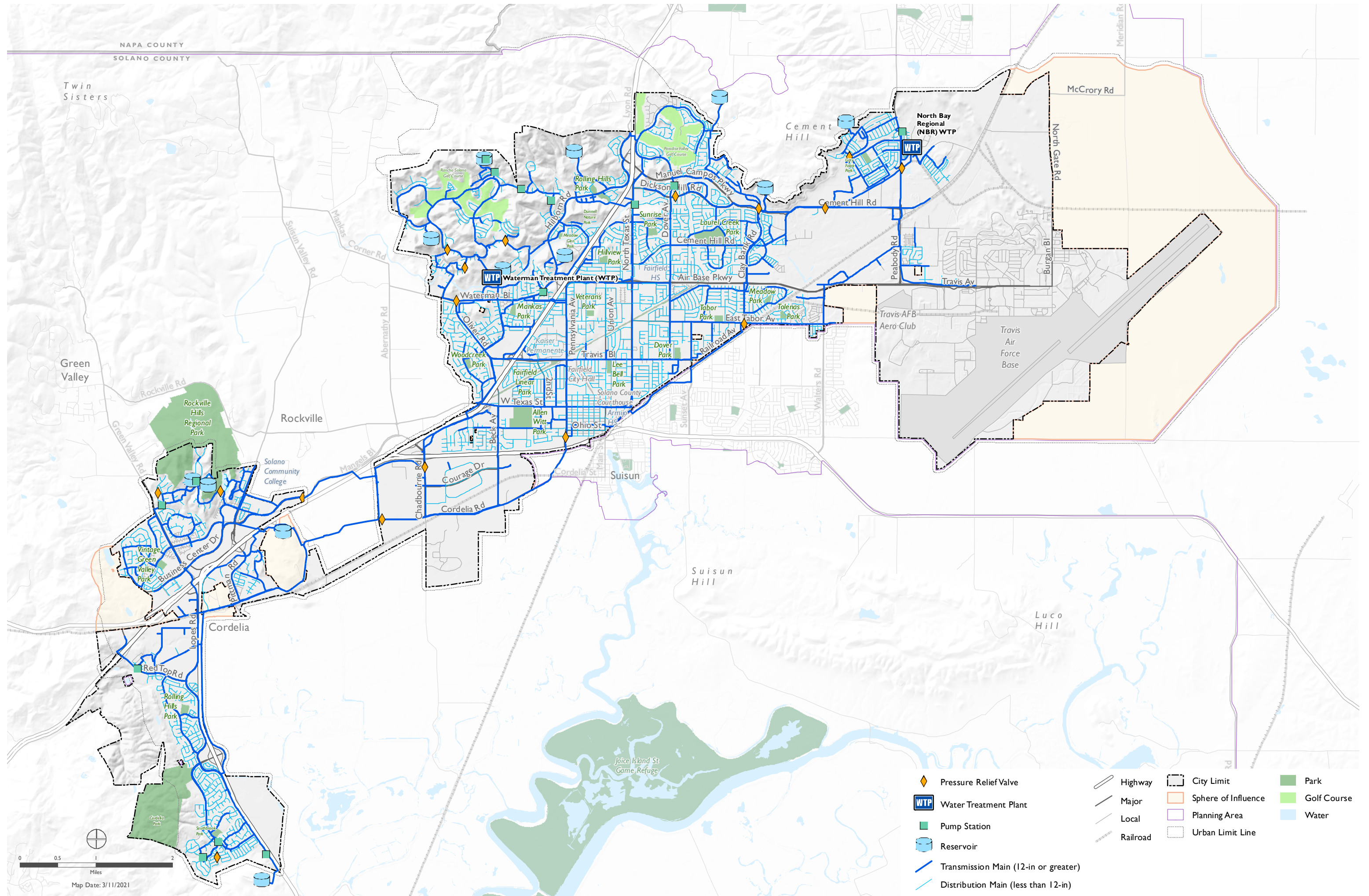
**Table 3.16-4: DWR Retail: Multiple Dry Years Supply and Demand Comparison**

Dry Years		2025	2030	2035	2040	2045 (opt)
First Year	Supply Totals	13,188	13,188	13,188	13,188	13,188
	Demand Totals	7,106	7,647	7,776	8,152	8,339
	<b>Difference</b>	<b>6,082</b>	<b>5,541</b>	<b>5,411</b>	<b>5,036</b>	<b>4,848</b>
Second Year	Supply Totals	12,471	12,471	12,471	12,471	12,471
	Demand Totals	7,106	7,647	7,776	8,152	8,339
	<b>Difference</b>	<b>5,365</b>	<b>4,824</b>	<b>4,694</b>	<b>4,319</b>	<b>4,131</b>
Third Year	Supply Totals	11,275	11,275	11,275	11,275	11,275
	Demand Totals	7,106	7,647	7,776	8,152	8,339
	<b>Difference</b>	<b>4,169</b>	<b>3,628</b>	<b>3,498</b>	<b>3,123</b>	<b>2,935</b>
Fourth Year	Supply Totals	11,753	11,753	11,753	11,753	11,753
	Demand Totals	7,106	7,647	7,776	8,152	8,339
	<b>Difference</b>	<b>4,647</b>	<b>4,106</b>	<b>3,976</b>	<b>3,601</b>	<b>3,413</b>
Fifth Year	Supply Totals	12,471	12,471	12,471	12,471	12,471
	Demand Totals	7,106	7,647	7,776	8,152	8,339
	<b>Difference</b>	<b>5,365</b>	<b>4,824</b>	<b>4,694</b>	<b>4,319</b>	<b>4,131</b>

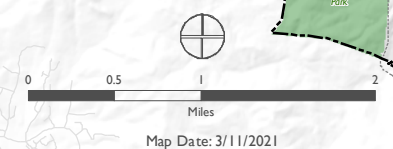
Notes:

- I. Units in MG.

Source: Kennedy/Jenks Consultants, 2021; Dyett & Bhatia, 2024



- |                                      |          |                     |             |
|--------------------------------------|----------|---------------------|-------------|
| Pressure Relief Valve                | Highway  | City Limit          | Park        |
| Water Treatment Plant                | Major    | Sphere of Influence | Golf Course |
| Pump Station                         | Local    | Planning Area       | Water       |
| Reservoir                            | Railroad | Urban Limit Line    |             |
| Transmission Main (12-in or greater) |          |                     |             |
| Distribution Main (less than 12-in)  |          |                     |             |



Map Date: 3/11/2021

### Wastewater System

The FSSD and the Cities of Fairfield and Suisun City jointly operate and maintain the wastewater collection system that serves both cities. Wastewater is collected in City and FSSD- owned sewers and is pumped through four major pump stations to the FSSD Wastewater Treatment Plant (WWTP). WWTP inflow data was received from FSSD, and over the summers of 2018, 2019 and 2020 (dry weather periods), the Average Dry Weather Flows (ADWFs) were about 12.5 mgd. In 2010, improvements were completed to increase the plant's capacity from 17.5 to 23.7 mgd ADWF.

FSSD owns and operates the trunk sewer system, which includes all 12-inch and larger sewers, while the cities own and operate their own sewer system with gravity sewers smaller than 12 inches in diameter that flow to the FSSD trunk sewer system. The FSSD trunk sewer system flows to the FSSD WWTP for treatment and disposal. The sewer systems are shown on **Figure 3.16-2**.

### Sewer System Description

Per the Fairfield-Suisun Sewer District Act, amended September 2002, the District consists “of the territory in Solano County now contained within the Cities of Fairfield and Suisun City. Any territory hereafter annexed to either city shall be a part of the district upon annexation.” In November 2004, the Solano County Local Agency Formation (LAFCO) approved an out-of-boundary service agreement allowing FSSD to provide sewer service to two areas located outside the District's jurisdictional boundary. The two areas are commonly referred to as “Old Cordelia” and “Suisun Valley Road / Rockville Road Intersection.” In 2020, Solano County LAFCO approved FSSD service to the Middle Green Valley Specific Plan (MGVSP) area, a 1,905-acre area located along Green Valley Road, outside of the FSSD service area (LAFCO, 2021).

The FSSD sewer system consists of about 67 miles of gravity sewers (12 to 48 inches in diameter), 14 wastewater pump stations, and 15 miles of force mains (4 to 48 inches in diameter). Force mains are pressurized sewers located just downstream of pump stations. The City's wastewater collection system pipes are constructed of vitrified clay pipe, polyvinyl chloride pipe, and asbestos cement pipe. In 2016, the City had 54,000 sewer connections (Swale, 2018). The sewer system is divided into four sewer basins, draining by gravity to four major pump stations: Cordelia Pump Station, Inlet Pump Station, Suisun Pump Station, and Central Pump Station. The FSSD system also includes three other trunk system pump stations, and seven other smaller wastewater lift stations. Wastewater is pumped through the four major pump stations to the FSSD WWTP, located on Chadborne Road south of Cordelia Road in Fairfield.

On average, the Fairfield-Suisun Sub-regional WWTP receives approximately 15 mgd ADWF. In 2010, improvements were completed to increase the plant's capacity from 17.5 to 23.7 mgd ADWF. Thus, there is an excess capacity of approximately 8.7 mgd ADWF. The highest historic dry weather flow between 1983 and 2016 was 16.7 mgd in 2006 (Swale, 2018). Although the capacity of the WWTP is rated based on the ADWF, the FSSD WWTP was also designed to treat the PWWF from a 20-year storm event (a very large storm that would occur on average about once every 20 years).

The final treatment of the water meets stringent federal, State and regional water quality standards. Treated wastewater effluent is discharged to Boynton Slough, southeast of the WWTP. About 10 percent of the effluent is recycled for irrigation, marsh enhancement, and in-plant uses.

A major by-product of the WWTP processes is biosolids. The biosolids are thickened and sent to the plant’s anaerobic digester, which produces a gas containing mostly methane and carbon dioxide. The digested solids are dewatered using a screw press. Previously, biosolids were hauled offsite to a landfill, but since 2016, FSSD has partnered with Lystek International to repurpose its digested solids into a high-grade fertilizer. The gas from the digesters is used to generate electricity.

The FSSD Wastewater Collection System Master Plan Update (WCSMPU) includes future Base Wastewater Flow (BWF ) estimates based on projected future land uses for the Cities of Fairfield and Suisun as of 2020. The City requires developers to prepare sewer master plans to indicate how growth will be accommodated (Swale, 2018). Future FSSD BWF also includes buildout of the MGVSP, an unincorporated area of Solano County.

The WCSMPU identified several trunk sewers within the City having capacity issues under existing Peak Wet Weather Flow (PWWF) conditions. Specifically, along West Texas and Empire streets from 5<sup>th</sup> Fifth Street north of West Texas Street to Empire Street at 1<sup>st</sup> First Street, and Texas Street at Taft Street to Clay Street south of Texas Street. In addition, the Lopes Road Lift Station and Cordelia Pump Station were identified to have capacity deficiencies under existing conditions. Capacity deficiencies were identified under future PWWF conditions along Peabody Road north of Huntington Drive at Stanford Court and Huntington Drive at Stanford Court to Walters Road north of East Tabor Avenue.

**Table 3.16-5** summarizes the estimated existing and future average BWF, PWWF for the 10-year, 24-hour design storm for the FSSD system.

**Table 3.16-5: Collection System Flow Estimates, mgd**

	<i>Existing</i>	<i>Future</i>
<b>Average BWF</b>		
Residential	7.7	11.1
Non-Residential	1.6	3.6
Travis AFB and AB In-Bev	1.1	1.1 <sup>(a)</sup>
<b>Total</b>	<b>10.4</b>	<b>15.8</b>
PDWF <sup>(b)</sup>	16.1	23.0/24.3 <sup>(d)</sup>
PWWF <sup>(c)©</sup>	77.3	71.2/82.6 <sup>(d)</sup>



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	<i>Existing</i>	<i>Future</i>
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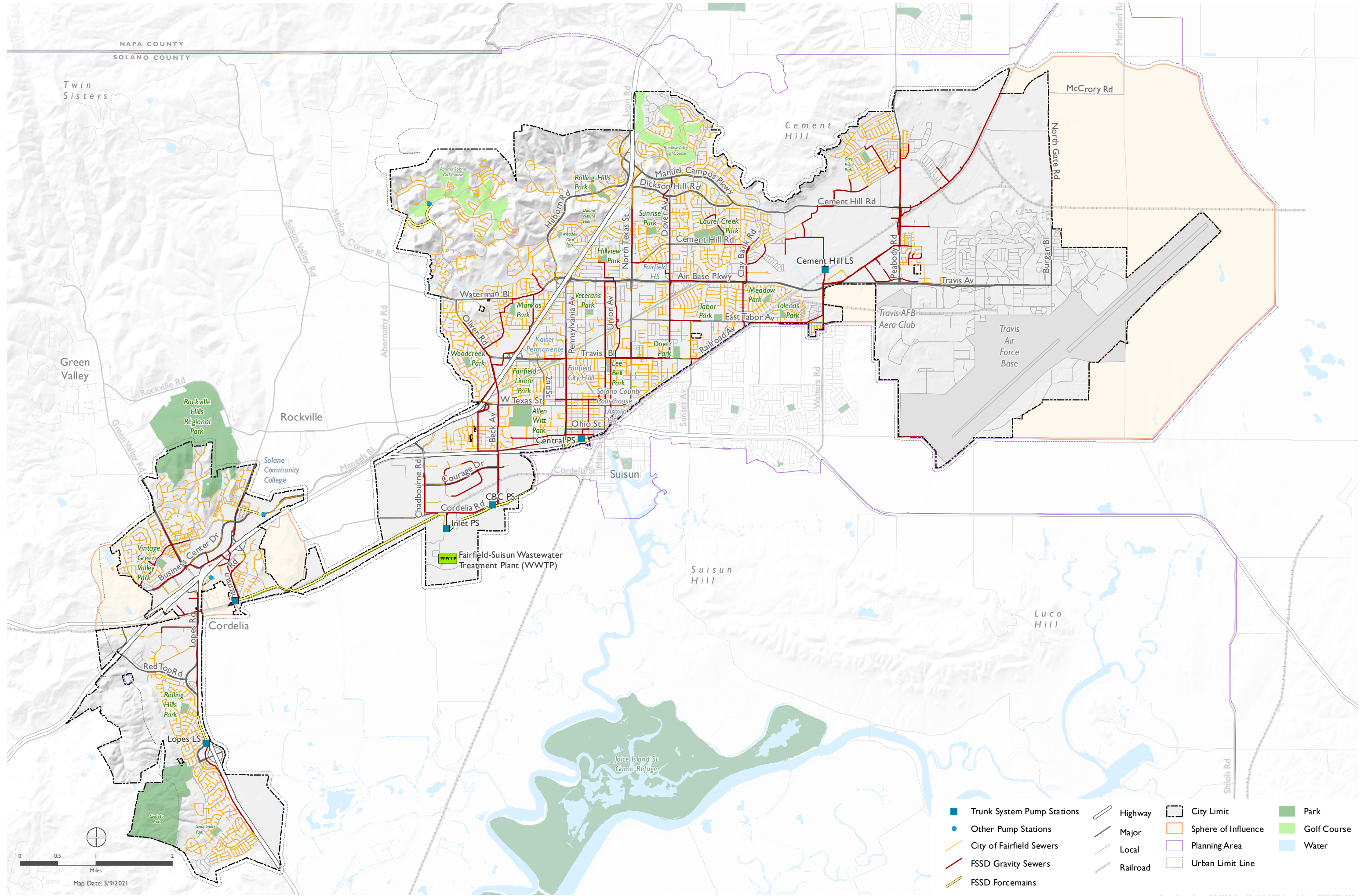
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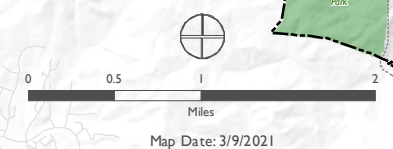
- a) Future changes not known
- b) Includes groundwater infiltration for a typical wintertime period
- c) For design storm (10-year, 24-hour)
- d) First value is based on flow in existing system without correction of deficiencies that may limit flows conveyed downstream; second value assumes that upstream trunk sewer and pump station deficiencies are relieved.

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Source: Fairfield-Suisun Sewer District Wastewater Collection System Master Plan Update (WCSMPU), Table ES-1, 2020



- |                            |          |                     |             |
|----------------------------|----------|---------------------|-------------|
| Trunk System Pump Stations | Highway  | City Limit          | Park        |
| Other Pump Stations        | Major    | Sphere of Influence | Golf Course |
| City of Fairfield Sewers   | Local    | Planning Area       | Water       |
| FSSD Gravity Sewers        | Railroad | Urban Limit Line    |             |
| FSSD Forcemains            |          |                     |             |



Map Date: 3/9/2021

Source: Solano County GIS, 2020; City of Fairfield, 2020; Dyett & Bhatia, 2020; FSSD 2021

### ***Stormwater System***

The City's stormwater collection system consists of a collection system of storm drain pipes, three pump stations, creeks, and engineered channels, with sizes ranging from 6- to 84-inches in diameter. Storm runoff travels through storm drains and natural channels draining to McCoy, Union, Pennsylvania Avenue, Ledgewood, Laurel, and Union Avenue Creeks, discharging into tidal channels tributary to Suisun Slough, and to American Canyon, Suisun, Jameson Canyon, Green Valley, and Dan Wilson Creeks, discharging into tidal channels tributary to Cordelia Slough. All stormwater from the City flows into the Suisun Marsh, a tidal area of marshlands, sloughs and bays.

The City is subject to the requirements of the California Regional Water Quality Control Board for the San Francisco Bay Region's Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, which mandates the implementation of stormwater control measures to limit the contributions of urban runoff pollutants to the San Francisco Bay. The NPDES permit was issued to the Fairfield-Suisun Urban Runoff Management Program (FSURMP), a collaboration between the cities of Fairfield and Suisun City intending to reduce or eliminate pollutants discharged from the urban environment into the storm drains, creeks, and the Suisun Marsh. The NPDES requires that all new developments incorporate stormwater quality measures during and post-construction. All erosion control and stormwater quality measures must be designed in accordance with the most recent NPDES permit.

The City is required to prepare a Green Stormwater Infrastructure Plan to guide a shift to a more resilient and sustainable stormwater management system. Green Stormwater facilities such as bioretention facilities, pervious pavement, infiltration features, and rainwater harvesting systems can be incorporated into new construction and existing development to reduce stormwater runoff volumes, disperse runoff to vegetated areas, promote infiltration and evapotranspiration, and use bioretention to detain and treat runoff before it reaches the creeks. Erosion control and stormwater quality measures must be designed in accordance with the most recent NPDES permit in effect at the time the project is deemed complete.

Individual development projects are required to address drainage and flood control issues within the City through stormwater treatment measure maintenance agreements, low-impact development standards, and post-construction stormwater requirements. New developments creating more than one acre of impervious area are required to build stormwater detention basins to store stormwater runoff from the project site and control the discharge, eliminating the flooding-impact from the project development. Pursuant to requirements in Section C.3 of the NPDES Permit, the City requires that peak discharge from the detention basin does not exceed 90-percent of the peak flow from the 100-year, 24-hour storm event. Discharge from developments cannot exceed the capacity of any portion of the existing downstream system. Storm drain design calculations within a development and runoff generated by upstream areas within the contributing watershed must be submitted to the City Engineer for approval.

### ***Solid Waste***

Solid waste disposal services are provided in the Planning Area by Republic Services, the City's exclusive franchised hauler for the City's solid waste, recyclables, and green waste. The Fairfield City Code requires that all residential, industrial, and commercial businesses must subscribe to garbage and recycling service. Republic Services operates Solano Recycle, Batteries, Oil, Paint and Anti-freeze (BOPA) collection, and Household Hazardous Waste Collection at their 2901 Industrial Court, Fairfield, CA, Industrial Court facility.

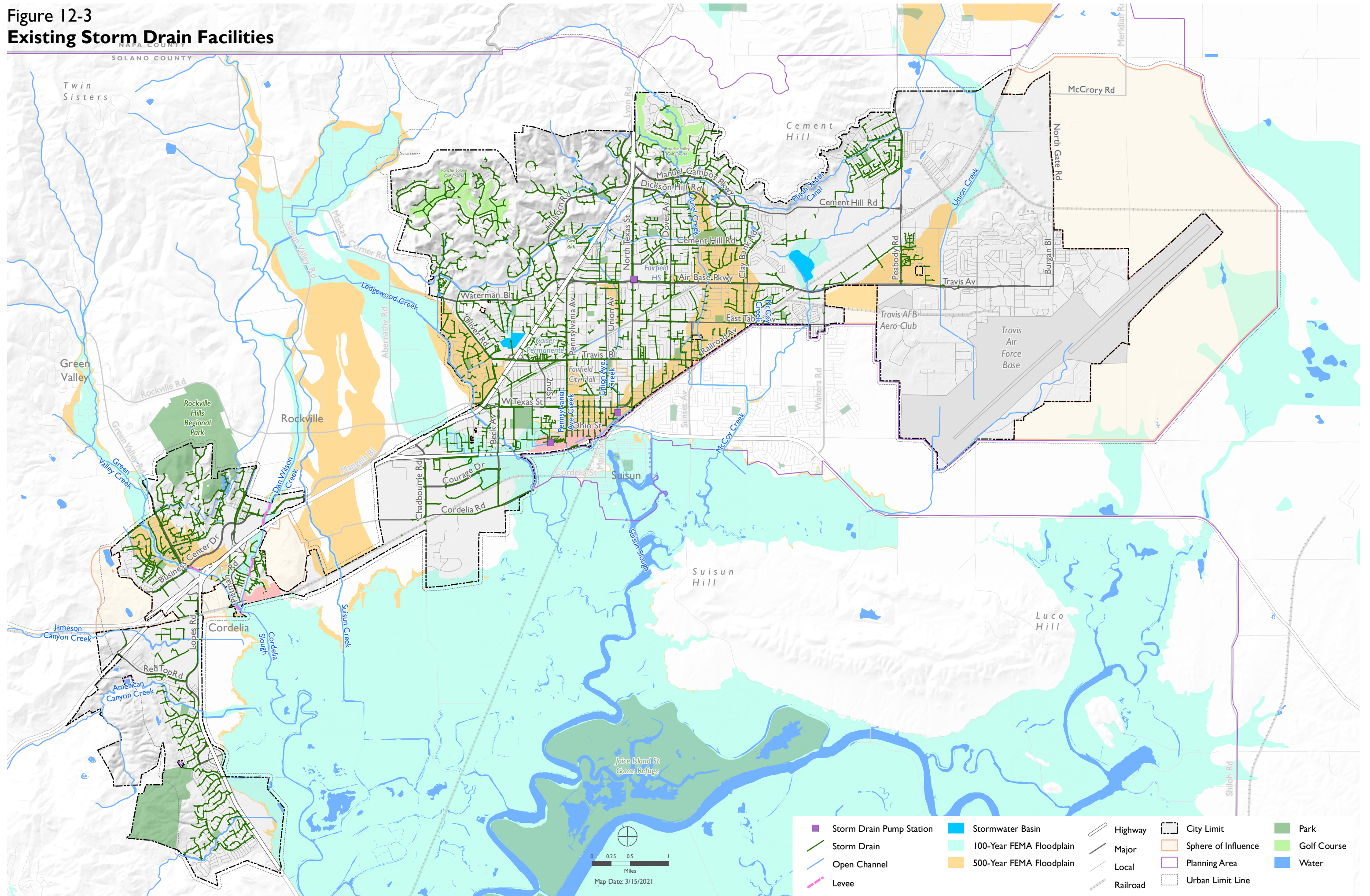
Solid waste is taken to the Potrero Hills Landfill in Suisun City, approximately four miles southeast of the Plan Area. The Potrero Hills Landfill has a maximum permitted throughput of 4,330 tons per day. The landfill has a permitted capacity of 83 million cubic yards, with a remaining capacity of nearly 14 million cubic yards (13,872,000 cubic yards). The closure date for Potrero Hills is planned for 2048. If capacity concerns arise in the future, the City has the authority through its franchise agreement to redirect waste to another facility with available capacity. In 2022, the City disposed of approximately 7.7 pounds of waste per resident per day (PPD) into landfills, an increase from 5.9 PPD in 2007, based on the most recent accurate data available, as shown on **Table 3.16-6**. According to Solano County’s 2024 Non-Disposal Facility Element, Fairfield’s organic material is hauled to Potrero Hills and later transferred to Yolo County Landfill’s Compost Facility. Commingled Recyclables are taken to West County Integrated Resource Recovery (IRRF) in Richmond, and Newby Island Recyclery in Milpitas. Construction and Demolition materials are transferred to Sierra Waste & Recycling.

**Table 3.16-6: Fairfield Landfill Disposal, 2007-2022**

Year	Landfill Disposal (tons)	Per Capita Disposal: Population (pounds per day)	Per Capita Disposal: Employment (pounds per day)
2007	113,249	5.90	15.80
2008	104,833	5.40	15.20
2009	98,1834	5.10	15.60
2010	90,883	4.80	15.40
2011	83,995	4.40	13.40
2012	85,167	4.40	13.50
2013	80,840	4.10	12.60
2014	77,332	3.90	11.70
2015	86,705	4.20	13.00
2016	146,568	7.20	21.60
2017	160,002	7.60	23.10
2018	162,434	7.70	22.60
2019	158,270	7.40	21.60
2020	162,068	7.60	22.20
2021	162,971	7.40	23.30
2022	166,249	7.70	22.90

Source: Cal Recycle, 2024. Available: <https://www2.calrecycle.ca.gov/LGCentral/Home/slcp/capacityplanning/recycling>. Accessed : June 25, 2024.

**Figure 12-3**  
**Existing Storm Drain Facilities**



Source: Solano County GIS, 2020; City of Fairfield, 2020; Dyett & Bhatia, 2020

### *Electricity and Natural Gas Facilities*

The Pacific Gas & Electric Company (PG&E) provides electrical and natural gas service to customers in the City of Fairfield. PG&E charges connection and user fees for all new developments in addition to sliding rates for electrical and natural gas service based on use. Starting in April 2022, MCE automatically became the primary provider for electricity generation, replacing PG&E. PG&E, which relies more on fossil fuels to generate electricity, continues to deliver energy and maintain lines and infrastructure in the Planning Area, though Residents can choose to remain with PG&E's electric generation service by opting out of MCE service should they desire. In 2022, Solano County consumed a total of 3,255.4 million kilowatt-hours (kWh) of electricity, which is about 1.1 percent of the State's total consumption (247.3 billion kWh) (California Energy Electricity, 2024).

Natural gas service for the Specific Plan Area is also provided by PG&E, regulated by the California Public Utilities Commission and the Federal Energy Regulatory Commission. PG&E's natural gas infrastructure system consists of over 50,000 miles of natural gas pipeline (PG&E 2024). PG&E provides natural gas service to Fairfield through both underground and aboveground transmission and distribution facilities. New distribution facilities are typically constructed within easements on private property. However, in some instances, new facilities are constructed within existing streets to increase capacity.

Electricity and gas usage are discussed in greater detail in Chapter 3.6: Energy, Climate Change, and Greenhouse Gases.

### *Telecommunications*

AT&T (formerly SBC), T-Mobile, Verizon, Cingular Wireless, Comcast, and other phone and internet providers provide telecommunications services in Fairfield. These providers offer local phone service, long distance phone service, and high speed internet service. Major telephone transmission lines traverse the region. These lines usually follow rights-of-way that parallel major roadways and rail lines.

## **REGULATORY SETTING**

### **Federal Regulations**

#### *Federal Safe Drinking Water Act*

The Safe Drinking Water Act (SDWA), administered by the United States Environmental Protection Agency (EPA) in coordination with the states, is the main federal law that ensures the quality of drinking water. Under the SDWA, the EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. The Department of Public Health administers the regulations contained in the SDWA in the State of California.

#### *United States Environmental Protection Agency*

The 1986 amendments to the Safe Drinking Water Act and the 1987 amendments to the Clean Water Act established the Environmental Protection Agency (EPA) as the primary authority for water programs. The EPA is the federal agency responsible for providing clean and safe surface water, groundwater, and drinking water, and protecting and restoring aquatic ecosystems. The Planning Area is in EPA Region 9 (Pacific Southwest), which includes Arizona, California, Hawaii, Nevada, Pacific Islands, and Tribal Nations.

#### *Federal Water Pollution Control Act of 1972 (Clean Water Act)*

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into “waters of the United States.” The Act specifies a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. Some of these tools include Total Maximum Daily Loads (TMDLs), water quality certification, and regulations on discharge of dredge or fill material. For more details, see Section 3.9: Hydrology and Water Quality.

#### *National Pollutant Discharge Elimination System*

The Clean Water Act was amended in 1987 to include urban and stormwater runoff, which required many cities to obtain a National Pollution Discharge Elimination System (NPDES) permit for stormwater conveyance system discharges. Section 402(p) of the Clean Water Act prohibits discharges of pollutants contained in stormwater runoff, except in compliance with a NPDES permit.

## **State Regulations**

### *California Department of Public Health*

The Drinking Water Program, which regulates public water supply systems, is a major component of the State Department of Public Health Division of Drinking Water and Environmental Management. Regulatory responsibilities include the enforcement of the federal and State Safe Drinking Water Acts, the regulatory oversight of public water systems, issuance of water treatment permits, and certification of drinking water treatment and distribution operators. State regulations for potable water are contained primarily within the Food and Agricultural Code, the Government Code, the Health and Safety Code, the Public Resources Code, and the Water Code. Regulations are from Title 17 and Title 22 of the California Code of Regulations.

The regulations governing recycled water are found in a combination of sources including the Health and Safety Code, Water Code, and Titles 22 and 17 of the California Code of Regulations. Issues related to treatment and distribution of recycled water are generally under the influence of the State Water Resources Control Board (SWRCB).

### *California Porter–Cologne Water Quality Control Act*

The Porter-Cologne Water Quality Control Act established the State Water Resources Control Board (SWRCB), and nine regional water quality control boards (RWQCBs) to address water quality and rights regulation. The five-member SWRCB protects water quality by setting statewide policy, coordinating and supporting the Regional Water Quality Control Board (RWQCB) efforts, and reviewing petitions that contest RWQCB actions. The SWRCB is also solely responsible for allocating surface water rights.

Each RWQCB makes critical water quality decisions for its region, including setting standards, issuing waste discharge requirements, determining compliance with those requirements, and taking appropriate enforcement actions. The Planning Area lies within the jurisdiction of the San Francisco Regional Water Quality Control Board.

The Act authorizes the SWRCB to enact state policies regarding water quality in accordance with CWA section 303. In addition, the Act authorizes the SWRCB to issue waste discharge requirements (WDRs) for projects that would discharge to State waters. SWRCB Order No. 2006-0003 provides a consistent statewide approach to reducing sanitary sewer overflows (SSOs) by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system, to prevent sanitary sewer waste from entering the storm sewer system, and to develop a sewer system management plan.

The Porter-Cologne Water Quality Control Act further requires that the SWRCB or the RWQCBs adopt water quality control plans (basin plans) for the protection of water quality. Basin plans also provide the technical basis for determining waste discharge requirements, taking enforcement actions, and evaluating clean water grant proposals.



### *California Department of Water Resources*

The California Department of Water Resources (DWR) is responsible for the operation and maintenance of the California SWP. DWR is also responsible for overseeing the statewide process of developing and updating the California Water Plan (Bulletin 160 series); protecting and restoring the Sacramento–San Joaquin Delta; regulating dams, providing flood protection, and assisting in emergency management; educating the public about the importance of water and its proper use; and providing technical assistance to service local water needs.

### *Senate Bills 610 and 221*

Enacted in 2002, Senate Bill (SB) 610, which was codified in the State Water Code beginning with section 10910, requires the preparation of a water supply assessment (WSA) for projects within cities and counties that propose to construct 500 or more residential units or the equivalent. SB 610 stipulates that when environmental review of certain large development projects is required, the water agency that is to serve the development must complete a WSA to evaluate water supplies that are or will be available during normal, single-dry, and multiple-dry years during a 20-year projection to meet existing and planned future demands, including the demand associated with a proposed project.

Enacted in 2001, SB 221, which was codified in the State Water Code beginning with section 10910, requires that the legislative body of a city or county, which is empowered to approve, disapprove, or conditionally approve a subdivision map, must condition such approval upon proof of sufficient water supply. The term “sufficient water supply” is defined in SB 221 as the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection that would meet the projected demand associated with the proposed subdivision. The definition of sufficient water supply also includes the requirement that sufficient water encompasses not only the proposed subdivision, but also existing and planned future uses, including agricultural and industrial uses.

### *The Water Conservation Act of 2009 (SB X7-7)*

California legislation enacted in 2009 as SB 7 of the 7th Special Legislative Session (SB X7-7) instituted a new set of urban water conservation requirements known as “20 Percent By 2020.” These requirements stipulate that urban water agencies reduce per-capita water use within their service areas by 20 percent relative to their use over the previous 10 to 15 years.

**Title 24 (California Energy Code)** The California Energy Code (Title 24, Part 6, of the California Code of Regulations, California’s Energy Efficiency Standards for Residential and Nonresidential Buildings), provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances. The Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The Code provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances; water and space heating and cooling equipment; and insulation for

doors, pipes, walls and ceilings. The Code emphasizes saving energy at peak periods and seasons, and improving the quality of installation of energy efficiency measures.

#### *California Green Building Standards Code*

Title 24 houses, California's Energy Efficiency Standards for Residential and Non-Residential Buildings. It requires construction of new buildings and additions to adhere to energy-efficiency standards. These standards include targets for energy efficiency, water consumption, dual-plumbing systems for potable and recyclable water, diversion of construction waste from landfills, and the use of environmentally sensitive materials in construction and design. The City follows the most current State Building Code, with select amendments as indicated in Chapter 5 of the Municipal Code.

#### *State Updated Model Landscape Ordinance (Assembly Bill 1881 (2006))*

The State's updated Model Water Efficient Landscape Ordinance requires cities and counties to adopt landscape water conservation ordinances by July 15, 2015. The City adopted Ordinance No. 2015-23, codified in Municipal Code Chapter 22A, in compliance with this State mandate.

#### *California Urban Water Management Planning Act*

The California Legislature enacted the Urban Water Management Planning Act of 1983 (California Water Code Sections 10610 through 10656) to support conservation and efficient use of urban water supplies at the local level. The Act requires that every urban water supplier that provides water to 3,000 or more customers, or over 3,000 AF of water annually, to make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its customers during normal, dry, and multiple-dry years. The act requires that total projected water use be compared to water supply sources over the next 20 years in five-year increments, that planning occur for single- and multiple-dry water years, and that plans include a water recycling analysis that incorporates a description of the wastewater collection and treatment system within the agency's service area along with current and potential recycled water uses.

The City of Fairfield complies with Water Code requirements to prepare and adopt a UWMP and update it every five years. A UWMP is required in order for a water supplier to be eligible for the DWR-administered state grants, loans, and drought assistance. A UWMP provides information on water use, water resources, recycled water, water quality, reliability planning, demand management measures, best management practices (BMPs), and water shortage contingency planning for a specified service area or territory.

#### *California Emergency Graywater Regulations*

In 2009, as part of the Governor's declared State of Emergency, Chapter 16A "Non potable Water Reuse Systems" was incorporated into the 2007 California Plumbing Code. Chapter 16A establishes minimum requirements for the installation of graywater systems in residential occupancies regulated by the California Department of Housing and Community Development, providing

guidance and flexibility designed to encourage the use of graywater. The standards allow small graywater systems to be installed in homes without a construction permit, substantially reducing the barriers to installing small residential graywater systems in California. The purpose of the regulations is to conserve water by facilitating greater reuse of laundry, shower, sink, and similar sources of discharge for irrigation and/or indoor use; to reduce the number of noncompliant graywater systems by making legal compliance easily achievable; to provide guidance for avoiding potentially unhealthful conditions; and to provide an alternative way to relieve stress on private sewage disposal systems.

#### *California Public Utilities Commission*

The California Public Utilities Commission (CPUC) regulates electric and natural gas utility services statewide. The CPUC oversees environmental documentation of distribution infrastructure, and permits interconnections, reliability systems, and electric and communications infrastructure. The CPUC has jurisdiction over natural gas services, including in-state transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering, and billing.

#### *California's Department of Resources Recycling and Recovery*

California Department of Resources Recycling and Recovery (CalRecycle) is the State's leading authority on recycling, waste reduction, and product reuse. CalRecycle plays an important role in the stewardship of California's vast resources and promotes innovation in technology to encourage economic and environmental sustainability. CalRecycle brings together the State's recycling and waste management programs and continues a tradition of environmental stewardship. Mandated responsibilities of CalRecycle are to reduce waste, promote the management of all materials to their highest and best use, and protect public health and safety and the environment.

#### *California Integrated Waste Management Act (AB 939)*

AB 939, California's Integrated Waste Management Act of 1989, mandates that 50 percent of solid waste be diverted by the year 2000 through source reduction, recycling, and composting. AB 939 also establishes a goal for all California counties to provide at least 15 years of ongoing landfill capacity. This requires each region to prepare a source reduction and recycling element to be submitted to CalRecycle, which administers programs formerly managed by the state's Integrated Waste Management Board and Division of Recycling.

#### *California Solid Waste Reuse and Recycling Access Act of 1991 (AB 1327)*

AB 1327 was established in 1991, which required CalRecycle to develop a model ordinance for the adoption of recyclable materials in development projects. Local agencies were then required to adopt the model, or an ordinance of their own, governing adequate areas for collection and loading of recyclable materials in development projects.

### *Disposal Measurement System Act of 2008 (SB 1016)*

SB 1016 maintains the 50 percent diversion rate requirement established by AB 939, while establishing revised calculations for those entities who did not meet the 50 percent diversion rate. SB 1016 also established a per capita disposal measurement system to make the process of goal measurement, as established by AB 939, simpler, timelier, and more accurate. The new disposal-based indicator—the per capita disposal rate—uses only two factors: a jurisdiction’s population (or in some cases employment) and its disposal as reported by disposal facilities.

### *Mandatory Commercial Recycling (AB 341)*

Effective July 1, 2012, AB 341 requires that commercial enterprises that generate four cubic yards or more of solid waste weekly participate in recycling programs. This requirement also includes multifamily housing complexes of five units or more, regardless of the amount of solid waste generated each week.

### *Mandatory Commercial Organics Recycling (AB 1826)*

AB 1826 requires that commercial enterprises that generate certain amounts of organic and solid waste weekly participate in composting programs. The law includes escalating thresholds to ease businesses into commercial organic recycling.

### *State Climate Change Scoping Plan*

In accordance with the California Global Solutions Act of 2006 (AB 32), the California Air Resources Board prepared the 2008 Climate Change Scoping Plan (first updated in 2014 and a second update is pending for 2017), which includes a series of recommendations regarding recycling and waste. Key recommendations include reducing methane emissions at landfills; increasing waste diversion, composting, and other beneficial uses of organic materials; and mandating commercial recycling (Cal Air Board, 2008 & 2017).

### *Short-lived Climate Pollutants (SB 1383)*

Senate Bill 1383 is a statewide effort to reduce emissions of short-lived climate pollutants (SLCP) by reducing organic waste disposal to 50% by 2020 and 75% by 2025. Organic waste in landfills emits 20 percent of the state’s methane, a climate super pollutant 84 times more potent than carbon dioxide. Fairfield complies with SB 1383’s seven program elements, including providing organics collection services to all residents and businesses, establishing edible food recovery programs, conducting education and outreach to community, procuring recyclable and recovered organic products, securing access to recycling and edible food recovery capacity, and monitoring compliance and conducting enforcement.

## **Local Regulations**

### *Solano County LAFCO*

The Solano Local Agency Formation Commission (LAFCO) is a state mandated boundary commission responsible for coordinating logical and timely changes in local government boundaries. The Commission, in the consideration of proposals, has to observe four basic statutory purposes: the discouragement of urban sprawl; the preservation of open space and prime agricultural land resources; the efficient provision of government services; and the encouragement of orderly growth boundaries based upon local conditions and circumstances.

It is the role of LAFCO to either: approve, approve with conditions or deny proposals for changes of organization or reorganization after considering several factors. Among the issues to be considered are: The Legislature's policies and priorities for LAFCO, the proposal's relationship to the affected agency's Sphere of Influence; the application's compliance with the California Environmental Quality Act (CEQA); and the submitted responses to Solano LAFCO's Standards.

### Municipal Service Review

To prepare and update spheres of influence, the commission must conduct a service review of municipal services (Municipal Service Review, or MSR) provided in the county or other appropriate area as designated by the commission. The MSR is required to address the present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies. This includes the quality and the ability of the city or district to provide those services, and it will include a discussion of capital improvement projects currently underway, and projects planned for the future where applicable. As part of this General Plan Update, which includes a proposed boundary change for growth areas described in the Project Description, the City will be required to update the MSR.

### Standards and Procedures

As part of the decision-making process, Solano County LAFCO has adopted eleven standards for consideration in reviewing specific annexation proposals. Standard 10, Provision and Cost of Community Services, requires that the applicant obtain verifications from the affected agency(ies) that the full range of services required to serve the affected territory can be provided. For city annexations that propose to convert open space lands to urban uses, the proposal shall be consistent with the city's Municipal Service Review.

### *Suisun-Solano Water Authority Solano Irrigation District 2020 Water Agency Urban Water Management Plan*

The Solano County Water Agency (SCWA) is the wholesale water agency providing untreated water to cities, agricultural districts, and institutions in Solano County, including the city of Fairfield. SCWA prepares and adopts the UWMP as a planning tool for its water supply service area. The current UWMP provides an overview of the water supply system, water resources

planning, the water shortage contingency plan, water demand, wastewater, recycled water, and water conservation. SCWA and its member agencies have comprehensive urban and agricultural water conservation programs.

#### *Fairfield 2020 Urban Water Management Plan*

The City adopted a UWMP in 2020 in compliance with State law. The UWMP addresses water conservation and resource management programs to ensure adequate water supplies are available to meet existing and future water demands. The UWMP must be prepared every five years and submitted to the Department of Water Resources (DWR). On December 6, 2022, the Fairfield City Council authorized staff to begin efforts on the most extensive and comprehensive plan to date, which is intended to identify systemwide improvements over the next two decades. The update, called the Public Utility Master Plan (PUMP), serves as a planning tool to ensure that the City's water system can meet future needs while remaining adequately funded. The PUMP is expected to be released for adoption hearings in Fall 2024.

#### *Solano County Municipal Code*

##### Chapter 6.4: Sewage Standards

This chapter requires all new development in unincorporated County parcels to connect to sewer systems if they are available, defined as a) within 200 feet of the property; b) if the structure is within 1,000 feet of the property line and c) if the agency in control of the sewer permits connection. Septic systems may be permitted if there is no available sewer connection.

#### *City of Fairfield Municipal Code*

##### Chapter 9, Solid Waste and Recyclables Collection Service

The Solid Waste Collection Services Ordinance establishes City regulations relating to the storage, accumulation, collection, and disposal of solid waste, and includes provisions for recycling (both residential and commercial) and disposal/recycling of construction and demolition waste.

##### Chapter 22: Water

The provisions of this chapter apply to water supply and services provided by the City, systems connecting to the city's water distribution infrastructure, water efficient landscaping, the issuance of permits for water uses for construction work, and protocols for water shortages. The chapter also sets rates, fees, and charges for the City's water services, as well as penalties for violations of the code.

Chapter 22B, the City of Fairfield Stormwater Management and Discharge Control Ordinance, regulates non-stormwater discharges to the public storm drain system through compliance with the NPDES Permit and various construction site controls.

## Chapter 24: Stormwater Management and Discharge Control

The City has adopted a Stormwater Management and Discharge Control Ordinance to regulate non-stormwater discharges to the public drain system; protect the public storm drain system from spills, dumping, or disposal of materials other than stormwater; and reducing pollutant in stormwater discharges to the maximum extent practicable. The code contains requirements to reduce pollutants in stormwater, specifications for construction site controls, measures for watercourse protection, and establishes penalties for violations of code provisions.

### Article XI: Development Impact Fees

Chapter 25, Article XI of the City of Fairfield Municipal Code establishes a development impact fee program to partially fund traffic facility construction, urban design facilities construction, public facilities construction, park and recreational facilities construction, and Northeast Area facility construction. Applicants of commercial, industrial, and residential projects would be required to pay their fair share in development impact fees set forth by the City of Fairfield Municipal Code to fund improvements in the City facilities. The fair share fee is determined by the City annually through the Budget and Five-Year Capital Improvement Program.

### *Fairfield Public Works Department General Development Conditions*

The Public Works Department applies General Development Conditions to individual development proposals, developed within the guidance of the California Government Code. General Development Conditions related specifically to CEQA include the following:

#### All Utilities

- For individual developments, the developer's civil engineer shall prepare a utility plan covering water, fire, sewer, and storm drain systems. The purpose of the plan is to evaluate utility capacity and ensure installation of utilities in an orderly and cost-effective way that considers both interim and ultimate service needs. The plan shall be prepared in advance of individual site improvement plans and shall be subject to review and approval by the City Engineer.

#### Water Utilities

- Conceptual planning for the water and fire system shall address the following:
  - proposed on-site water system layout - points of connection to the public water system
  - proposed fire system elements, including fire hydrants, fire sprinklers, Fire Department connections, and backflow prevention devices
  - water lines serving more than two fire hydrants or more than 100 units shall be looped and connected to the public water system in at least two locations
  - water pressure constraints for the proposed development

- The developer shall verify the size of the existing water services and water meters. Services and meters shall be upsized as needed for the proposed use. Backflow prevention devices shall be installed or upgraded to meet current code requirements.
- The developer shall verify the size of existing fire lines. Fire lines shall be upsized and extended as needed for the proposed use. Backflow prevention devices shall be installed or upgraded to meet current code requirements.

#### Sewer Utilities

- Conceptual planning for the sewer system shall address the following:
  - adequacy of the existing downstream sewer system to convey post-development sewage
  - proposed on-site sewer system layout
  - points of connection to the public sewer system
- The developer shall pay any additional sanitary sewer connection fees levied by the Fairfield-Suisun Sewer District to provide funding for future improvements of the sanitary sewer trunk lines downstream of the proposed development.

#### *City of Fairfield Conditions of Approval*

The City of Fairfield has adopted standard Conditions of Approval (COA) for major development projects. The following COAs related to utilities and service systems would apply to the Proposed Project.

**COA 4.2:** Trash receptacle(s) are required and shall be enclosed by a six (6) foot high masonry wall with metal, solid view obstructing gates pursuant to City standards. Within multi-family residential projects, all trash enclosures shall be provided with a shade structure. The precise location and construction details shall be subject to review and approval by the Department of Community Development. The enclosure shall include a reinforced concrete apron as approved by the Department of Public Works. All commercial and multifamily residential projects shall meet the requirements of the California Green Building Standards Code pertaining to recyclable materials storage and handling and access to trash enclosures.

**COA 4.3:** It shall be the applicant's responsibility to coordinate the location of all utility equipment with PG&E. Final locations of all above ground equipment must be approved by PG&E, the Community Development Department and Public Works Department prior to issuance of building permits.

**COA 4.4:** All ground-mounted utility appurtenances such as transformers or air conditioning units shall be located out of public view and/or adequately screened through the use of a combination of concrete or masonry walls, or berming, painting and/or landscaping. Said appurtenances shall be indicated on the approved landscape and irrigation plans prior to issuance of building permits.



- COA 6.9:** All electrical equipment shall be located interior to the building (i.e., no exterior electrical cabinets), unless screened from public view in a manner acceptable to the Community Development Department. Any exterior equipment or cabinets shall be depicted on architectural and site plans submitted for plan check, with location of equipment and screening method clearly identified on plans and shall be painted to match the building color upon installation.

## Impact Analysis

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### **SIGNIFICANCE CRITERIA**

For the purposes of this EIR, a significant adverse impact would occur if implementation of the Proposed Project would:

- Criterion 1:** Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- Criterion 2:** Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- Criterion 3:** Result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Criterion 4:** Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- Criterion 5:** Not comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

### **METHODOLOGY AND ASSUMPTIONS**

The analysis for this section addresses impacts on public utilities and city infrastructure due to projected growth arising from the Proposed Project. Subsequent California Environmental Quality Act (CEQA) review at the project level may be required to determine whether significant environmental effects would result from the construction of water distribution lines, wastewater collection system components, storm drainage conveyance pipes or facilities, and any onsite storage or pumping facilities on development sites, or other utilities improvements. Project-level review will occur when proposed development plans are prepared.

Infrastructure evaluations were conducted for potable water supply and water distribution, wastewater collection and treatment, and stormwater and flood control. The following resources were used:

- The draft City of Fairfield 2024 Public Utility Master Plan (2024 PUMP)
- The Fairfield Suisun Sewer District Wastewater Collection System Master Plan Update (WCSMPU, 2020)
- The Federal Emergency Management Agency (FEMA) Flood Insurance Study (FIS) for Solano County California and Incorporated Areas
- The Fairfield Suisun Sewer District Urban Management Program – Stormwater C.3 Guidebook
- The City of Fairfield Standard Specifications and Details

The details of this evaluation are provided in more detail in Appendix I. This is a program-level Draft EIR that considers the potential impacts from adoption of the Proposed Project by assessing proposed policies to the Fairfield General Plan. New utility master plans or updates of the existing utility master plans based on the Proposed Project are essential to identify the final correctly sized required infrastructure and accurately determine the infrastructure costs that will be needed to support the Proposed Project. Physical impacts associated with the construction and operation of new facility improvements would be addressed at the time they are proposed and would be required to demonstrate compliance with all applicable City regulations and policies to reduce environmental impacts to the extent feasible.

## **RELEVANT POLICIES**

### **Climate Action Plan**

*See the Climate Action Plan for more information on specific actions that implement the following measures:*

**SW-1:** Reduce the amount of solid waste that is generated and sent to landfills, especially organic waste.

**SW-1A:** Solid Waste Disposal Rate

**SW-1B:** Organic Waste Diversion and Edible Food Recovery

**SW-1C:** Compost Per Capita

**SW-1D:** Single Use Plastic and Container Ban

**SW-1E:** Construction and Demolition Waste

**SW-1F:** Solid Waste Education and Assistance

**SW-1G:** Outreach and Enforcement

**SW-1H:** Expand Waste-to-Energy System

**SW-1I:** Consumption Study

**WW-1:** Work with the Fairfield-Suisun Sewer District to reduce emissions from wastewater treatment.

**WW-1A:** Reduce Use of Fossil Fuels

**WW-1B:** Capacity of Waste-to-Energy

**PW-1:** Reduce water utility emissions by 60% below 2020 levels by 2030 and 100% by 2050.

PW-1A: Landscape Efficiency

PW-1B: Water Conservation Ordinance

PW-1C: Recycled Water Program

PW-1D: Education and Incentives

## Land Use and Urban Design Element

LU-20: Require growth areas to meet City standards and requirements for site planning.

LU-20.1 **Site Plans.** All new development must prepare a site plan that addresses, at minimum:

- How development patterns minimize grading and visual dominance over any scenic resources or hillsides
- Provision of adequate emergency ingress and egress
- Provision of adequate utilities
- Pedestrian and bicycle circulation, including incorporation of future bikeway connections, as shown in **Figure 4-3**.

## Sustainability Element

SUS-5: Coordinate with partners and the public to reduce energy consumption and promote energy conservation.

SUS-5.1 **Electricity Provider Conservation Efforts.** Support efforts that increase energy conservation in all households and businesses.

SUS-5.2 **Energy Conservation Resources.** Support education, outreach, and training programs for residents and businesses to increase awareness of energy conservation techniques and resources.

SUS-9 Implement measures to lower per capita urban water consumption, promoting water conservation and sustainability.

SUS-9.1 **Water Conservation Techniques.** Require water conservation techniques to be incorporated into the design of all development projects.

SUS-9.2 **Water Efficiency Programs.** Coordinate with the Solano Water Conservation Committee to provide water efficiency audits for residential and commercial buildings and implement incentives to encourage water-efficient retrofit improvements to existing private buildings.

SUS-9.3 **Greywater and Recycled Water.** Promote the use of and analyze barriers to the use of greywater systems and recycled water for irrigation purposes. As infrastructure becomes available, encourage recycled or grey water use and stormwater capture systems in new and existing developments, and in areas that do not impact groundwater quality.

- SUS-9.4**      **Municipal Water Use.** Consider carrying out a water conservation audit of existing municipal facilities and improve efficiency of municipal water use through retrofits and employee education.
- SUS-9.5**      **Native/Drought Tolerant Landscaping.** Develop a recommended drought-tolerant and native tree and plant species list and make it available on the City’s website, along with information about the benefits of using drought-tolerant and/or native vegetation. Require the planting of native and/or drought-tolerant landscaping at the site of new/existing City facilities, landscaped medians, and parkway strips to reduce water use and maintenance costs. Consider requiring that compost be applied to these areas to further reduce water loss.
- SUS-10:**      Integrate sustainable stormwater management strategies.
- SUS-10.1**      **Green Infrastructure.** Incorporate green infrastructure practices to reduce pollution runoff, reduce stress on stormwater systems, recharge underground aquifers, and reduce urban heat island effects, while promoting greenery in the community. Consider developing a Green Streets Plan that includes policy guidance, tools, analytics, and funding mechanisms to create more sustainably designed street and storm drainage systems.
- SUS-10.2**      **Stormwater Management.** Require stormwater management techniques that minimize surface water runoff in public and private developments. Utilize low-impact development techniques such as bioswales and other best management practices to manage stormwater.

*Reducing Waste*

- SUS-11:**      Facilitate recycling, reduction in the amount of waste, and reuse of materials to reduce the amount of solid waste sent to landfill.
- SUS-11.1**      **Recycling Program.** Continue to implement a comprehensive, user-friendly recycling program that involves all City operations. Target recovery of 75 percent of all waste generated at City operations.
- SUS-11.2**      **Waste Reduction.** Promote sustainability measures for businesses and residents to reduce waste, such as municipal composting, recycling, and expanded education on the benefits of the green waste recycling program.

**Public Facilities and Services Element**

- PFS-1:**      Provide excellent public services and utilities that address current needs and are commensurate with future growth.

- PFS-1.2: Development Impact Fair Share.** Through the development review process, ensure that adequate public utilities and services are available to serve new development and that new development pays its fair share of the public costs attached to each development project, which include, but are not limited to, the acquisition of permanent open space, provision of adequate school facilities, the provision of streets, police and fire service, street lighting, sidewalks, landscaping, storm drains, water, sewer, and other infrastructure needs.
- PFS-7:** Provide an adequate supply of quality water and water infrastructure to support current and future population and employment growth, as well as focused support of the region's agritourism goals.
- PFS-7.2 Adequate Water Supply.** Acquire water supplies to serve all foreseeable needs in the General Plan with a minimum 90 percent reliability (e.g., water supplies may be deficient in no more than 10 percent of the years). Continue to pursue additional water supplies to meet the city's future demands.
- PFS-7.3 Infrastructure Maintenance and Improvement.** Maintain water storage, conveyance, and treatment infrastructure in good working condition in order to supply domestic water to all users with adequate level of service.
- PFS-7.4 Urban Water Management Plan.** Encourage and actively promote long-term water conservation according to the water management programs established in the City's Urban Water Management Plan.
- PFS-7.5 Non-Potable Water Supply System.** In cooperation with Fairfield-Suisun Sewer District, explore development of an expanded non-potable water system and recycled water systems to serve large irrigation and industrial process users in order to extend potable water supplies and reduce maximum day demands on the potable system, and to reduce reliance on groundwater for irrigation in areas adjacent to the city. *See Sustainability Element for additional policies related to water conservation.*
- PFS-7.6 Protect Access to Water Supplies.** Identify and monitor State and Federal actions that would impact Fairfield's water supplies. In coordination with the Solano County Water Agency and Solano Water Authority, collaborate, develop, and pursue water supply projects that benefit Fairfield and the Solano County region.
- PFS-8:** Ensure provision of superior wastewater collection and treatment facilities to support current and future growth.
- PFS-8.1 Sewer Services.** Continue to provide sewer services and operate major public facilities through the Fairfield-Suisun Sewer District.

- PFS-8.2 Sewer System Maintenance.** Support the Fairfield-Suisun Sewer District’s efforts to continue to provide sewer system maintenance for all main lines, pump stations and treatment plant facilities. The City of Fairfield will provide maintenance for all sewer main lines less than 12" in diameter.
- PFS-8.3 Wastewater Treatment.** In cooperation with the Fairfield-Suisun Sewer District, plan, construct, and maintain wastewater treatment facilities to provide a level of wastewater treatment and service standards consistent with current and anticipated needs.
- PFS-8.4 New Development.** Require that all new development located within City limits connect to the public wastewater collection system, construct all sanitary sewer lines serving such development (including oversizing of sewers if requested by the Fairfield-Suisun Sewer District or the City, and provide adequate funding for the development’s use of all wastewater infrastructure and facilities. The costs of oversizing shall be borne by the beneficiary of the oversizing,
- PFS-9:** Develop and maintain an environmentally sensitive, climate resilient drainage system for handling runoff and preventing localized flooding.
- PFS-9.3: Storm Drainage Plan.** Prior to project approval, require new development and redevelopment projects to submit a storm drainage plan that meets the following requirements:
- Adherence to the City of Fairfield Standard Specifications and Details, Engineering Design Standards (Section 4 - Storm Drainage);
  - Prevention of on and off-site flooding through “green infrastructure,” Low Impact Development techniques and, if applicable, trash capture devices; and
  - Demonstration of water runoff volumes that are no greater than the capacity of any portion of the existing downstream system through utilization of detention, retention, or other approved methods of stormwater management.
- PFS-10:** Maintain adequate solid waste disposal capacity.
- PFS-10.1: Reduce Waste in Landfills.** Support and comply with the State’s recycling goals per AB 341 and SB 1383, including commercial recycling and organic waste recycling programs.
- PFS-10.2: Collection and Recycling Services.** Ensure the continued provision of adequate solid waste collection and recycling services in Fairfield. Implement programs within the Source Reduction and Recycling Element (not a General Plan element) which promote source reduction, recycling,

and composting as ways of reducing waste and increasing landfill capacity.  
*See the Sustainability Element for additional policies on recycling.*

**PFS-10.3: Countywide Waste Management.** Continue to participate as member of the County Local Task Force for Integrated Waste Management by providing input on county-wide waste management issues.

**PFS-10.4: Household Hazardous Waste Disposal.** Continue to promote the safe disposal of household hazardous waste, e-waste, and batteries through public education.

## IMPACTS

**Impact 3.16-1 Implementation of the Proposed Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (Less than Significant)**

Implementation of the Proposed Project would allow for the potential development of future residential, commercial, and industrial land uses in the Planning Area. Additional population and businesses would generate additional demand for water and wastewater services, and therefore, a potential increased demand for water provision and wastewater collection, conveyance, and treatment services over currently established levels. Additional development has the potential to increase pervious areas, resulting in increased stormwater runoff. Further, new developments could require the relocation or construction of new electric, gas, or telecommunications facilities if existing facilities were found to be insufficient or if planned development interfered with existing facilities.

### Water

#### Water Treatment Capacity

There could be a significant impact from the implementation of the Proposed Project if new or expanded water facilities were needed to serve new residents and businesses and were constructed out of accordance with environmental standards.

The City's required water treatment plant capacity is equal to the system-wide maximum day demand. The City of Fairfield's existing water demand in the City is 19.6 mgd, when this value is scaled to maximum day demand it becomes 37.6 mgd. Scaled to maximum day demand, the Proposed Plan's anticipated increase in demand equals 3.8 mgd<sup>4</sup>.

As indicated in Environmental settings, Fairfield's current treatment capacity is approximately 52.7 mgd. At a systemwide level, anticipated treatment capacity required to meet future maximum day demands across the system is estimated to be 54.7 mgd, resulting in a 2 mgd treatment capacity deficit. As described in the draft 2024 PUMP, it is anticipated that the deficit would be addressed through expansion of the City's NBR WTP. In addition, the City of Vacaville also currently receives treated water from the NBR WTP and has expressed interest in contributing to further expansion of the NBR WTP, so that they may also receive additional water in the future. As a result, planning efforts are underway to evaluate and identify an expansion alternative. Expansion of the NBR WTP would be subject to the policies associated with the Project that would address potential impacts of siting, construction, and operation of new facilities to the extent assessed in other sections of this EIR. Proposed policies include those requiring construction best management practices to limit land disturbance, development review to protect significant biological resources, reduce air pollution, promote water-and energy-efficient construction and landscaping, implementation of noise mitigation measures, and management of archaeological materials found during development.



Further, goals and policies in the Proposed Project aim to provide an adequate supply of quality water and water infrastructure to support future population and employment growth, as well as focused support of the region's agritourism goals (Policy PFS-7). Such policies would acquire water supplies to serve all foreseeable needs in the General Plan with a minimum 90 percent reliability, continue to pursue additional water supplies to meet the city's future demands, maintain water storage, conveyance, and treatment infrastructure in good working condition in order to supply domestic water to all users with adequate level of service, and actively promote long-term water conservation per water management programs established in the City's UWMP (Implementing Policies PFS-7.2, PFS-7.3, PFS-7.4). Additionally, policies also encourage the exploration of development of an expanded non-potable water system and recycled water systems to serve large irrigation and industrial process users in order to extend potable water supplies and reduce maximum day demands on the potable system (Implementing Policy PFS-7.5). The Proposed Project also requires protection of access to water supplies by monitoring State and Federal actions that would impact Fairfield's water supplies (Implementing Policy PFS-7.6)

Coupled with planned NBP WTP expansion, policies in the Proposed Project would help to reduce the demand on existing treatment infrastructure and allow for meaningful consideration of potential impacts of any future decisions regarding the provision of new infrastructure. Therefore, through compliance with State and local regulations, and implementation of the Proposed Project policies, impacts would be less than significant.

#### Water Conveyance

There could be a significant impact from the implementation of the Proposed Project if new or expanded water conveyance facilities were needed to serve new residents and businesses and were constructed out of accordance with environmental standards.

Growth Areas A and B, as shown in **Figure 2-6**, the new Cordelia neighborhood and Nelson Hill, within the Planning Area do not have transmission pipelines located within them. Thus, transmission pipelines and necessary conveyance will need to be extended into these areas. The estimated total length of transmission mains needed is about 13,000 feet with a typical diameter of 16-inches. Most of the Growth Areas have elevation ranges that fall within the typical service elevation range of the City's largest pressure zone and could likely be served by existing transmission pipelines in that zone. However, three Growth Areas: Cordelia Commercial Center (Growth Area 1), New Cordelia Residential Neighborhood (Growth Area A), and Nelson Hill (Growth Area B), fall outside of that range and should be served by higher pressure zones.

Growth Area 1 and Growth Area A are located adjacent to Red Top Pump Station and their elevations fall within the typical service elevation range of Red Top Pump Station. The City is currently replacing the existing Red Top Pump Station, which will increase its firm capacity and upsize the suction pipeline. This will help address most of the projected future water demand needs of Red Top. However, if all future development estimated to occur within the Red Top area proceeds as shown in the Proposed Project, the pump station may need to be further evaluated and expanded in the future.

Growth Area B contains elevations that are high enough that a new booster pump station may be required to maintain a minimum pressure of 45 pounds per square inch (psi) at customer locations. Based on the demands and fire flow requirement within Growth Area B, the capacity of the pump station is estimated to be approximately 0.6 mgd. The City currently uses storage tanks to support customers in many of its upper pressure zones. Growth Area B requires a booster pump station to serve it and will be hydraulically separated from Zone 1. Based on the demands and fire flow requirement within Growth Area B, the storage volume needed is estimated to be approximately 1.9 MG. As such, it is anticipated that a new storage tank would be required to support customers in that area and could result in a significant impact from the implementation of the Proposed Project.

New transmission pipeline would be needed to extend the existing water distribution network into the Growth Areas and Growth Area B would likely need to become a new pressure zone to maintain adequate pressures within it, requiring a new booster pump station and a new storage reservoir to support the water demands. In accordance with the Fairfield Public Works Development General Plan Conditions, the developer's civil engineer would be required to prepare a utility plan covering water systems to evaluate utility capacity and ensure installation of utilities in an orderly and cost-effective way. Conceptual planning for water needs for fire requirements must address the on-site water system layout, points of connection to the public water system, water lines serving hydrants, and any water pressure constraints.

Any required construction of new water conveyance systems would be subject to the policies associated with the Project that would address potential impacts of siting, construction, and operation of new facilities to the extent assessed in other sections of this EIR. Proposed policies include those requiring construction best management practices to limit land disturbance, development review to protect significant biological resources, reduce air pollution, promote water-and energy-efficient construction and landscaping, implementation of noise mitigation measures, and management of archaeological materials found during development.

Goals and policies in the Proposed Project aim to provide adequate water infrastructure to support future population and employment growth. This includes Implementing Policy PFS-1.2, which requires development pay its fair share of public costs for infrastructure projects, and PFS-7.3, which aims to maintain water storage, conveyance, and treatment infrastructure in good working condition.

Overall, the Proposed Project policies would help to reduce the demand on existing conveyance infrastructure and allow for future expansion of new water conveyance infrastructure. Compliance with City regulations, such as the Public Works Department General Development Conditions, would also reduce impacts. As such, this impact is less than significant.

### *Wastewater Treatment*

#### Wastewater Treatment Capacity

Implementation of the Proposed Project will result in increased wastewater flows to the City's WWTP, which could result in the need to expand the treatment facility.

As described in the Environmental Setting, WWTP inflow data from FSSD states that the Average Dry Weather Flows (ADWFs) were about 12.5 mgd over the summers of 2018, 2019, and 2020 (dry weather periods). Implementation of the Proposed Project results in an increase of ADWF of 2.7 mgd, resulting in a flow increase from about 12.5 mgd to 15.2 mgd from the development associated with the Proposed Project. The capacity of the WWTP is 23.7 mgd ADWF. Therefore, there would be a remaining capacity of about 8.5 mgd for existing commitments for the other tributary agencies (Suisun City, Travis AFB, and other unincorporated areas). As such, implementation of the Proposed Project would not require the construction or expansion of WWTP facilities and associated impacts would be less than significant.

Further, Municipal Code, Sections 25.1501 through 25.1511, establishes a development impact fee program to partially fund public facilities construction, like the City's WWTP. Projects resulting from implementation of the Proposed Project would be required to pay their fair share in development impact fees set forth by the City of Fairfield Municipal Code to fund improvements in City facilities. This would ensure there is adequate financial capacity to fund the operation, maintenance, and expansion of the collection system if need be.

Implementation of policies in the Proposed Project would ensure the provision of superior wastewater collection and treatment facilities to support current and future growth (Implementing Policy PFS-8), by continuing to operate major public facilities through the FSSD, supporting FSSD's effort to provide sewer system maintenance to all infrastructure, and cooperating with FSSD to plan, construct, and maintain wastewater treatment facilities with current and anticipated needs (Implementing Policies PFS-8.1, PFS-8.2, PFS-8.3). Additionally, all new development pursuant to the Proposed Project within city limits would be required to construct sanitary sewer lines serving such development and provide adequate funding for the development's use of all wastewater infrastructure and facilities (Implementing Policy PFS-8.4).

Because the WWTP can accommodate treatment and disposal of the projected buildout flows and because of the Municipal Code and Proposed project policies, this impact is considered less than significant regarding wastewater treatment capacity and plants.

### Wastewater Conveyance

As indicated in Environmental Settings, the 2020 WCSMPU identifies existing capacity deficiencies and needed capital improvement projects and accounted for future growth areas in the City of Fairfield and Suisun as of 2020. Potential development of the new Cordelia Commercial Center, the Business Flex area, the Hale Ranch Area, and the Enhanced Use Lease Area were not evaluated for sewer improvement need. As identified in Appendix I, up to 4.8 miles of new sewer could be needed, and a new update to the WCSMPU is required.

New development would be subject to the Public Works Department General Development Conditions, which require sites to prepare a utility plan. Conceptual planning is required to address adequacy of the existing downstream sewer system, the proposed on-site sewer system layout, and points of connection. The developer is required to pay any additional sewer connection fees levied by FSSD to provide funding for any future improvements downstream of proposed development.

Any required construction of new wastewater conveyance systems would be subject to the policies associated with the Project that would address potential impacts of siting, construction, and operation of new facilities to the extent assessed in other sections of this EIR. Proposed policies include those requiring construction best management practices to limit land disturbance, development review to protect significant biological resources, reduce air pollution, promote water-and energy-efficient construction and landscaping, implementation of noise mitigation measures, and management of archaeological materials found during development.

Additionally, Proposed Project policies aim to provide wastewater treatment service standards consistent with current and anticipated need, require all new development to connect to the wastewater collection system, and bear the cost of any potential oversizing (Implementing Policies PFS-8.3, PFS-8.4). This impact is considered less than significant regarding wastewater treatment conveyance infrastructure.

### ***Stormwater Drainage***

A significant impact would occur if the Proposed Project would require the construction or relocation of stormwater drainage infrastructure which could cause significant environmental effects. Implementation of the Proposed Project would result in significant new development and redevelopment into key areas of the city, as shown in **Figure 2-6**, including eight “infill” focus areas within the city limits, and three “growth” focus areas where the City may annex land in order to meet economic and housing goals. As Fairfield is largely ‘built out’, there is already stormwater infrastructure in place to serve future development needs. However, development pursuant to the Proposed Project is planned in three growth areas not currently served by stormwater infrastructure. Please see Chapter 3.9, Hydrology, for additional discussion.

As discussed in Environmental Setting, the City’s collection system consists of storm drainpipes, three pump stations, creeks, and engineered channels, with sizes ranging from 6- to 84-inches in diameter. Storm runoff travels through storm drains and natural channels draining to McCoy, Union, Pennsylvania Avenue, Ledgewood, Laurel, and Union Avenue Creeks, discharging into tidal channels tributary to Suisun Slough, and to American Canyon, Suisun, Jameson Canyon, Green Valley, and Dan Wilson Creeks, discharging into tidal channels tributary to Cordelia Slough. All stormwater from the City flows into the Suisun Marsh, a tidal area of marshlands, sloughs and bays.

Fairfield Suisun Sewer District Urban Management Program – Stormwater C.3 Guidebook, which mandates the implementation of stormwater control measures to limit the contributions of urban runoff pollutants to the San Francisco Bay. New development and redevelopment, depending on the area of impervious surfaces, could be required to incorporate on-site methods to result in no net increase in drainage off-site compared to pre-project site hydrology; these methods could include low impact development techniques that filter, store, evaporate, and detain runoff close to the source of rainfall and control the rate and/or volume of stormwater, allowing stormwater to naturally infiltrate soils.

Development associated with implementation of the Proposed Project would be required to provide public services and utilities that address current needs and are commensurate with future growth and pays its fair share of the public costs attached to each development project, such as

storm drains (Implementing Policy PSF-1.2). Additionally, development and redevelopment projects pursuant to the Proposed Project are required to submit a storm drainage plan that adheres to the City of Fairfield Standard Specifications and Details, Engineering Design Standards (Section 4 - Storm Drainage) (Implementing Policy PSF-9.3). Development of the Proposed Project would be required to prevent on and off-site flooding through “green infrastructure” by implementing Low Impact Development (LID) techniques and demonstration of stormwater runoff volumes that are no greater than the capacity of any portion of the existing down-stream system through utilization of detention, retention, or other approved methods of stormwater management (Policy PSF-10).

As indicated in the Fairfield Public Works Development General Development Conditions, project applicants would be required to prepare a utility plan covering storm drain systems and evaluate utility capacity. Additional stormwater requirements under General Development Conditions are described in Chapter 3.9, Hydrology. While site-specific stormwater conveyance needs are not available at this time, any required construction of new stormwater conveyance systems would be subject to the policies associated with the Project that would address potential impacts of siting, construction, and operation of new facilities to the extent assessed in other sections of this EIR. Proposed policies include those requiring construction best management practices to limit land disturbance, development review to protect significant biological resources, reduce air pollution, promote water-and energy-efficient construction and landscaping, implementation of noise mitigation measures, and management of archaeological materials found during development.

Additionally, development pursuant to the Proposed Project would be required to comply with these requirements, which would minimize the increase in stormwater volume and velocity to the maximum extent practicable. Therefore, through compliance with stormwater regulations, General Development Conditions, and implementation of Proposed Project policies, there would be a less than significant impact on stormwater facilities.

#### *Electric Power, Natural Gas, and Telecommunications Facilities*

The development envisioned under the Proposed Project is expected to lead to growth in both population and employment in Fairfield, which will require electrical, natural gas, and telecommunication facilities to serve them; if the electrical, natural gas, and telecommunication needs of the new development exceeds existing facilities’ capacities, or required relocation of the facilities, a significant environmental impact could occur.

The Proposed Project does not envision the relocation of natural gas, electrical, and telecommunication facilities, and it is expected to have sufficient capacity to serve new development. Any construction or relocation of electrical lines, poles, natural gas lines, and telecommunication facilities would be minor construction work and would be required to be performed in accordance with applicable Federal Energy Regulatory Commission, California Public Utilities Commission, and Federal Communications Commission environmental standards. Current state and local codes address energy conservation in general and efficiency in new buildings, which further reduces wasteful energy use and relieves the systems of some demand. Current city, state, and federal rebate and incentive programs on energy efficient products and measures also contribute to efforts to reduce energy consumption and demand.

The Sustainability Element of the Proposed Project aims to coordinate with partners and the public to reduce energy consumption and promote energy conservation. Specifically, the Proposed Project supports electricity providers conservation efforts to increase energy conservation in all households and businesses pursuant to the Proposed Project (Implementing Policy SUS-5.1). The Proposed Project also sets out to increase awareness of energy conservation techniques and resources by supporting education outreach, and training programs for residents and business (Implementing Policy SUS-5.2).

As such, these goals and policies related to utilities and energy savings would reduce the Proposed Project's impact on the current electricity, natural gas, and telecommunications providers. Therefore, the impacts of the Proposed Project on relocation or construction of electric, natural gas, and telecommunications facilities is less than significant.

#### *Mitigation Measures*

None required.

#### **Impact 3.16-2 Implementation of the Proposed Project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. (Less than Significant)**

The City's current water supply is exclusively from surface water that is treated and distributed to meet the demands of the City's water customers, derived from three sources: Solano Project, State Water Project (WSP), and Settlement Water obtained through negotiations with the California Department of Water Resources (DWR) in 2003.

As presented in the draft 2024 PUMP and discussed in Environmental Setting, the City has an annual water supply of approximately 53,696 acre-feet per year (AFY) (approximately 17,500 million gallons per year, MG/yr). However, because the full supply is not always available, the typical water supply is 47,837 AFY (approximately 15,587 MG/yr), according to the 2024 PUMP. On an average daily basis, this supply is approximately 43 million gallons per day (mgd).

Implementation of the Proposed Project would add an additional 523 MG/yr to the existing average demand of 7,163 MG/yr, resulting in a total demand for 7,686 MG/yr. Thus, the City has an adequate, reliable water supply for the Proposed Project; therefore, no new or expanded water facilities beyond the current existing facilities will be required for the Proposed Project. As indicated above in Environmental Settings, even if this 523 MG/yr demand was added to any normal, dry, or multiple-dry weather scenarios as described in the 2020 UWMP, there would still be water supply capacity in excess of over 2,000 MG for normal, dry, and multiple dry years.

Additionally, goals and policies in the Proposed Project aim to provide an adequate supply of quality water and water infrastructure to support and future population and employment growth, as well as focused support of the region's agritourism goals (Policy PFS-7). Such policies would acquire water supplies to serve all foreseeable needs in the General Plan with a minimum 90 percent reliability, continue to pursue additional water supplies to meet the city's future demands, maintain water storage, conveyance, and treatment infrastructure in good working condition in order to

supply domestic water to all users with adequate level of service, and actively promote long-term water conservation per water management programs established in the City's Urban Water Management Plan (Implementing Policies PFS-7.2, PFS-7.3, PFS-7.4). Furthermore, policies also encourage the exploration of development of an expanded non-potable water system and recycled water systems to serve large irrigation and industrial process users in order to extend potable water supplies and reduce maximum day demands on the potable system (Implementing Policy PFS-7.5). The Proposed Project also requires protection of access to water supplies by monitoring State and Federal actions that would impact Fairfield's water supplies (Implementing Policy PFS-7.6)

Therefore, with adherence to the policies and regulations described above, the Project's potential to result in insufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years is less than significant, and no mitigation is required.

#### *Mitigation Measures*

None required.

#### **Impact 3.16-3 Implementation of the Proposed Project would not result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. (Less than Significant)**

Implementation of the Proposed Project will result in increased population and employment, resulting in greater wastewater flows into the WWTP, which could exceed the capacity of the sewer system. If demands on the WWTP increases such that a facility must be expanded, the expansion could result in significant impacts.

As discussed in Impact 3.16-1, WWTP inflow data from FSSD states that the Average Dry Weather Flows (ADWFs) were about 12.5 mgd over the summers of 2018, 2019, and 2020 (dry weather periods). Implementation of the Proposed Project results in an increase of ADWF of 2.7 mgd, resulting in a flow increase from about 12.5 mgd to 15.2 mgd from the development associated with the Proposed Project. The capacity of the WWTP is 23.7 mgd ADWF. Therefore, there would be a remaining capacity of about 8.5 mgd for existing commitments for the other tributary agencies (Suisun City, Travis AFB, and other unincorporated areas). As such, implementation of the Proposed Project would not result in inadequate capacity for projected wastewater treatment demand. Please see Impact 3.16-1 for information on wastewater conveyance.

Additionally, Implementing Policies PFS-8.1, PFS-8.2, and PFS-8.3 would ensure that the provision of superior wastewater collection and treatment facilities support current and future growth by continuing to operate major public facilities through the FSSD, supporting FSSD's effort to provide sewer system maintenance to all infrastructure, and cooperating with FSSD to plan, construct, and maintain wastewater treatment facilities with current and anticipated needs. Further, all new development pursuant to the Proposed Project within city limits would be required to construct sanitary sewer lines serving such development and provide adequate funding for the development's

use of all wastewater infrastructure and facilities (Implementing Policy PFS-8.4). Lastly, as noted in Impact 3.16-1, Municipal Code, Sections 25.1501 through 25.1511, establishes a development impact fee program that would require new development to pay their fair share in development impact fees for public facilities.

Because the WWTP can accommodate treatment and disposal of the projected buildout flows in addition to the provider's existing commitments and because of the Municipal Code and Proposed Project policies, impacts to wastewater treatment capacity is considered less than significant.

#### *Mitigation Measures*

None required.

**Impact 3.16-4 Implementation of the Proposed Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. (Less than Significant)**

#### *Construction*

A significant impact would occur if development under the Proposed Project generates solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impairs the attainment of solid waste reduction goals. Demolition and construction activities associated with implementation of the Proposed Project would result in a temporary increase in solid waste generation. Solid waste generation would occur periodically during construction. However, the increase would be minimal and temporary. In addition, individual projects within the Planning Area would be required to comply with the State's Green Building Code, which requires all permitted residential and non-residential construction demolition and additions/alternations projects to recycle or salvage a minimum 65 percent of nonhazardous construction materials generated from the project. Therefore, the Proposed Project would not generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure during construction. This impact would be less than significant.

#### *Operation*

Projected population and employment growth under the Proposed Project would lead to additional demands for solid waste disposal services. The specific distribution and timing of projected development that could be permitted under the Proposed Project is not known, and, thus, the specific potential increase in solid waste disposal needs, including compliance with state and local standards, local capacity, and solid waste reduction goals cannot be predicted. Therefore, the potential environmental impacts on such facilities and programs as a result of the Proposed Project cannot be evaluated at this time. If the increased demand exceeds infrastructure capabilities (i.e., landfill capacity) or standards and goals, a significant impact could occur.

The Potrero Hills Landfill in Suisun City is expected to have adequate capacity until at least 2048. If capacity concerns arise in the future, the City has the authority through its franchise agreement to redirect waste to be taken to other landfills (such as Hay Road) if need be. The City of Fairfield



also participates in the preparation of the Countywide Non-Disposal Facility Element, a requirement of AB 939 that mandates each jurisdiction divert 50 percent of solid waste annually from being landfilled.

In addition, implementation of state laws and policies to reduce the waste stream and extend the lifespan of the landfill, such as AB 341 and SB 1383, are expected to extend the capacity, as discussed in Impact 3.16-5. Further, the Proposed Project contains numerous policies aimed at maintenance of adequate solid waste disposal capacity, including reducing waste in landfills with recycling programs, implementing programs within the Source Reduction and Recycling Element to promote source reduction, recycling, and composting as ways of reducing waste and increasing landfill capacity, and continuing to participate in the County Local Task Force for Integrated Waste Management (Implementing Policies PFS-10, PFS-10.1, PFS-10.2, PFS-10.3). Additionally, all new development resulting from implementation of the Proposed Project would be required to comply with the CALGreen Code, as discussed in Regulatory Setting above, requiring diversion of at least 65 percent of construction waste from landfills.

Given Potrero Hills Landfill's remaining and planned capacity, Proposed Project policies, and existing waste reduction regulations, the collection, transfer, recycling, and disposal needs of the projected population increase under the Proposed Project would not result in adverse impacts on landfill facilities. Therefore, the impacts would be less than significant.

#### *Mitigation Measures*

None required.

#### **Impact 3.16-5 Implementation of the Proposed Project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. (Less than Significant)**

As noted above, the Proposed Project would likely increase the amount of solid waste generated in the Planning Area due to growth in population and employment, which could lead to noncompliance with federal, State, and local regulations related to solid waste.

Future development projects would be required to comply with federal, State, and local solid waste standards identified in the Regulatory Setting, such as the California Integrated Waste Management Act, the CALGreen Code, AB 939, AB 341 and AB 1826, and SB 1383.

AB 939 mandated that the State of California generates a 25 percent diversion rate by 1995 and a 50 percent diversion rate by 2000. In 2005, California diverted 52 percent of its waste from landfills; therefore, the State, including the City of Fairfield, reached this goal and is in compliance with this law.

AB 341, adopted in 2012, requires that commercial enterprises that generate four cubic yards or more of solid waste and multi-family housing complexes of five units or more weekly participate in recycling programs in order to meet California's goal to recycle 75 percent of its solid waste by 2020. AB 1826 required businesses that generate two or more cubic yards of solid waste to implement an organic recycling program. Fairfield's Solid Waste Collection Services Ordinance, adopted in 2021,

requires all businesses to participate in the city's recycling programs regardless of the amount of solid waste generated.

SB 1383, adopted in 2016, establishes goals of 50 percent organics waste reduction by 2020 and 75 percent reduction by 2025. The City is tasked with strictly enforcing the requirements of SB 1383. The regulations require the City to implement enforceable policies (i.e. municipal code ordinances) to ensure all residents and businesses comply with the requirements in SB 1383. Furthermore, the State now has the authority to financially penalize non-compliant jurisdictions up to \$10,000 per day, per violation. Per Chapter 9 of the Fairfield Municipal Code, all residents and businesses must participate in organic recycling. Residents and businesses are strongly encouraged to contact Republic Services and subscribe if they have not done so. The City of Fairfield maintains a list of edible food recovery organizations and services serving the Fairfield and the greater Solano County area and has prepared a list of materials to help residents and businesses learn more about ways to comply with SB 1383. In the future, the City will comply with requirements regarding procurement of organic material and will continue to collaborate with the County and other jurisdictions within the county to determine the necessary organic waste recycling and edible food recovery capacity needed to divert organic waste and edible food from the landfill as required under the regulations.

The Proposed Project includes multiple policies aimed at achieving solid waste reduction targets established in AB 939, AB 341, and SB 1383, including reducing waste in landfills with recycling programs, implementing programs within the Source Reduction and Recycling Element to promote source reduction, recycling, and composting as ways of reducing waste and increasing landfill capacity, and continuing to participate in the County Local Task Force for Integrated Waste Management (Implementing Policies PFS-10, PFS-10.1, PFS-10.2, PFS-10.3).

Development of future land uses, as projected in the Proposed Project, would be required to comply with these State and local statutes and regulations related to solid waste. Furthermore, the policies provided in the Proposed Project regarding solid waste disposal and associated public facilities would further ensure compliance with applicable regulations. Therefore, the impacts would be less than significant.

#### *Mitigation Measures*

None required.