

4.15 UTILITIES

4.15.1 Introduction

This section addresses the potential impacts of the project on utilities and infrastructure. It describes the existing utilities in the project area and identifies the applicable federal and state plans, policies, and laws and local plans, policies, and regulations. Utilities considered include water, wastewater, solid waste, electricity, natural gas, and telecommunications. The analysis identifies the potential impacts of the project, including cumulative impacts, on utilities and infrastructure and identifies mitigation measures, when available, to reduce the level of impact to less than significant.

Important terms for specific parts of the project are discussed in detail in Section 4.0, “Approach to the Environmental Analysis.” The following brief discussion is intended to remind the reader how those terms are defined and used in the EIR analysis, including this section. “SAP area” refers to the entire SAP area, which includes the PRSP area. “Net SAP area” refers to the portion of the SAP area outside the PRSP area. The “project” encompasses the entirety of the SAP, including the PRSP and all associated off-site improvements. “Project area” refers to the entire area covered by the project. Because the project area is composed of three pieces (the net SAP area, the PRSP area, and areas where other off-site infrastructure would support the project), the impact analysis typically is divided into three subsections: “Net SAP Area,” “PRSP Area,” and “Other Supporting Infrastructure.” (“Other Supporting Infrastructure” refers to improvements outside the SAP area and is divided into “Pleasant Grove Retention Facility” and “Off-Site Transportation and Utility Improvements.”) Some required infrastructure improvements are planned outside the PRSP area but still in the SAP area; those improvements are addressed in the “PRSP Area” sections.

The water quality effects associated with stormwater drainage are addressed in Section 4.9, “Hydrology and Water Quality.” Public services, including law enforcement, fire protection, schools, and recreation, are addressed in Section 4.13, “Public Services.”

As discussed in Chapter 1, “Introduction,” the PRSP land use plan has been slightly revised since circulation of the NOP. Changes primarily relate to increasing the distance between the landfill property and land designated for residential uses, modifying the density of proposed residential areas, reducing the proposed commercial intensity, slightly decreasing the acreage of open space, and increasing the acreage of parks. The size of the PRSP area (2,213 acres) has not changed since release of the NOP, and the overall area of development would be nearly identical. Several technical memoranda (See Appendix P) were prepared to update the utilities calculations in response to the revised PRSP, including updates to the Potable Water, Recycled Water, and Water Conservation Master Plans; the Sanitary Sewer Master Plan; the Storm Drain Master Plan; and the Dry Utilities Master Plan. The revised calculations in these technical memoranda reflect the revised land use plan and are incorporated into this section of the Draft EIR. The technical memoranda identify slight decreases in demand for utilities resulting from the revisions to the PRSP, with the exception of potable water demand, which would increase by about 2 percent as compared to the original land use plan.

4.15.2 Environmental Setting

Public utilities in the project area are provided by various entities, as identified in Table 4.15-1 and discussed in detail below.

Table 4.15-1 Utility Providers for the Project Area

Utility	Agency/Provider
Water Supply	Placer County Water Agency
Recycled Water	Placer County Placer County Water Agency (retailer) City of Roseville (wholesaler)
Wastewater Collection and Conveyance	Placer County (County Service Area No. 28, Zone 2A3) South Placer Wastewater Authority
Wastewater Treatment	South Placer Wastewater Authority, City of Roseville
Stormwater Drainage	Placer County City of Roseville (retention) City of Lincoln (retention)
Solid Waste Collection and Disposal	Western Placer Waste Management Authority Recology Auburn Placer
Natural Gas	Pacific Gas and Electric Company
Electrical Service	Pacific Gas and Electric Company Pioneer Community Energy
Communications	AT&T Comcast Consolidated Communications Wave Broadband

Source: Compiled by Ascent Environmental in 2017

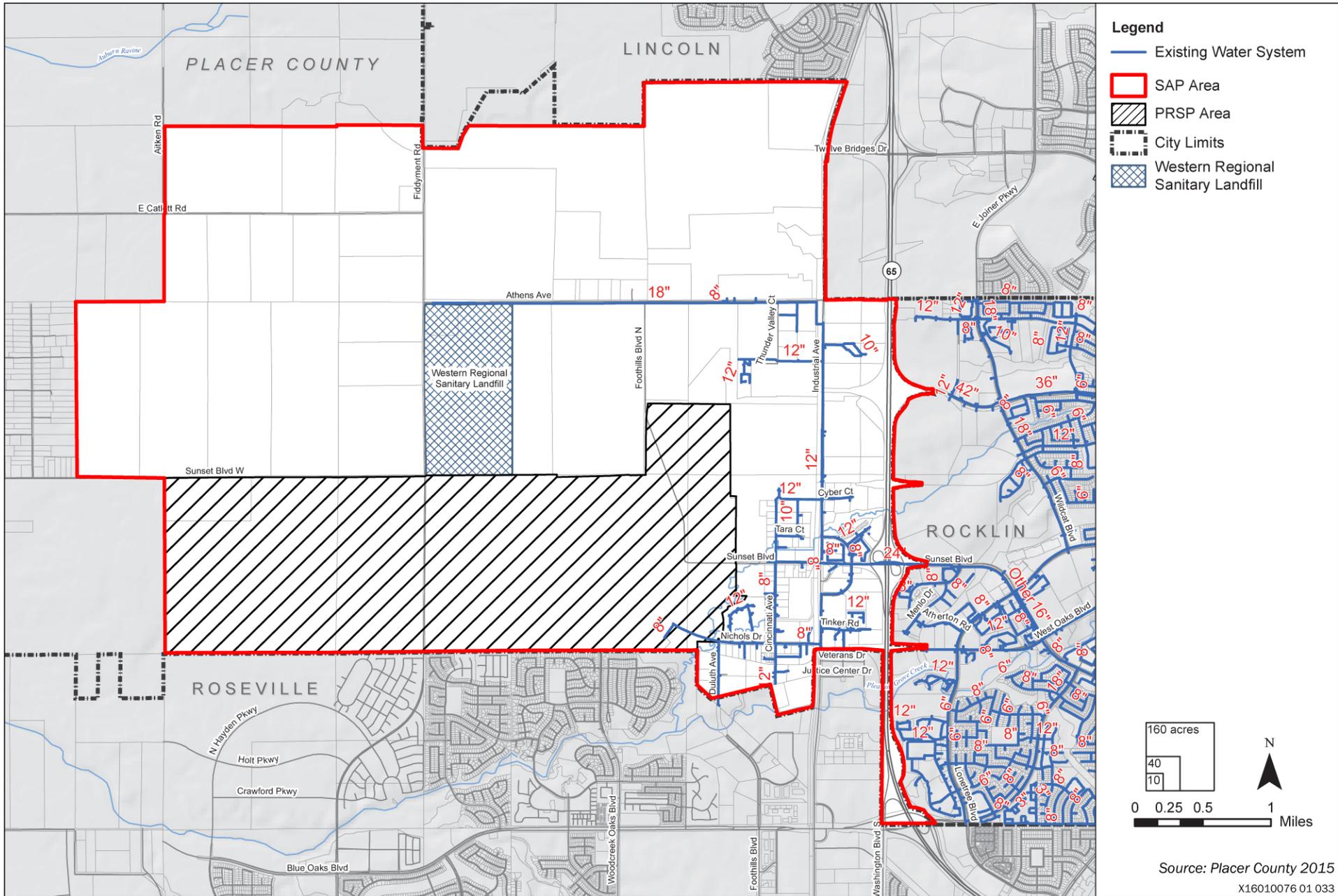
WATER SUPPLY

Net SAP Area

Placer County Water Agency (PCWA) is the water wholesaler and retailer for customers within the SAP area. The SAP area is located within PCWA lower Zone 6 and within the Sunset Industrial Pressure Zone with a 350-hydraulic grade line (HGL). Existing potable water system facilities are in place to serve existing land uses within the net SAP area as shown in Exhibit 4.15-1. Existing distribution facilities within the Sunset Area are within PCWA's lower Zone 6 service area and the Sunset Industrial Pressure Zone. Existing water supply distribution lines that serve, or could serve, the net SAP area include (Placer County 2017a:18–20):

- ▲ a 24-inch pipeline in Sunset Boulevard,
- ▲ an 18-inch pipeline in Athens Avenue,
- ▲ a 36-inch transmission main in Whitney Ranch Parkway that terminates east of SR 65 east of the project area,
- ▲ a 24-inch transmission main within the Whitney Oaks overcrossing west of SR 65,
- ▲ a 16-inch pipeline in Nichols Road,
- ▲ a 16-inch pipeline in West Oaks Boulevard that terminates east of SR 65 southeast of the project area, and
- ▲ an emergency intertie with the City of Roseville located at Industrial Avenue.

The primary water supply for lower Zone 6 is Pacific Gas and Electric Company (PG&E) water from the Drum-Spauling hydroelectric system. PCWA also uses water from the Middle Fork of the American River pursuant to its own water rights. PCWA pumps American River water near Auburn into the Auburn Tunnel, which connects to the Auburn Ravine where it can be distributed to Zone 6 irrigation water customers or pumped by the Ophir Pump Station and treated and distributed to customers within lower Zone 6. The lower Zone 6 receives treated water from the Foothill and Sunset water treatment plants (WTPs), which have treatment capacities of 58 million gallons per day (mgd) and 8 mgd, respectively, for a combined treatment capacity of 66 mgd (Placer County 2017a:18). The existing demand for treated water from the Foothill WTP and Sunset WTP is approximately 63.5 mgd, which yields available capacity to treat an additional 2.5 mgd (PCWA 2017a).



Source: Placer County 2015
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Exhibit 4.15-1

Existing Water Supply System



Based on its 2015 Urban Water Management Plan (UWMP), PCWA has adequate surface water entitlements. PCWA's Capital Investment Program outlines planned infrastructure necessary to provide safe drinking water to new areas within the SAP area (Placer County 2017a:18).

Future planned PCWA improvements include the extension of the existing transmission pipeline in Whitney Ranch Parkway across SR 65 westerly in phases as three 24-inch mains. On the west side of SR 65, these 24-inch mains will manifold back together into the 42-inch main that will serve as the primary SAP area treated water supply. PCWA has plans to extend this major transmission pipeline westerly and southerly to a proposed treatment plant off the Sacramento River, which would supply water from the opposite direction as the current supply system. This added source will greatly improve supply reliability to the region and the Sunset Area (Placer County 2017a:18).

PCWA also plans to begin construction in 2018 on the first phase of the Ophir WTP and associated conveyance pipelines, which are currently under design and would provide treatment capacity of 10 mgd. The Ophir WTP would be constructed in three phases, for a total treatment capacity of 30 mgd (PCWA 2016a:3-4,39).

PRSP Area

The PRSP area is located within the Zone 6 service area of PCWA (Placer County 2017b:1-2). Except for an 8-inch line that extends into the southeastern corner of the property, there is no existing water supply infrastructure in the PRSP area.

Placer County Water Agency

Existing Surface Water Supplies

PCWA's surface water supplies consist of water from the North Fork American River and its tributaries (including water stored in its Middle Fork Project) under water right Permits 13856 and 13858, Central Valley Project (CVP) water under Interim CVP Contract 14-06-200-5082A-IR3 from the American River, and water purchased from PG&E from the Yuba and Bear Rivers under the 1982 Zone 3 Contract Purchase Agreement and the February 27, 2015 Water Supply Agreement. PCWA also uses a limited amount of surface water from small creeks under pre-1914 water rights. Lastly, PCWA has occasionally purchased water from the South Sutter Water District for service to PCWA Zone 6 customers under Nevada Irrigation District's water rights (PCWA 2016b:3-1).

A summary of PCWA's existing surface water supplies are provided in Table 4.15-2 based upon the existing water rights currently held and the contracts to which PCWA is a party. The table identifies the source, purpose of use, and maximum available quantity for each water asset.

Table 4.15-2 Surface Water Rights and Contract Entitlements

Supply	Source	Purpose of Use	Max Use (afy)	Place of Use Description
Permits 13856 and 13858	American River	Irrigation, Domestic, Municipal and Industrial, Recreation	120,000	"Western Placer County"; Portions of Sacramento County, including San Juan Water District, Sacramento Suburban Water District, and Rio Linda WD service areas
Central Valley Project Contract	American River	Municipal and Industrial	35,000	Southeastern Placer County
PG&E Water Supply Agreement (2015)	Yuba and Bear Rivers	Irrigation and Domestic	100,400	Western Water System
PG&E (Zone 3) Purchase Agreement (1982)	Yuba and Bear Rivers	Irrigation and Domestic	25,000	Communities of Applegate, Weimar, Meadow Vista, Colfax, Gold Run, Monte Vista, Dutch Flat, Alta, and surrounding areas

Table 4.15-2 Surface Water Rights and Contract Entitlements

Supply	Source	Purpose of Use	Max Use (afy)	Place of Use Description
South Sutter Water District Contract	Yuba River	Irrigation	12,000	West of the City of Lincoln
Pre-1914 Appropriative Right (S000959)	Canyon Creek	Irrigation and Domestic	40 cfs (maximum)	Alta, Colfax, Monte Vista, and rural areas (not limited to former Zone 3)
Pre-1914 Appropriative Right (S000967)	Tributary to Auburn Ravine	Irrigation and Stock Watering	Not stated	"Boardman Canal" Area
Pre-1914 Appropriative Right (S010397)	South Fork Dry Creek Tributary to Coon Creek	Irrigation	Not stated	Localized irrigation just east of Auburn
Pre-1914 Appropriative Right (S010398)	North Fork Dry Creek Tributary to Coon Creek	Irrigation	Not stated	Localized irrigation just east of Auburn

Notes: afy = acre-feet per year, cfs = cubic feet per second.

Source: Based on information in PCWA 2016b:3-2

Current and Projected Water Supplies

In normal years, PCWA anticipates its Zone 1 PG&E contract will provide a supply of 100,400 acre-feet per year (afy) and its North Fork American River water rights will yield 120,000 afy. In addition, PCWA anticipates an additional 10,000 afy of water to be made available through the 1982 PG&E contract. Beginning in 2025, PCWA anticipates its Central Valley Project contract will yield at least 32,000 afy. Also, PCWA's pre-1914 appropriative rights are available for deliveries and the estimated yield is 3,400 afy. PCWA anticipates that the South Sutter Water District supply will not be available in the future. Recycled water is projected to be available in the PCWA retail service area starting in 2025. These recycled water supplies would be derived from the City of Lincoln and City of Roseville to meet PCWA service area demands. Table 4.15-3 summarizes PCWA's projected average year water supplies through 2045 or buildout (PCWA 2016b:3-11).

Table 4.15-3 Projected Average Year Water Supplies (afy)

Supply Source	2020	2025	2030	2035	2040	2045
Middle Fork American River Project	120,000	120,000	120,000	120,000	120,000	120,000
CVP Contract	0	32,000	32,000	32,000	32,000	32,000
PG&E Agreements	110,400	110,400	110,400	110,400	110,400	110,400
Pre-1914 Appropriations	3,400	3,400	3,400	3,400	3,400	3,400
Recycled Water	0	2,500	5,000	7,000	8,000	9,000
Groundwater	0	0	0	0	0	0
Total Supply	233,800	268,300	270,800	272,800	273,800	274,800

Note: afy = acre-feet per year.

Source: PCWA 2016b:3-12

Average Year Supply Reliability

Under average conditions, PCWA estimates it has a baseline quantity of 110,400 afy of PG&E water for uses in its service area. PCWA's modeling over an 82-year hydrologic record indicates that 120,000 afy will be available from the North Fork American River supply in average years. Based on U.S. Bureau of Reclamation estimates of availability as written in PCWA's CVP contract and CalSim II modeling conducted by PCWA, PCWA estimates that 32,000 afy of CVP water will be available in average years. PCWA's pre-1914 appropriative rights will provide approximately 3,400 afy during average years. PCWA does not anticipate receiving water from South Sutter Water District (SSWD). As buildout of the City of Lincoln and the planning areas west of the City of Roseville occurs, recycled water should be available in both average and dry years. Table 4.15-3 depicts PCWA's average year supply reliability (PCWA 2016b:3-12).

Single Dry Year Supply Reliability

In the worst-case scenario, if hydrologic conditions were similar to those experienced during the 1977 drought year, PCWA estimates for planning purposes that only 50 percent of its recent PG&E use quantities will be available. Importantly, this level of cutback has never been realized as even in the extreme droughts of 2014 and 2015, PG&E was able to deliver 68.9 percent of the anticipated supplies. The full North Fork American River water supply would remain available (120,000 acre-feet) due to the ability to store and deliver supplies under this water permit. PCWA's CVP supply would likely be reduced by 50 percent of full contract allocations based on the U.S. Bureau of Reclamation's current municipal and industrial shortage policy. In a single dry year, the pre-1914 appropriate right supply quantity is assumed for purposes of this analysis to be reduced by 75 percent, given that the creeks from which PCWA diverts are runoff dependent. Table 4.15-4 represents these assumptions.

Any potential shortfall in supply that may occur under buildout conditions in a dry year may be addressed through groundwater production. Groundwater may be produced by overlying users and/or appropriators to meet demands, consistent with the current Western Placer County Groundwater Management Plan or the Groundwater Sustainability Plan (GSP), which must be adopted and implemented by January 2022. Recycled water demand is also anticipated to supplement surface water supplies for nonpotable uses in dry years. In addition to groundwater, PCWA has various demand management mechanisms at its disposal to address supply shortages (PCWA 2016b:3-12–3-13).

Table 4.15-4 Existing Supplies during a Single Dry Year and Multiple Dry Years (afy)

Supply Conditions	2020	2025	2030	2035	2040	2045
Single Dry Year Supply	154,450	156,950	161,450	163,450	165,450	166,450
Multiple Dry Year Supply	228,500	231,000	233,500	235,500	236,500	237,500

Note: afy = acre-feet per year

Source: PCWA 2016b:3-13, 3-14

Multiple Dry Year Supply Reliability

During multiple dry year periods, PCWA anticipates that its PG&E supplies will be reduced by 25 percent each year. North Fork American River supply in the Middle Fork Project would not be reduced. CVP supplies are assumed to be reduced by 25 percent. Pre-1914 water supply is assumed for purposes of this analysis to be reduced by 50 percent (PCWA 2016b:3-13). Table 4.15-4 represents these assumptions.

Projected Water Demand

Average Water Year Conditions

Under this water supply scenario, PCWA would anticipate full availability of its supplies as described above. The total supplies and the forecasted demands in the PCWA service area are shown in Table 4.15-5. As demonstrated, PCWA has sufficient water supplies through projected buildout conditions during an average year.

Table 4.15-5 Average Year Supply and Demand Comparison (afy)

	2020	2025	2030	2035	2040	2045	Buildout of PCWA Service Area
Supply ¹	233,800	268,300	270,800	272,800	273,800	274,800	274,800
Demand	177,351	196,950	209,954	224,056	246,250	256,060	271,690
Difference	56,449	71,350	60,846	48,744	27,550	18,740	3,110

Note: afy = acre-feet per year.

¹ Supply includes CVP water.

Source: PCWA 2016b:7-1

Single Dry Year Conditions

To address water shortages, PCWA has adopted a Water Shortage Contingency Plan (WSCP). The WSCP is a helpful tool in managing conditions during a drought cycle, especially in order to meet state-mandated conservation targets. PCWA uses increasingly strict water use prohibitions to reduce water demands. Water use prohibitions become more restrictive as water supply conditions worsen (PCWA 2016b:6-1-6-2).

In a single dry year condition, PCWA anticipates reductions to its surface water supplies and anticipates implementing the requirements for reducing water demand that are outlined in the WSCP. As demonstrated in Table 4.15-6, and with the represented demand adjustments, PCWA has sufficient water supplies through projected buildout conditions during the single driest year (PCWA 2016b:7-1-7-2). Note that the supply identified in Table 4.15-6 for year 2020 is less than that shown for the same year and conditions in Table 4.15-4. The data in Table 4.15-4 supports the discussion of water supply reliability, while the supply amount shown in Table 4.15-6 reflects water availability based on actual conditions. In short, the data for 2020 in Table 4.15-4 includes water sourced from the CVP whereas the data in Table 4.15-6 does not include CVP water for 2020.

Table 4.15-6 Single Driest Year Supply and Demand Comparison (afy)

	2020	2025	2030	2035	2040	2045	Buildout of PCWA Service Area
Supply ¹	138,450	156,950	161,450	163,450	165,450	166,450	166,450
Demand	98,673	106,892	116,988	128,069	146,915	154,538	166,133
Difference	39,777	50,058	44,462	35,381	18,536	11,912	317

Notes: afy = acre-feet per year.
¹ Supply does not include CVP water.
 Source: PCWA 2016b:7-2

Multiple Dry Year Conditions

For assessing reliability of water supplies during multiple dry year conditions, PCWA assessed a 3-year series of dry conditions that mimic supply conditions from 1990 through 1992. While supplies available during this series of multiple dry years were not as constrained as during the representative single dry year condition, actual water supply availability over multiple years depends on many factors that require flexibility for PCWA to manage supplies and implementation of its WSCP stages accordingly.

Because multi-dry year supplies are less constrained than under single dry year conditions, modifications to demand are also less constrained in those years; however, WSCP demand reduction measures are still implemented. As shown in Table 4.15-7, PCWA has sufficient water supplies through projected buildout even with a series of multiple dry year conditions (PCWA 2016b:7-2-7-3). Note that the supply identified in Table 4.15-7 for year 2020 is less than that shown for the same year and conditions in Table 4.15-4. The data in Table 4.15-4 supports the discussion of water supply reliability, while the supply amount shown in Table 4.15-7 reflects water availability based on actual conditions. In short, the data for 2020 in Table 4.15-4 includes water sourced from the CVP whereas the data in Table 4.15-7 does not include CVP water for 2020.

Table 4.15-7 Multiple Dry Year Supply and Demand Comparison (afy)

	2020	2025	2030	2035	2040	2045	Buildout of PCWA Service Area
Supply ¹	204,500	231,000	233,500	235,500	236,500	237,500	237,500
Demand	142,335	152,651	165,272	178,971	200,562	209,936	224,741
Difference	62,165	78,349	68,228	56,529	35,939	27,564	12,759

Notes: afy = acre-feet per year.
¹ Supply does not include CVP water.
 Source: PCWA 2016b:7-3

Groundwater Supplies

Groundwater pumping in western Placer County occurs from the North American sub-basin of the Sacramento Valley groundwater basin. See “Groundwater Hydrology” in Section 4.9, “Hydrology and Water Quality,” for additional description of these groundwater resources (PCWA 2016b:3-8–3-9).

PCWA has historically produced a limited quantity of groundwater. PCWA currently maintains the Sunset Well and Tinker Well in the Sunset Industrial area (i.e., within the SAP area), each with a production capacity of 1,000 afy. These wells are used for backup and dry-year supplies only, and are not included in the water supply for average or multiple dry years.

The calculated sustainable yield for the entire North American River Groundwater Subbasin is 400,000 afy (MWH 2007:3-17). The Water Forum set the sustainable yield for the Sacramento County portion of the subbasin at 131,000 afy, the Sutter County portion at 175,000 afy, and the Placer County portion at 95,000 afy.

As required by Sustainable Groundwater Management Act of 2014 (SGMA), Placer County, PCWA and other agencies formed the West Placer Groundwater Sustainability Agency (WPGSA). The WPGSA is working on a GSP, which must be adopted by January 31, 2022, as required by the SGMA. The future GSP will dictate the use of groundwater in the region as it seeks to protect the sustainability of the groundwater basin.

RECYCLED WATER

Recycled water facilities do not currently exist in the SAP area. Nearby recycled water providers and facilities are discussed below.

South Placer Wastewater Authority

The South Placer Wastewater Authority (SPWA) is a Joint Powers Authority composed of representatives of the City of Roseville, Placer County, and the South Placer Municipal Utility District (SPMUD). The City of Roseville recycles water at its regional Pleasant Grove Wastewater Treatment Plant (PGWWTP) and Dry Creek Wastewater Treatment Plant (DCWWTP) and distributes it within its service area, as described below under, “Wastewater.” As a member agency of SPWA, the County discharges wastewater to the City of Roseville’s wastewater conveyance and treatment facilities but does not currently share in the ability to reuse any of the recycled water generated at the PGWWTP.

The City of Roseville, which currently distributes water from its wastewater treatment plants, has stated that it will wholesale recycled water to another entity to retail within the project area. However, this is not a commitment or a will-serve letter from the City of Roseville, and the City and retailer will have to confirm the availability of recycled water, design details, delivery pressures, diurnal supply availability, and other considerations at the time when the project is being designed. The recycled water retailer is expected to be PCWA with a point of connection on Woodcreek Oaks Boulevard. Use of recycled water is planned for the SAP area as described in the regional evaluation of wastewater and recycled water systems, described further below. Based on that analysis, an adequate supply of recycled water would be available from the City of Roseville’s wastewater treatment plants.

City of Lincoln

The City of Lincoln’s wastewater treatment plant is located adjacent to Fiddymont Road approximately 1.5 miles north of Athens Avenue. An existing pipeline from the plant runs down Fiddymont Road and currently provides recycled water to the irrigation pivots on the landfill property west of Fiddymont Road and south of Athens Avenue. More than 1 mgd of wastewater from Placer County is treated at the Lincoln plant, and according to projections, this amount will increase to 4 mgd at buildout of the County areas tributary to this plant. Under the terms of the 2013 executed *Construction, Operations, and Joint Exercise of Powers Agreement*, the County’s share of recycled water is equal to its flow sent to the city’s wastewater treatment plant. Therefore, tertiary treated wastewater from the Lincoln plant could be distributed south into the Sunset Area recycled water system if an alternative to PGWWTP is deemed necessary for a recycled water source.

WASTEWATER

Wastewater Collection and Conveyance

Wastewater collection facilities are in place to serve existing land uses in the SAP area and are provided through County Service Area (CSA) 28, Zone of Benefit 2A3. CSA Zones of Benefit have been developed in Placer County to own and operate utility systems and to assess customers of separate, specific areas based upon the costs of serving those areas. CSA 28, Zone of Benefit 2A3 was established to provide sewer services to the SAP area. The boundary of CSA 28, Zone of Benefit 2A3 includes all existing developed property in the net SAP area. As new development comes on line, it is required to annex to the CSA Zone of Benefit to connect to existing sewer collection facilities. Placer County and the City of Roseville work together to monitor growth, plan for treatment plant expansions, and ensure that adequate wastewater treatment capacity is available in the SPWA area. Funding for CSA services are provided through property assessments. New development also must pay local and regional connection fees. The local connection fee is collected by the CSA and regional fees are forwarded to the City of Roseville as the contribution by the CSA Zone of Benefit toward payment of the bond debt related to the construction of the regional wastewater facilities (Placer County 2017a:12).

A combination of lift stations, gravity pipelines, and force mains make up the wastewater collection facilities in the SAP area, and there are two points of connection to the regional Pleasant Grove Sewer Trunk Line which conveys flows to the Pleasant Grove Wastewater Treatment Plant (PGWWTP) (Exhibit 4.15-2).

The PRSP area is primarily undeveloped except for the City of Roseville Power Plant 2 (Peaking Plant). The Peaking Plant is served by a 10-inch sewer line that connects to a 20-inch sewer main in Duluth Avenue (Placer County 2017c:8), which ultimately discharges to the Cincinnati flow meter at the city/county boundary at the southern end of Cincinnati Boulevard.

Pleasant Grove Wastewater Treatment Plant

The PGWWTP, located approximately 1.5 miles southwest of the project area, receives and treats wastewater flows from development in the project area. The PGWWTP and associated regional facilities (e.g., Pleasant Grove sewer trunk line) are owned and operated by the City of Roseville for the benefit of the SPWA. The Regional Service Area and Ultimate Service Area boundaries for SPWA are shown in Exhibit 4.15-3.

The PGWWTP has a total capacity to treat 9.5 mgd average dry weather flow (ADWF) and presently treats 7.1 mgd ADWF, leaving an estimated 2.4 mgd ADWF of available capacity. The PGWWTP is permitted to discharge 12 mgd ADWF. On April 5, 2017, the City of Roseville approved a project to expand the PGWWTP treatment capacity from 9.5 mgd to 12 mgd (City of Roseville 2017a). Construction of the PGWWTP expansion project is anticipated to begin in 2018 and be completed within 2 years. Once complete, the estimated available capacity of the PGWWTP would be 4.9 mgd ADWF.

The *South Placer Regional Wastewater and Recycled Water Systems Evaluation (Systems Evaluation)* delineates the 2005 Regional Service Area boundary of SPWA and provides baseline and projected characterizations of its regional wastewater and recycled water systems (RMC Water and Environment 2009). The Regional Service Area boundary as defined in the Systems Evaluation is shown in Exhibit 4.15-3 and includes areas within Roseville, Rocklin, Loomis, and portions of Granite Bay and unincorporated Placer County. (It should be noted that Exhibit 4.15-3 shows the boundaries and designations used in the Systems Evaluation and may not reflect current conditions.) The Systems Evaluation is also the long-term planning tool to project wastewater treatment and transmission needs, and to identify necessary capital improvement projects to accommodate urban growth within the service area. The Systems Evaluation addresses system conditions as of June 2004 with updates through 2009 and anticipated buildout conditions within the Regional Service Area boundary. Buildout, including rezones and intensifications, would generate 16.52 mgd ADWF at the PGWWTP (RMC Water and Environment 2009:ES-14). In addition to buildout of the Regional Service Area boundary, the Systems Evaluation assesses future urban growth areas (UGAs) to determine an Ultimate Service Area boundary. The UGAs consider recently approved and pending specific plans and other

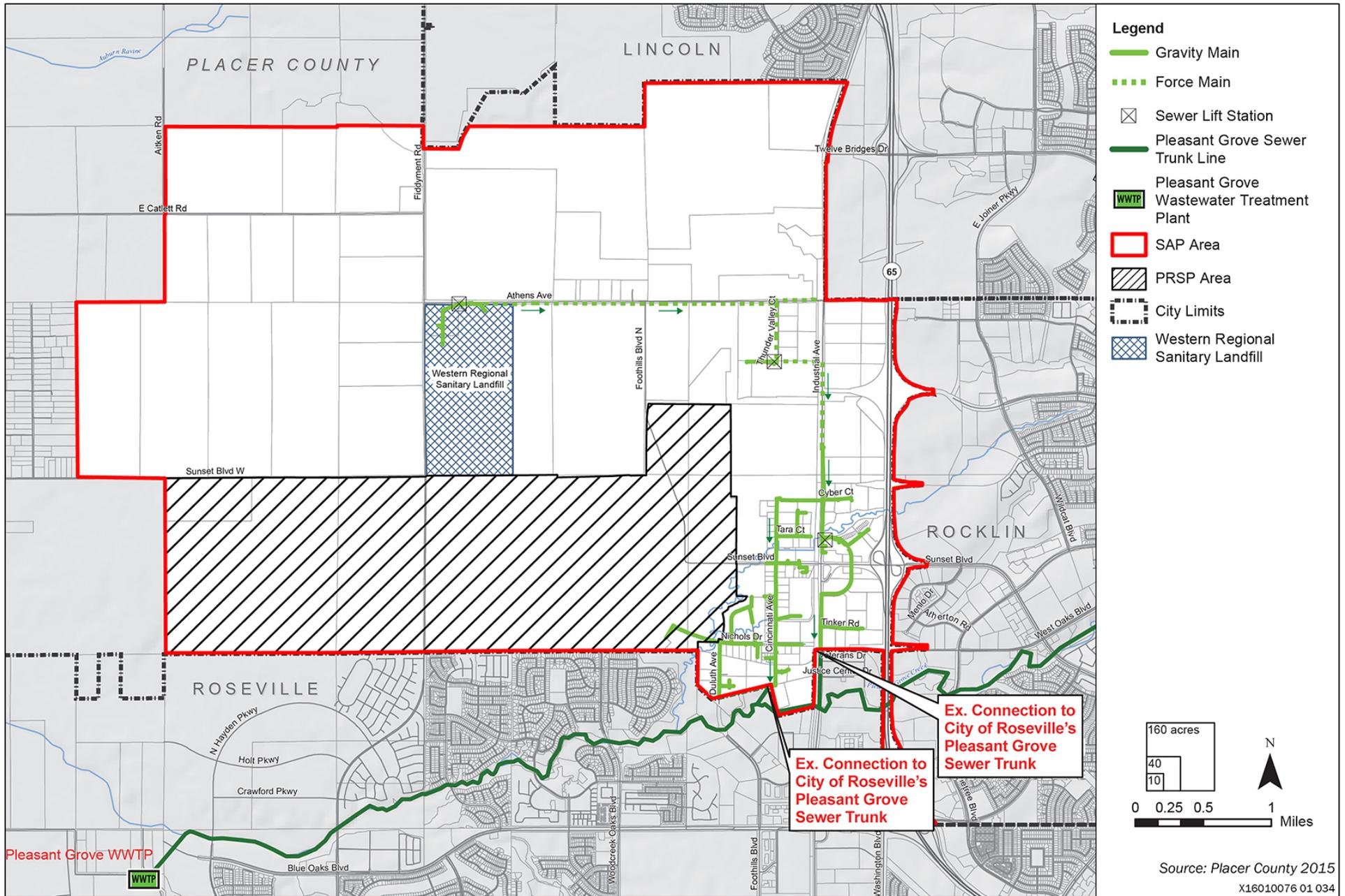


Exhibit 4.15-2

Existing Wastewater Collection and Treatment Infrastructure



development proposals, and thus include areas that have not yet been approved for development. Specifically, the UGAs for the PGWWTP service area include:

- ▲ Amoruso Ranch,
- ▲ Creekview,
- ▲ Curry Creek,
- ▲ Enviro Tech,
- ▲ Orchard Creek,
- ▲ Placer Ranch area,
- ▲ Portions of Placer County,
- ▲ Regional University,
- ▲ Sierra Vista, and
- ▲ SPMUD.

Buildout of the Ultimate Service Area, which includes the Regional Service Area boundary, would generate 25.67 mgd ADFW at the PGWWTP (RMC Water and Environment 2009:ES-14).

The portion of the SAP area east of Fiddymment Road is within the Regional Service Area boundary; west of Fiddymment Road, however, the net SAP area (north of the PRSP area boundary) is outside both the Regional Service Area and Ultimate Service Area boundaries.

The PRSP area, referred to as the Placer Ranch Urban Growth Area (UGA) in Exhibit 4.15-3, is considered in its entirety (2,213 acres) in the Systems Evaluation, but the areas that are within and beyond the Regional Service Area boundary, that is, east and west of Fiddymment Road, are assessed separately (RMC Water and Environment 2009:ES-6).

STORMWATER

Section 4.9, "Hydrology and Water Quality," provides additional detail about the watersheds that are identified below for the SAP and PRSP areas.

Net SAP Area

The net SAP area spans three watersheds within the larger Natomas Cross Canal watershed. The southern portion is within the Pleasant Grove Creek watershed. Flows from this area flow into University Creek, which is a tributary to Pleasant Grove Creek. The northern portion of the SAP area is located within the Orchard Creek and Dutch Ravine-Auburn Ravine watersheds. Most of the northern SAP area drains to Orchard Creek, which ultimately outlets to the Dutch Ravine-Auburn Ravine watershed (Exhibit 4.9-1). The site is dominated by grassland that allows infiltration and percolation of stormwater.

PRSP Area

The PRSP area is primarily within the Pleasant Grove Creek watershed with a small portion in the Orchard Creek watershed, both of which are part of the larger Natomas Cross Canal watershed of northwestern Placer County and southeastern Sutter County (Exhibit 4.9-1).

Most of the PRSP area, via various tributaries and overland routes, contributes to University Creek, which drains from the east to the southwest. The portion of the PRSP area in the southeast corner drains to the North Branch Placer tributary of Pleasant Grove Creek, which flows from the north alongside the eastern property line before discharging into the north main branch of Pleasant Grove Creek. The northeast quadrant of the PRSP area is located within the Orchard Creek watershed, which drains to the north before joining the main branch of Orchard Creek before discharging to Auburn Ravine Creek. Like the net SAP area, the site is dominated by grassland that allows infiltration and percolation of stormwater.

SOLID WASTE

Solid Waste Collection

Recology Auburn Placer (Recology) is the solid waste collection franchisee for the SAP area. Recology provides residential and commercial garbage collection services, as well as debris box services. On April 9, 2013, the County Board of Supervisors approved an amended and restated agreement with Recology,

extending the term through the end of fiscal year 2023. For fiscal year 2013/14, Recology served one residential account and approximately 81 commercial accounts within the SAP area (Placer County 2015).

Solid Waste Management and Disposal

The Western Placer Waste Management Authority (WPWMA) is a regional agency comprised of Placer County and the cities of Roseville, Rocklin, and Lincoln. WPWMA provides recycling and waste disposal to those communities as well as the cities of Auburn and Colfax and the Town of Loomis.

Most of the solid waste collected in western Placer County is first processed at the WPWMA Materials Recovery Facility (MRF). The MRF recovers, processes, and markets recyclable materials from the waste stream. The facility also processes source separated wood waste and green waste and accepts separated recyclables, including electronics and other universal wastes (e.g., batteries and fluorescent lamps), at the recycling drop-off and buy-back center. The compost portion of the facility has an annual processing capacity of 82,000 tons (this is averaged over the year and does not account for seasonal peaks). The facility is permitted to have up to 75,000 cubic yards (approximately 37,500 tons) of compost material at the facility at any one time.

Residual waste from the MRF is transported to the Western Regional Sanitary Landfill (WRSL). The landfill is a Class II/Class III non-hazardous waste site. Hazardous waste from households and Conditionally Exempt Small Quantity Generators is accepted at the MRF's Permanent Household Hazardous Waste Collection Facility (PHHWCF).

WPWMA owns and oversees the operations of the landfill, MRF, compost facility, and PHHWCF which are located at the corner of Athens Avenue and Fiddyment Road. A private firm, under contract to WPWMA, manages the day-to-day operation of the facilities.

Western Regional Sanitary Landfill Permit Limits and Constraints

The 291-acre WRSL is permitted to accept 1,900 tons of solid waste per day and 624 vehicles per day. For the period of July 1, 2016 through June 30, 2017, the average weekday tonnage received was 1,077 tons and the average vehicle count was 143 vehicles per day. The landfill has a permitted design capacity of 36,350,000 cubic yards and a remaining capacity of 24,468,271 cubic yards as of July 2017. Under current land use and development conditions, the landfill has a permitted lifespan extending to 2058 (WPWMA 2017).

The MRF has a permitted processing limit of 1,750 tons per day and 1,014 vehicles per day. For the period of July 1, 2016 through June 30, 2017, the average weekday tonnage received at the MRF was 1,191 tons and the average weekday vehicle count at the MRF was 640 vehicles. The MRF expanded in 2007, increasing its processing capacity of municipal solid waste and construction and demolition debris to 2,200 tons per day.

The MRF contract operator is required to achieve an annual diversion rate of 22 percent from the MRF processing lines; however, this does not include the additional recyclables received and diverted via the facility's buy-back center, drop-off center, compost facility, and landfill diversion (inert waste and construction/demolition waste). Facility-wide, the overall diversion achieved in 2016 was nearly 40 percent.

ELECTRICITY

Pacific Gas and Electric Company

The Sunset Industrial Infill District (Industrial Avenue, Cincinnati Avenue, West Sunset Boulevard, and the surrounding areas), as defined by PG&E, is well-developed with multiple overhead electric lines, including 21-kilovolt (kV) and 115-kV lines. Athens Avenue, adjacent to the Thunder Valley Casino, has both 115-kV transmission and 21-kV distribution lines; the 115-kV line turns north just west of the casino and continues north. The 21-kV line on Athens Avenue continues west where it connects to a 21- to 12-kV auto-bank, which

converts it to 12 kV, then continues west toward Fiddymont Road at 12 kV (Placer County 2017d:1–2). A 12-kV overhead distribution line runs north to south along the east side of Fiddymont Road and another runs west from Fiddymont Road along the north side of Sunset Boulevard West (Placer County 2017e:8–9). Existing electrical infrastructure within and adjacent to the project area is shown in Appendix E.

PG&E's Rio Oso-Atlantic 230-kV double-circuit electric transmission tower line occupies a 120-foot-wide easement and runs in a northwest to southeast direction through the eastern portion of the PRSP area.

PG&E's Pleasant Grove Substation is located on Industrial Boulevard north of Sunset Boulevard West and serves the industrial areas to the east of PRSP area at 21 kV.

Roseville Electric

Roseville Electric has a 60-kV overhead transmission line running in a northwest-southeast alignment adjacent to PG&E's 230-kV line until it ties to Roseville Electric's Peaking Plant #2 (RPP2). The line continues west adjacent to and just south of the PRSP area—with 12-kV and fiber line underbuilds—to Woodcreek Oaks Boulevard where it dips underground, turns south, and runs to a point where it surfaces before entering Roseville's Dave Bakkie Substation.

The City of Roseville owns and operates RPP2, a simple cycle combustion turbine peaking plant in the southeast corner of the PRSP area. The plant has access to PG&E's Line 123 gas transmission main east of the facility via a 4-inch steel tap, though it is unknown if that is its primary source of fuel. The plant is currently accessed from Nichols Drive.

NATURAL GAS

PG&E has a 12-inch steel gas transmission main (Line 123) traversing roughly southwest to northeast through the far southeastern portion of the PRSP area. Line 123 angles to roughly parallel Industrial Avenue to Twelve Bridges Drive, where it turns east. This transmission main brings natural gas to the general area at high pressures—likely 500–600 pounds per square inch gauge (psig), which can vary. Lines of this type are typically engineered to a maximum allowable operating pressure (MAOP) of 900 psig.

Regulator stations reduce the transmission pressure to typical distribution pressures (MAOP 60 psig) and serve the adjacent communities. The nearest regulator station to the project area, the Industrial Park Regulator Station, is on Sunset Boulevard West near Cincinnati Avenue. It serves the industrial areas in the vicinity of Cincinnati Avenue and Industrial Avenue but is well positioned to serve the PRSP area. A second regulator station is on Twelve Bridges Drive just west of East Joiner Parkway and a third is located on Westbrook Boulevard just north of Pleasant Grove Boulevard (Placer County 2017d:2). Two other gas regulator stations also feed into the system: one at Blue Oaks Boulevard and Industrial Avenue and the other at Country Club Drive and Badovinac Drive (Placer County 2017e:9–10). Existing natural gas infrastructure in the southern portion of the SAP area and within and adjacent to the PRSP area is shown in Appendix E.

The Sunset Industrial Infill District is developed with gas mains serving the immediate area. A 6-inch plastic gas main extends south along Industrial Avenue toward Roseville, and north to just north of Cyber Court. An 8-inch main is stubbed on Sunset Boulevard East toward the PRSP area. PG&E also has an 8-inch plastic gas distribution main stubbed north at Fiddymont Road, a 6-inch plastic main stubbed north at Woodcreek Oaks Boulevard, a 4-inch plastic main stubbed north at Grove Hill Way, and a 4-inch plastic main is stubbed west at Nichols Drive.

COMMUNICATIONS

Net SAP Area

Telecommunication (including internet) service is provided to the businesses and residential customers within the net SAP area primarily by AT&T. The telecommunication service is provided by a combination of

joint overhead communication and electric lines with lateral service to each respective business and residence (Placer County 2015).

Cable and television service is provided to customers within the net SAP area primarily by Comcast and Consolidated Communications. The cable and television services are provided by a combination of joint overhead, cable/television, communication, and electric lines with lateral service to each respective business and residence (Placer County 2015).

AT&T

The Stanford/Rocklin central office (CO) is located north of Sunset Boulevard on Industrial Avenue. Underground fiber trunks run north on Industrial Avenue, along Cincinnati Avenue and west along Sunset Avenue West. A fiber line runs west on Athens Avenue past the Thunder Valley Casino then north on Fiddymment Road.

AT&T's Pleasant Grove Wire center is located on Pleasant Grove Boulevard just north of Howsley Road. An old buried copper cable runs west from it on Sunset Boulevard West (Placer County 2017d:2).

Consolidated Communications

Consolidated Communications' (CCI) Placer Corporate CO is located on Placer Corporate Drive in the Sunset Industrial Infill District. It has fiber and copper infrastructure in the surrounding areas and stubbed along the south and southeast boundaries of Placer Ranch. An overhead fiber line (an underbuild to PG&E's 12-kV line) that is believed to belong to CCI runs west on Athens Road, south on Fiddymment Road, and then west on Sunset Boulevard through the SAP area (Placer County 2017d:2).

Sprint

A Sprint fiber line extends north-south through the net SAP area along the east side of Fiddymment Road along the PG&E overhead 12-kV line (Placer County 2017d:3).

PRSP Area

The PRSP area is located within the service areas of AT&T and Wave Broadband for voice and data communication services. In addition, Comcast and Consolidated Communications have facilities immediately adjacent to the PRSP area and have plans to serve the PRSP area. Together, these providers offer voice, video, and data communication services. This includes land-line telephone service, voice over internet protocol telephone service, mobile telephone service, cable television service, and high-speed data line (internet) service.

AT&T Telephone and Broadband Services

AT&T overhead and underground facilities run along Cincinnati Avenue and Nichols Drive from the Stanford exchange, only a few short blocks away. AT&T has copper and fiber infrastructure extending through the residential projects south of PRSP area, including Fiddymment Farms, Diamond Creek, and Crocker Ranch. A controlled environment vault is located just off Woodcreek Oaks Boulevard where it dead ends into the PRSP area, and an AT&T hut sits on Nichols Drive near the PRSP area's eastern edge. Conduit is stubbed north on Fiddymment Road near the PRSP area southern boundary (Placer County 2017e:10).

Wave Broadband System

Wave Broadband has conduit structure with fiber stubbed west at Sunset Boulevard and Cincinnati Avenue, and at Nichols Drive and Duluth Avenue (Placer County 2017e:10).

Comcast Telephone/Broadband System

Comcast has facilities stubbed north at Fiddymment Road, Woodcreek Oaks Boulevard and Grove Hill Way, and facilities stubbed west at Nichols Drive (Placer County 2017e:11).

Consolidated Communications Telephone/Broadband System

Consolidated Communications (CCI) is well positioned to serve the PRSP area. Its Placer Corporate CO is located on Placer Corporate Drive near West Sunset Boulevard, and it has conduit stubbed west on Sunset

Boulevard toward the PRSP area from that CO. It has conduit from its Del Webb CO stubbed to the project's southern boundary on Fiddymment Road, and conduit from its Blue Oaks CO stubbed north to the project's boundary on Woodcreek Oaks Boulevard. Conduits from CCI's Industrial CO are stubbed to the north end of Foothills Boulevard toward the project.

Sprint Fiber System

A Sprint fiber line extends north-south through the PRSP area along the east side of Fiddymment Road along the PG&E overhead 12-kV line (Placer County 2017e:11).

4.15.3 Regulatory Setting

This section provides an overview of laws and regulations related to utilities that are applicable to the project.

FEDERAL

Water

Safe Drinking Water Act

As mandated by the Safe Drinking Water Act (Public Law 93-523), passed in 1974, the U.S. Environmental Protection Agency (EPA) regulates contaminants of concern to domestic water supply. Such contaminants are defined as those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA primary and secondary Maximum Contaminant Levels (MCLs). MCLs and the process for setting these standards are reviewed every 3 years. Amendments to the Safe Drinking Water Act enacted in 1986 established an accelerated schedule for setting drinking water MCLs. EPA has delegated responsibility for California's drinking water program to the Department of Water Resources' Division of Drinking Water (DDW). DDW is accountable to EPA for program implementation and for adoption of standards and regulations that are at least as stringent as those developed by EPA.

Wastewater

National Pollutant Discharge Elimination System Permit

The National Pollutant Discharge Elimination System (NPDES) permit program was established in the Clean Water Act (CWA) to regulate municipal and industrial discharges to surface waters of the U.S. The discharge of wastewater to surface waters is prohibited unless an NPDES permit has been issued to allow that discharge. Each NPDES permit includes the following provisions: effluent and receiving water limits of allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions in discharges not specifically allowed in the permit; provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, and self-monitoring activities; and other regulatory requirements. The Central Valley Regional Water Quality Control Board (CVRWQCB) establishes the quality of the effluent that can be discharged to waterways within the Sacramento area through Waste Discharge Requirements (WDRs) that implement the NPDES permit. WDRs are updated at least every 5 years. A new permit must be issued in the event of a major change or expansion of the facility.

The wastewater discharge from the PGWWTP to Pleasant Grove Creek is regulated under NPDES Permit No. CA0084573/WDR No. R5-2014-0051 issued by the CVRWQCB. To obtain the permit, the City of Roseville submitted a Report of Waste Discharge (RWD) which includes information about the design and operation of the treatment plant (including the ADWF for the plant), influent wastewater characteristics, and removal rates for specific water quality parameters. The NPDES permit and the WDRs are used to identify discharge prohibitions, effluent limitations, and monitoring and reporting requirements.

The discharge prohibitions and limitations in the permit are designed to ensure the maintenance of public health and safety, protection of receiving water resources, and safeguarding of designated beneficial uses of water bodies. Discharge limitations in the PGWWTP NPDES permit define allowable effluent concentrations for a number of parameters including flow, biological oxygen demand (BOD), total suspended solids, ammonia nitrogen, nitrate plus nitrite, total coliform, oil and grease, and pH. Limitations also encompass toxicity to aquatic life. The provisions provide stipulations for the disposal of solid materials, and limitations on impacts to receiving waters. The permit also specifies the sampling, monitoring, and reporting of requirements for compliance with waste discharge regulations. The monitoring program entails sampling influent, effluent, and the receiving water. The provisions of the NPDES permit and the WDR are enforceable through an order issued by the CVRWQCB or civil action. Title 40 of the Code of Federal Regulations (CFR), Part 503 and Part 258, serves as the basis for the CVRWQCB requirements for biosolids disposal by land application or in a landfill. Title 27 of the CCR and standards established by the SWRCB in a General Order for the disposal of biosolids regulate the disposal of biosolids (Water Quality Order No. 2004-12-DWQ).

Title 40 of the CFR, Parts 405 through 471, contains the Federal Categorical Pretreatment Standards for the pretreatment of industrial wastes discharged to publicly owned treatment works such as the PGWWTP.

Stormwater

Refer to Section 4.9.3, “Regulatory Setting,” in Section 4.9, “Hydrology and Water Quality,” for a discussion of the Clean Water Act, including CWA Section 401 and 402 National Pollutant Discharge Elimination System.

STATE

Water

Safe Drinking Water Quality Regulations

The California Department of Public Health (DPH) establishes “primary” and “secondary” Domestic Water Quality Standards for drinking water supplied by public water systems such as the city. The standards are required by state law to meet or exceed standards adopted by EPA. The concentrations of specified constituents are limited to maximum contaminant levels and are established on a constituent basis for bacteriological contaminants (such as coliform), organic chemicals (such as benzene), inorganic chemicals (such as total dissolved solids), and radioactivity (such as gross alpha particle activity). Primary standards are set at levels necessary to protect public health and may not be exceeded. Secondary standards are based on aesthetic criteria, such as taste and odor, and are composed of (1) recommended limits that may be exceeded but are not recommended to be exceeded; (2) upper limits that may be exceeded for a limited duration with prior DPH approval; and (3) short term limits that may not be exceeded. Public water systems also must obtain a domestic water supply permit from DPH that must be amended to reflect changes to the water supply system.

Urban Water Management Planning Act

The Urban Water Management Planning Act (Water Code Sections 10610–10656) requires that every urban water supplier that provides water to 3,000 or more customers or that provides over 3,000 acre-feet of water annually prepare and adopt an urban water management plan. The act states that urban water suppliers should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The act also states that the management of urban water demands and the efficient use of water shall be actively pursued to protect both the people of the state and their water resources.

The PCWA 2015 UWMP, adopted in June 2016, provides verification that future demands, represented by existing general plans within the land use jurisdictions served by PCWA, will not exceed PCWA’s available water supplies (PCWA 2017a). The 2015 UWMP, included potable water demand allocations for buildout of the 1997

Sunset Industrial Area Land Use Plan, which was determined to be 8,859 afy and system demand (customer demand plus 8 percent loss in the system) of 9,656 afy.

Sustainable Groundwater Management Act

The SGMA became law on January 1, 2015 and applies to all groundwater basins in the state (Water Code Section 10720.3). (The SGMA is composed of three separate bills: Senate Bill (SB) 1168, SB 1319, and Assembly Bill (AB) 1739. All three were signed into law by the Governor on September 16, 2014.) By enacting the SGMA, the legislature intended to provide local agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater within their jurisdiction (Water Code Section 10720.1).

Pursuant to the SGMA, any local agency that has water supply, water management, or land use responsibilities within a groundwater basin may elect to be a groundwater sustainability agency (GSA) for that basin (Water Code Section 10723). On May 9, 2017, Placer County passed Resolution 2017-097, approving a Memorandum of Agreement establishing the WPGSA within the North American Sub-basin. The WPGSA also includes PCWA, the City of Roseville, the City of Lincoln, and the Nevada Irrigation District

All GSAs are required to complete and begin implementing a GSP by January 31, 2022. The GSP must outline how the GSA will implement, manage, and measure specific actions for the health and viability of the basin. The California Department of Water Resources (DWR) will evaluate the GSP and provide the GSA with an assessment of the plan and any necessary recommendations within 2 years for initial establishment. The DWR will also review plans as updated by GSAs every 5 years. The WPGSA has been hosting public meetings to provide updates on the drafting process of the GSP.

Water Supply Assessment

PRC Section 21151.9 requires that a water supply assessment (WSA) be prepared for proposed projects as defined in the statute to ensure that long term water supplies are sufficient to meet the project's demands in normal, single dry, and multiple dry years for a period of 20 years. Preparation of a WSA is required if a proposed action meets the statutory definition of a "water-demand project," which means (California Water Code Section 20912(a)):

- ▲ a proposed residential development of more than 500 dwelling units;
- ▲ a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet (sq. ft.) of floor space;
- ▲ a proposed commercial office building employing more than 1,000 persons or having more than 250,000 sq. ft. of floor space;
- ▲ a proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sq. ft. of floor area;
- ▲ a mixed-use project that includes one or more of the projects specified in the above bullets; or
- ▲ a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

Completion of a WSA requires collection of proposed water supply data and information relevant to the project in question, an evaluation of existing/current use, a projection of anticipated demand sufficient to serve the project for a period of at least 20 years, delineation of proposed water supply sources, and an evaluation of water supply sufficiency under normal, single-dry year and multiple-dry year conditions.

A WSA is required to be prepared by the public water system that will serve the project, unless there is no public water system, in which case the WSA is prepared by the CEQA lead agency. A "public water system" is

defined in Section 15155 as a system that provides piped water for human consumption and has at least 3,000 connections.

The County requested that PCWA prepare two separate WSAs: one for the SAP (including the PRSP) and one for the PRSP alone. The WSAs (included in Appendix N) assessed available water supplies and determined that sufficient water is available to meet existing and planned future demand of development at buildout of the SAP and PRSP areas during normal, single-dry, and multiple dry water years (PCWA 2017b:6, 2017c:6). County staff confirmed with PCWA that the recent changes to the PRSP land use plan (see Section 4.15.1) do not require amendment of the WSA because the slight increase in water demand is still below the amount allocated in the WSA (Firenzi, pers. comm., 2018).

Written Verification of Water Supply

Government Code Section 66473.7 requires an affirmative written verification of sufficient water supply for subdivisions of 500 or more units from the applicable public water supplier. Also known as SB 221, this law is designed as a “fail-safe” mechanism to ensure that collaboration on finding the needed water supplies to serve a new large subdivision occurs early in the planning process. This verification must also include documentation of historical water deliveries for the previous 20 years, as well as a description of reasonably foreseeable impacts of the proposed subdivision on the availability of water resources of the region. Government Code Section 66473.7 (b)(1) states as follows:

The legislative body of a city or county or the advisory agency, to the extent that it is authorized by local ordinance to approve, conditionally approve, or disapprove the tentative map, shall include as a condition in any tentative map that includes a subdivision a requirement that a sufficient water supply shall be available. Proof of the availability of a sufficient water supply shall be requested by the subdivision applicant or local agency, at the discretion of the local agency, and shall be based on written verification from the applicable public water system within 90 days of a request.

As a result of the information contained in the written verification, a city or county may attach conditions to assure there is an adequate water supply available to serve the project as part of the tentative map approval process. Preparation of a Water Supply Verification would be a condition of approval of any SAP and PRSP tentative or final tract maps or parcel maps that meet the water demand criteria for such a verification. Additionally, applicants for tentative or final maps would be required to obtain will-serve letters from the water provider.

Water Conservation

On November 10, 2009, Governor Arnold Schwarzenegger signed SBX7-7, which required each urban water supplier to reduce its per-capita water use by 2020, with a statewide goal of achieving a 20-percent reduction by 2020. In response to this requirement, PCWA established a 2020 Urban Water Use Target and an Interim 2015 Urban Water Use Target. These values were determined to be 241 gallons per capita per day (gpcd) and 270 gpcd, respectively, as presented in the 2010 UWMP. PCWA is on track toward compliance with that target by 2020 (PCWA 2016b:4-2, 4-8).

Achieving PCWA’s 2020 conservation target will require the PCWA to continue its ongoing conservation efforts, and perhaps enhance efforts to maintain success experienced in 2014 (though not as drastically as mandated by the state in 2015). New customers will likely further reduce PCWA’s gpcd since the factors described below are designed to further reduce per capita water use.

Indoor Infrastructure

In January 2010, the California Building Standards Commission adopted the statewide mandatory Green Building Standards Code (CALGreen Code) that requires the installation of water-efficient indoor infrastructure for all new projects beginning after January 1, 2011. Most recently updated in 2016, the revised code went into effect on January 1, 2017. CALGreen Code was incorporated as Part 11 into Title 24 of the CCR. The CALGreen Code applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure. The CALGreen Code requires residential and nonresidential water efficiency and conservation measures including water efficient fixtures, urinals, and toilets;

compliance with the California Model Water Efficiency Landscape Ordinance (see below) standards for outdoor water use; and other water-saving measures for new buildings and structures that will reduce the overall potable water use by 20 percent. The 20 percent water savings can be achieved by: (1) installing plumbing fixtures and fittings that meet the 20 percent reduced flow rate specified in the CALGreen Code, or (2) demonstrating a 20 percent reduction in water use from the building “water use baseline.”

California Model Water Efficiency Landscape Ordinance

The Water Conservation in Landscaping Act was enacted in 2006 and was updated in April 2015 under Executive Order B-29-15, issued by Governor Brown. This law requires DWR to update the Model Water Efficient Landscape Ordinance (MWELo), with additional mandated water use reductions added in 2015. The MWELo, as updated, includes measures to replace lawns with drought-tolerant landscaping, increase enforcement, adjust water rate structures, and streamline government response. Placer County is in compliance with this state law. The County adopted a water efficient landscape ordinance, pursuant to state requirements, on October 3, 2017.

The provisions of the MWELo are applicable to new construction with a landscape area greater than 500 sq. ft. requiring a building or landscape permit, plan check, or design review. The MWELo requires use of a dedicated landscape meter for all non-residential irrigated landscapes of 1,000 sq. ft. and residential irrigated landscapes of 5,000 sq. ft., and it requires the use of automatic irrigation controllers utilizing either evapotranspiration or soil-moisture sensor data for irrigation scheduling in all irrigation systems, among other requirements. The MWELo provides a methodology to calculate total water use based upon given plant factors and irrigation efficiencies. Finally, MWELo requires the landscape design plan to delineate hydrozones (based upon plant factor) and then assign a unique valve for each hydrozone (low-, medium-, or high-water use).

The proposed ordinance protects water supply and quality by improving water conservation and promoting sustainable landscapes.

Recycled Water

California Code of Regulations, Title 22

Water reclamation criteria are contained in Title 22, Division 4 of the CCR under the jurisdiction of DWR's DDW as defined in the California Water Code. These criteria specify the level and degree of treatment for recycled water according to the designated use and establish acceptable levels of constituents in the water. Title 22 also sets forth means for assuring reliability in the production of recycled water by requiring an Engineering Report that describes the recycled water quality, treatment process and reliability features, distribution and use of recycled water. These criteria are designed to protect public health based on potential exposure and potential public health effects.

Title 22 regulations specify treatment criteria for five categories of recycled water use: irrigation of food crops; irrigation of fodder, fiber and seed crops; landscape irrigation; recreational impoundments; and groundwater recharge. The most effective uses of recycled water require that it be “adequately disinfected, oxidized, coagulated, clarified, filtered wastewater.” The tertiary treatment process at PGWWTP currently produces wastewater that meets these requirements.

Regional Water Quality Control Board Recycled Water Master Reclamation Permit

The PGWWTP recycled water distribution system operates under a Master Water Reclamation Permit (Order No. 97-147) issued by the Regional Water Quality Control Board (RWQCB). This permit contains specific prohibitions on the use of recycled water by users, and places stringent water quality and treatment and disinfection standards on the recycled water generated at the PGWWTP. Recycled water retailers (e.g., PCWA and the City of Roseville) are required to obtain recycled water permits under the State of California Order WQ 2016-0068-DDW, Water Reclamation Requirements for Recycled Water Use.

Wastewater

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the state must adopt water quality plans, policies, and objectives that will provide protection to the state's waters for the use and enjoyment of the people of California. In California, the SWRCB has authority and responsibility for establishing policy for water quality control issues for the state. Regional authority for planning, permitting, and enforcement is delegated to the nine Regional Water Quality Control Boards (RWQCBs). The Porter-Cologne Act authorizes the SWRCB and RWQCB to issue NPDES permits containing WDRs, and to enforce these permits. SWRCB and RWQCB regulations implementing the Porter-Cologne Act are in Title 27 of the CCR.

General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems

The General Waste Discharge Requirements for Sanitary Sewer Systems (SWRCB Order No 2006-0003-DWQ) applies to sanitary sewer systems that are greater than 1 mile long and collect or convey untreated or partially treated wastewater to a publicly owned treatment facility. The goal of Order No. 2006-0003 is to provide a consistent statewide approach for reducing Sanitary Sewer Overflows (SSOs), accidental releases of untreated or partially treated wastewater from sanitary sewer systems, by requiring that:

1. In the event of an SSO, all feasible steps be taken to control the released volume and prevent untreated wastewater from entering storm drains, creeks, etc.
2. If an SSO occurs, it must be reported to the SWRCB using an online reporting system developed by the SWRCB.
3. All publicly owned collection system agencies with more than 1 mile of sewer pipe in the state must develop a Sewer System Management Plan (SSMP), which must be updated every 5 years.

The SSMP for the CSA 28, Zone 2A3 was approved in 2009 and updated in 2014.

Stormwater

Refer to Section 4.9.3, "Regulatory Setting," in Section 4.9, "Hydrology and Water Quality," for a discussion of the requirements of NPDES permits as they relate to stormwater discharge, which includes design and operational best management practices (BMPs) for drainage facility design. Section 4.9 also describes a policy of the RWQCBs to promote low-impact development (LID) principles in stormwater management.

Solid Waste

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of in landfills, the state legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties were required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995 and 50 percent by January 1, 2000. Solid waste plans are required to explain how each city's AB 939 plan will be integrated with the County plan. In order of priority, the plans must promote source reduction, recycling and composting, and environmentally safe transformation and land disposal. SB 1016 (2007) amended portions of the California Integrated Waste Management Act. The Act allows the California Integrated Waste Management Board (CIWMB) to use per capita disposal as an indicator in evaluating compliance with the requirements of AB 939. Jurisdictions track and report their per capita disposal rates to CalRecycle. Per capita disposal rates for unincorporated Placer County are below the target disposal rates established by AB 939 (1989; CalRecycle 2017a).

In 2011, AB 341 modified the California Integrated Waste Management Act and directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. The resulting Mandatory Commercial Recycling Regulation (2012) requires that on and after July 1, 2012, certain businesses that generate 4

cubic yards or more of commercial solid waste per week shall arrange for recycling services. To comply with this requirement, businesses may either separate recyclables and self-haul them or subscribe to a recycling service that includes mixed waste processing. WPWMA's facility includes a Materials Recovery Facility (MRF), which is a mixed waste processing facility. This facility receives and sorts waste to recover recyclable materials, assisting Placer County in meeting the state's waste reduction goal (WPWMA 2017).

AB 341 (2011) also established a statewide recycling goal of 75 percent; the 50 percent disposal reduction mandate still applies for cities and counties under AB 939 (1989). This law also requires certain businesses to recycle. To comply with this requirement, businesses may separate their recyclables and self-haul them to a recycling facility, recycle on-site, or subscribe to a mixed waste process service that diverts recyclables. The WPWMA MRF receives and sorts commercial waste to recover recyclable materials and accepts source-separated recyclables. Recology, under contract with the County, also provides commercial recycling collection for some material types.

AB 1826 (2014) requires certain business, beginning in 2016, to recycle their organic waste. The law also requires jurisdictions to develop and implement an organics recycling program. To comply with this requirement, businesses may separate their organic waste and self-haul it to an organics recycling facility, recycle on-site, or subscribe to a service that recycles organic waste. The WPWMA MRF receives and sorts commercial waste to recover organic materials, such as green waste and wood waste, and accepts separated green waste and wood waste. Recology, under contract with the County, offers food waste recycling collection.

SB 605 (2014) directed the California Air Resources Board (CARB) to develop a comprehensive Short-Lived Climate Pollutant (SLCP) strategy in coordination with CalRecycle and other state and local agencies to reduce statewide emissions of SLCPs. SB 1383 (2016) directed the CARB to approve and start implementing the SLCP strategy by 2018. Since methane is a SLCP produced from the decomposition of organic waste in landfills, the bill established targets to achieve a statewide 50-percent reduction in the level of the disposal of organic waste from the 2014 level by 2020 and 75-percent reduction in the level of the disposal of organic waste from the 2014 level by 2025. The bill required CalRecycle, in coordination with the Air Resource Board, to adopt regulations to achieve the organic waste reduction targets. The Air Resources Board approved a Short-Lived Climate Pollutant Strategy in 2017. CalRecycle is currently developing regulations.

California Building Standards Code (Title 24)

Where a local jurisdiction has not adopted a more stringent construction and demolition (C&D) ordinance, construction activities are required to implement Section 5.408 of the CALGreen Code. Under Section 5.408, construction activities are required to recycle and/or salvage for reuse a minimum of 65 percent of their nonhazardous C&D waste as of January 1, 2017. Applicable projects are required to prepare and implement a Construction Waste Management Plan, which is submitted to the local jurisdiction prior to issuance of building permits. Applicable projects include all newly constructed residential buildings or structures, existing residential buildings or structures with additions/alterations, all newly constructed nonresidential buildings or structures, existing nonresidential buildings with additions of 1,000 sq. ft. and larger and existing nonresidential alterations when permit valuation or estimated construction cost of alteration is \$200,000 and greater. The WPWMA MRF accepts mixed and separated construction debris for recycling. Contractors may also separate and self-haul debris to a recycler of their choice. Recology, under contract with the County, provides debris box collection services to aid in the separation of recyclable debris.

Electricity and Natural Gas

California Code of Regulations. Energy Efficiency Standards

Energy consumption in new buildings in California is regulated by State Building Energy Efficiency Standards (CALGreen) contained in the CCR, Title 24, Part 2, Chapter 2-53. Title 24 applies to all new construction of both residential and nonresidential buildings, and regulates energy consumed for heating, cooling, ventilation, water heating, and lighting. The 2016 Building Energy Efficiency Standards have improved

efficiency requirements from previous codes and the updated standards are expected to result in a statewide consumption reduction (CEC 2015).

PG&E Gas Rules

PG&E's Gas Rules 15 and 16 provide policies and procedures for the extension of gas services and distribution mains necessary to furnish permanent services to customers. It outlines responsibilities for installation and extension of gas lines, as well as financial contributions by project applicants.

LOCAL

Water

Refer to Section 4.9.3, "Regulatory Setting," in Section 4.9, "Hydrology and Water Quality," for a discussion of the Western Placer County Groundwater Management Plan.

Placer County Water Agency

PCWA's policies, improvement standards, technical provisions, and standard drawings are applicable to the SAP and PRSP water supply. PCWA's General Design Criteria set forth specific requirements for engineering design of water system improvements that are intended to provide a water system that will dependably and safely convey the required amount of high-quality water throughout the distribution system at the least cost.

PCWA's improvement standards require that the design of all PCWA facilities comply with the following:

1. laws and standards of the State of California Department of Public Health pertaining to domestic water supply (now under DWR's Division of Drinking Water);
2. Title 17, Chapter V, Sections 7583-7622 of the California Administrative Code (pertaining to cross-connections); and
3. applicable ordinances, rules, and regulations of all other local agencies.

Water Forum Agreement

An important component of water supplies within the Sacramento region is the Water Forum Agreement (WFA) (adopted in 2000, updated in 2015). The WFA is an agreement between multiple stakeholders in the Sacramento metropolitan area and lower foothill regions that provides water quality and reliability for all participants. The WFA's co-equal goals are to (1) provide a reliable and safe supply for the region's economic health and planned development through the year 2030, and (2) preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River.

From these co-equal goals, the Water Forum signatories determined seven major elements that must be implemented during the next 30 years if the agreement is to be successful. As one of the signatories, PCWA has agreed to specific water management actions under a range of hydrologic events that are linked primarily to the American River Basin and Folsom Reservoir. The water management actions impact the operation of PCWA's Middle Fork Project reservoirs as replacement water to benefit the Lower American River. Pursuant to the Water Forum provisions, PCWA has also developed best management practices that are consistent with the Demand Management Measures in the 2015 UWMP.

Placer County General Plan

GOAL 4.A: To ensure the timely development of public facilities and the maintenance of specified service levels for these facilities.

- ▲ **Policy 4.A.1.** Where new development requires the construction of new public facilities, the new development shall fund its fair share of the construction. The County shall require dedication of land within newly developing areas for public facilities, where necessary.

- ▲ **Policy 4.A.2.** The County shall ensure through the development review process that adequate public facilities and services are available to serve new development. The County shall not approve new development where existing facilities are inadequate unless the following conditions are met:
 - a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means); and
 - b. The facilities improvements are consistent with applicable facility plans approved by the County or with agency plans where the County is a participant.

GOAL 4.C: To ensure the availability of an adequate and safe water supply and the maintenance of high quality water in water bodies and aquifers used as sources of domestic supply.

- ▲ **Policy 4.C.1.** The County shall require proponents of new development to demonstrate the availability of a long-term, reliable water supply. The County shall require written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy. Where the County will approve groundwater as the domestic water source, test wells, appropriate testing, and/or report(s) from qualified professionals will be required substantiating the long-term availability of suitable groundwater.
- ▲ **Policy 4.C.2.** The County shall approve new development based on the following guidelines for water supply:
 - a. Urban and suburban development should rely on public water systems using surface supply.
 - b. Rural communities should rely on public water systems. In cases where parcels are larger than those defined as suburban and no public water system exists or can be extended to the property, individual wells may be permitted.
 - c. Agricultural areas should rely on public water systems where available, otherwise individual water wells are acceptable.
- ▲ **Policy 4.C.3.** The County shall encourage water purveyors to require that all new water services be metered.
- ▲ **Policy 4.C.4.** The County shall require that water supplies serving new development meet state water quality standards.
- ▲ **Policy 4.C.6.** The County shall promote efficient water use and reduced water demand by:
 - a. Requiring water-conserving design and equipment in new construction;
 - b. Encouraging water-conserving landscaping and other conservation measures;
 - c. Encouraging retrofitting existing development with water-conserving devices; and,
 - d. Encouraging water-conserving agricultural irrigation practices.
- ▲ **Policy 4.C.9.** The County shall support opportunities for groundwater users in problem areas to convert to surface water supplies.
- ▲ **Policy 4.C.11.** The County shall protect the watersheds of all bodies of water associated with the storage and delivery of domestic water by limiting grading, construction of impervious surfaces, application of fertilizers, and development of septic systems within these watersheds.
- ▲ **Policy 4.C.13.** In implementation of groundwater use policies, the County will recognize the significant differences between groundwater found in bedrock or 'hardrock' formations of the foothill/mountain

region and those groundwater found in the alluvial aquifers of the valley. The County should make distinctions between these water resources in its actions.

Recycled Water

Placer County General Plan

In addition to Goal 4.A and Policies 4.A.1 and 4.A.2, described above, the following policies are also applicable to the use of recycled water in the SAP area.

GOAL 4.C: To ensure the availability of an adequate and safe water supply and the maintenance of high quality water in water bodies and aquifers used as sources of domestic supply.

- ▲ **Policy 4.C.7.** The County shall promote the use of reclaimed wastewater to offset the demand for new water supplies.

Wastewater

South Placer Wastewater Authority

The SPWA is a joint powers authority formed to fund regional wastewater and recycled water facilities in southwestern Placer County for three partner agencies (the “participants”): City of Roseville, SPMUD, and Placer County. The regional facilities funded by the SPWA include trunk sewer lines and two wastewater treatment plants (WWTPs). All three participants transmit wastewater to these WWTPs. SPWA monitors compliance with funding and operational criteria established in the Funding and Operations Agreements among the participants.

The Funding Agreement outlines each participant’s responsibility for debt service of SPWA’s bonds and funding of regional facilities, and allocates the participants’ use of wastewater capacity at the regional wastewater treatment facilities. The Operations Agreement documents maintenance and operations responsibilities for regional facilities (primarily the WWTPs) and establishes the city as the owner and operator of the two WWTPs as well as regional infrastructure on behalf of the participants.

Placer County Code

Chapter 13, Article 13.12 (general regulations) and Article 13.14 (Industrial Pretreatment Ordinance for wastewater treatment systems) of the Placer County Code include requirements related to wastewater for preventing illicit discharges, proper design and construction, ensuring access for maintenance/repairs, limiting fats, oils, and grease discharges, and enforcement.

Placer County Land Development Manual

The Placer County Land Development Manual (LDM) establishes minimum standards for the design and construction of development improvements. These requirements apply to the design and construction of development improvements to be dedicated to the public and/or accepted by the County for operation and maintenance as well as improvements constructed in accordance with an agreement entered into between the County and a developer.

City of Roseville Municipal Code

Similar to Placer County, the City of Roseville has sewer regulations in its city code. Chapter 14.12 of the city code covers regulations of sewer use, similar to the Placer County Code Article 13.12.010 through 13.12.230. Chapter 14.16 covers sewer rates and charges, similar to the County Code, Article 13.12.240 through 13.12.410. Chapter 14.26 covers their Industrial Wastewater Regulations.

City of Roseville Design and Construction Standards

Section 9, Sanitary Sewer Design, of the city’s Design and Construction Standards provides criteria for design of sewer systems (City of Roseville 2017b). Compliance with these standards reduces impacts

related to wastewater conveyance by ensuring that wastewater collection and conveyance facilities are properly sized to convey the flows from development associated with the project.

Placer County General Plan

In addition to Goal 4.A and Policies 4.A.1 and 4.A.2, described above, the following policies are also applicable to wastewater services in the SAP area.

GOAL 4.D: The County shall require wastewater conveyance and treatment facilities that are sufficient to serve the Placer County General Plan proposed density of residential, commercial, and public/institutional uses in a way which protects the public and environment from adverse water quality or health impacts.

- ▲ **Policy 4.D.1.** The County shall limit the expansion of urban communities to areas where community and/or public wastewater treatment systems can be provided.
- ▲ **Policy 4.D.2.** The County shall require developments outside of an existing sewer service area and needing new connections to public conveyance and treatment facilities to be annexed into the sewer service area providing service.
- ▲ **Policy 4.D.3.** The County shall require proponents of new development within a sewer service area to provide written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy.
- ▲ **Policy 4.D.4.** The County shall require developments needing new connections to construct wastewater conveyance facilities which are sized and located to provide sewer service based on permitted densities and applicable sewer shed area. Wastewater conveyance systems shall be designed for gravity flow. Where gravity conveyance systems are not feasible, the agency providing service may approve pumping service where a site-specific engineering analysis demonstrates the long-term cost effectiveness of pumped facilities.
- ▲ **Policy 4.D.5.** The County shall require developments needing new connections to pay their fair share of the cost for future public wastewater facilities which support development based on the Placer County General Plan. The fair share will be based on the demand for these facilities attributable to the new development.
- ▲ **Policy 4.D.6.** The County shall discourage extension of sewer service outside of city spheres of influence and community plan areas, except in limited circumstances to resolve a public health hazard resulting from existing development, or where there is a substantial overriding public benefit.
- ▲ **Policy 4.D.7.** The County shall promote efficient water use and reduced wastewater system demand by:
 - a. Requiring water-conserving design and equipment in new construction as required in California law (AB 1881);
 - b. Encouraging retrofitting with water-conserving devices; and
 - c. Designing wastewater systems to minimize inflow and infiltration.
- ▲ **Policy 4.D.8.** The County shall encourage pretreatment of commercial and industrial wastes prior to their entering community wastewater conveyance and treatment facilities.
- ▲ **Policy 4.D.9.** The County shall promote functional consolidation of wastewater facilities.
- ▲ **Policy 4.D.10.** The County shall require all public wastewater facilities to be designed and built to the current standards of the agency providing service.

Stormwater

Refer to Section 4.9.3, “Regulatory Setting,” in Section 4.9, “Hydrology and Water Quality,” for a discussion of West Placer County Storm Water Quality Design Manual and Placer County NPDES Municipal Stormwater Permit.

Placer County Code

Specific ordinances relevant to stormwater infrastructure include the Stormwater Ordinance (Chapter 8, Article 8.28 of the Placer County Code) and the Flood Damage and Prevention Ordinance (Chapter 15, Article 15.52 of the Placer County Code). The Stormwater Ordinance includes discharge prohibitions, requirements for BMP installation and reduction of stormwater flows, and enforcement mechanisms.

Placer County General Plan

In addition to Goal 4.A and Policies 4.A.1 and 4.A.2, described above, the following policies are also applicable to stormwater in the SAP area.

GOAL 4.E: To manage rainwater and stormwater at the source in a sustainable manner that least inconveniences the public, reduces potential water-related damage, augments water supply, mitigates storm water pollution, and enhances the environment.

- ▲ **Policy 4.E.1.** The County shall encourage the use of natural stormwater drainage systems to preserve and enhance natural features.
- ▲ **Policy 4.E.2.** The County shall support efforts to acquire land or obtain easements for drainage and other public uses of floodplains where it is desirable to maintain drainage channels in a natural state.
- ▲ **Policy 4.E.3.** The County shall consider using stormwater of adequate quality to replenish local groundwater basins, restore wetlands and riparian habitat, and irrigate agricultural lands.
- ▲ **Policy 4.E.4.** The County shall ensure that new storm drainage systems are designed in conformance with the Placer County Flood Control and Water Conservation District’s Stormwater Management Manual and the County Land Development Manual.
- ▲ **Policy 4.E.5.** The County shall continue to implement and enforce its Grading, Erosion and Sediment Control Ordinance and Flood Damage Prevention Ordinance.
- ▲ **Policy 4.E.7.** The County shall prohibit the use of underground storm drain systems in rural and agricultural areas, unless no other feasible alternatives are available for conveyance of stormwater from new development or when necessary to mitigate flood hazards.
- ▲ **Policy 4.E.8.** The County shall consider recreational opportunities and aesthetics in the design of stormwater ponds and conveyance facilities.
- ▲ **Policy 4.E.9.** The County shall encourage good soil conservation practices in agricultural and urban areas and carefully examine the impact of proposed urban developments with regard to drainage courses.
- ▲ **Policy 4.E.10.** The County shall strive to improve the quality of runoff from urban and suburban development through use of appropriate site design measures including, but not limited to vegetated swales, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, rooftop and impervious area disconnection, porous pavement, and other best management practices (BMPs).
- ▲ **Policy 4.E.11.** The County shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures should take into consideration impacts on adjoining lands in the unincorporated area and on properties in jurisdictions within and immediately adjacent to Placer County.

- ▲ **Policy 4.E.12.** The County shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions.
- ▲ **Policy 4.E.13.** The County shall require that new development conforms with the applicable programs, policies, recommendations, and plans of the Placer County Flood Control and Water Conservation District.
- ▲ **Policy 4.E.14.** The County shall require projects that have significant impacts on the quantity and quality of surface water runoff to allocate land as necessary for the purpose of detaining post-project flows, evapotranspiring, infiltrating, harvesting/using, and biotreating stormwater, and/or for the incorporation of mitigation measures for water quality impacts related to urban runoff.
- ▲ **Policy 4.E.15.** The County shall require that new development in primarily urban development areas incorporate low impact development measures to reduce the amount of runoff, to the maximum extent practicable, for which retention and treatment is required.
- ▲ **Policy 4.E.16.** The County shall identify and coordinate mitigation measures with responsible agencies for the control of storm drainage systems, monitoring of discharges, and implementation of measures to control pollutant loads in urban storm water runoff (e.g., California Regional Water Quality Control Board, Placer County Environmental Health Division, Placer County Department of Public Works and Facilities, CDRA Engineering and Surveying Division, Placer County Flood Control and Water Conservation District).
- ▲ **Policy 4.E.20.** The County shall continue to implement and enforce its Stormwater Quality Ordinance.

Solid Waste

Placer County General Plan

In addition to Goal 4.A and Policies 4.A.1 and 4.A.2, described above, the following policies are also applicable to solid waste services in the SAP area.

GOAL 4.G: To ensure the safe and efficient disposal or recycling of solid waste generated in Placer County.

- ▲ **Policy 4.G.1.** The County shall require all new urban/suburban development, excluding rural development, to include provisions for solid waste collection.
- ▲ **Policy 4.G.2.** The County shall promote maximum use of solid waste source reduction, recycling, composting, and environmentally-safe transformation of wastes.
- ▲ **Policy 4.G.3.** The County shall require discretionary permit approval for all new waste disposal facilities.
- ▲ **Policy 4.G.4.** The County shall ensure that solid waste disposal facilities do not contaminate surface or groundwater in violation of state standards.
- ▲ **Policy 4.G.5.** The County shall promote the siting of new solid waste collection and transfer facilities in locations as close as practical to the areas they serve.
- ▲ **Policy 4.G.6.** The County shall ensure that landfills and transfer stations are buffered from incompatible development.
- ▲ **Policy 4.G.7.** The County shall require that all new development complies with applicable provisions of the Placer County Integrated Waste Management Plan.
- ▲ **Policy 4.G.8.** The County shall encourage the development of regional and community-based recycling facilities in heavy commercial and industrial areas.

- ▲ **Policy 4.G.9.** The County shall encourage businesses to use recycled products in their manufacturing processes and consumers to buy recycled products.
- ▲ **Policy 4.G.10.** The County shall encourage the establishment and implementation of a recycling market development zone in Placer County.
- ▲ **Policy 4.G.11.** When considering land use changes in the vicinity of a landfill operation, the County shall consider the landfill as the dominant land use in the area. In order to protect these facilities from incompatible encroachment, new residential land uses shall be separated from the property lines of active and future landfill sites by a buffer of one mile. Such buffers do not apply to closed landfills or solid waste transfer stations. Other uses will be required to provide buffers as described in Table 1-5. The intent of this policy is to prohibit the creation of new parcels for residential use within one mile of the landfill; not to prohibit construction of a residence on an existing legal building site within this area.
- ▲ **Policy 4.G.12.** The County shall ensure that solid waste collection service is available to all residential, commercial, and industrial areas within the current boundaries of Franchise Areas.

Electricity and Natural Gas

Placer County General Plan

In addition to Goal 4.A and Policies 4.A.1 and 4.A.2, described above, the following policy is also applicable to electricity and natural gas services in the SAP area.

- ▲ **Policy 4.A.4.** The County shall require proposed new development in identified underground conversion districts and along scenic corridors to underground utility lines on and adjacent to the site of proposed development or, when this is infeasible, to contribute funding for future undergrounding.

4.15.4 Analysis, Impacts, and Mitigation

STANDARDS OF SIGNIFICANCE

Based on the Placer County CEQA Checklist and Appendix G of the State CEQA Guidelines, implementing the project would result in a potentially significant impact regarding utilities and infrastructure if it would:

- ▲ require new or expanded water entitlements because of insufficient water supplies available to serve the project from existing entitlements and resources;
- ▲ require or result in the construction of new water delivery, collection, or treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- ▲ exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- ▲ require or result in the construction of new wastewater delivery or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- ▲ require sewer service that may not be available by the area's wastewater treatment provider;
- ▲ require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- ▲ be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs in compliance with all applicable laws;

- ▲ require new or expanded energy facilities that could cause significant environmental effects; or
- ▲ require new or expanded communications infrastructure that could cause significant effects.

METHODS AND APPROACH

Water

The impact analysis for water supply, including sufficiency of available water supplies and existing and proposed infrastructure relies on the data, conclusions, and recommendations identified in the following documents:

- ▲ *SB 610 Request for the Sunset Area Plan Project*, prepared by PCWA, November 3, 2017 (PCWA 2017d);
- ▲ *SB 610 Request for the Placer Ranch Specific Plan Project*, prepared by PCWA, November 3, 2017 (PCWA 2017e);
- ▲ Original WSA for Placer Ranch (PCWA 2006);
- ▲ *Sunset Area Water, Wastewater and Recycled Water Technical Report*, prepared by Psomas for Placer County, October 19, 2017;
- ▲ *Placer Ranch Potable Water Master Plan*, prepared by MacKay & Somps and HydroScience Engineers for Placer County, July 18, 2017; and
- ▲ *Addendum #1 to the Potable Water, Recycled Water, and Water Conservation Master Plans for the Placer Ranch Specific Plan*, prepared by HydroScience Engineers for Placer County, October 29, 2018.

Peaking Factors

Average day potable water demands were calculated based on either the number of dwelling units in residential parcels, or the total acreage for that type of land use. Maximum day demands (MDD) for potable water were calculated by applying a peaking factor to the average day demand. A peaking factor of 2.1 was applied to the Placer Ranch average day demands.

The MDD is used to size potable water infrastructure such as tanks and reservoirs to meet operational, and fire flow requirements. There must be adequate storage to convey water to Placer Ranch during fire flow events and when potable water use exceeds the MDD.

The peak hour demand (PHD) represents the highest flow rate Placer Ranch will require at any time throughout the day. This demand is used to size transmission mainlines. Transmission mainlines must be sized to minimize pressure and head loss while maintaining adequate water transport during peak hour conditions. This PHD was calculated by applying a peaking factor of 1.6 to the MDD.

Wastewater

Psomas was contracted by Placer County to prepare the *Sunset Area Water, Wastewater and Recycled Water Technical Report*, which estimated wastewater flows for buildout of the SAP area and recommended infrastructure requirements to provide wastewater services to the SAP area (Placer County 2017a; see Appendix B). MacKay & Somps was contracted by Placer County to prepare the *Placer Ranch Specific Plan Sanitary Sewer Master Plan* that includes a preliminary design and analysis for the sanitary sewer infrastructure to serve buildout of the PRSP area and the SAP area (Placer County 2017f; see Appendix H). An addendum to the *Placer Ranch Specific Plan Sanitary Sewer Master Plan* evaluated the changes in wastewater generation totals as a result of land use refinements made to the PRSP in early 2018 described in the Introduction above (Placer County 2018a).

Wastewater flow factors used to estimate wastewater generated by buildout of the SAP and PRSP areas are consistent with flow factors used for similar land use categories identified in the Systems Evaluation (see Tables 4.15-11 and 4.15-12).

For wastewater collection, peak wet weather flow (PWWF) estimates were used to appropriately size and design the required on-site and off-site infrastructure to service the SAP and PRSP areas, including pipelines and lift stations. The analysis of wastewater treatment capacity was determined using ADWF estimates for the SAP and PRSP areas.

For off-site wastewater collection facilities, the amount of wastewater that would be generated by development in the SAP and PRSP areas was calculated and compared to the capacity of the existing wastewater collection facilities, consisting of a 30-inch sewer line at Fiddymont Road and Angus Road and a 21-inch sewer line at Cincinnati Avenue and at Industrial Avenue, that convey wastewater to the Pleasant Grove sewer trunk line that flows to the PGWWTP. For wastewater treatment, the demand for treatment was calculated for the SAP and PRSP areas and compared to the capacity of the PGWWTP as well as to demand estimates included in the Systems Evaluation.

Stormwater

Psomas prepared a storm drainage technical report for the SAP, which documented the existing hydrologic characteristics of the SAP area and modeled the proposed improvements to determine the changes in the extent of impervious surfaces, infiltration rates, and the required retention volume (Placer County 2017g). The report also developed conceptual storm drain infrastructure sizing. Analysis of the environmental impacts associated with implementation of the SAP and PRSP includes evaluation of the anticipated changes in stormwater runoff and availability of retention areas. Similar to the report prepared for the SAP, MacKay & Soms prepared a storm drainage master plan for the PRSP (Placer County 2017h). An addendum to the storm drainage master plan for the PRSP evaluated the changes in storm drainage flows as a result of land use refinements made to the PRSP in early 2018 described in the Introduction above (Placer County 2018b). Additionally, Civil Engineering Solutions (CES) prepared technical memoranda regarding Pleasant Grove Creek Regional Volumetric Mitigation (CES 2017a), Placer Ranch on-site mitigation (CES 2017b), Lakeview Farms (CES 2017c), and Scilacci Farms (CES 2017d).

Solid Waste

Evaluation of potential solid waste impacts is based on the estimated solid waste generation of development in the SAP area and evaluation of existing and future capacity at landfills serving the project area. In determining the level of significance, the analysis assumes that the SAP, including the PRSP, and future developments implemented through these planning documents would comply with relevant federal, state, and local ordinances and regulations.

Electricity, Natural Gas, and Communication Services

Capitol Utility Specialists prepared technical dry utilities studies for the SAP and PRSP (Placer County 2017a, 2017b, 2018c). The studies evaluated existing utility capacity and infrastructure, calculated utility demands for the SAP and PRSP areas, and discussed the availability of the utility providers to provide service to the SAP and PRSP areas. The impact analysis considers the potential for environmental impacts related to providing utility service to the SAP and PRSP areas.

PROPOSED SUNSET AREA PLAN GOALS, AND POLICIES

The SAP includes the following goals and policies for development and maintenance of the utility services required to support Sunset Area employers, businesses, residents, and visitors.

GOAL PFS-1: Timing and Maintenance of Facilities and Services. To ensure the timely development of public facilities and the maintenance of specified service levels for these facilities for the Sunset Area.

- ▲ **Policy PFS-1.1: Facility Construction.** The County shall require new development to either construct new facilities, upgrade existing facilities, or pay its fair share of upgrading existing facilities.
- ▲ **Policy PFS-1.3: Facilities and Services for New Development.** The County shall ensure, through the development review process, that adequate public facilities and services are available to serve new development. The County shall not approve new development where existing facilities are inadequate unless the following conditions are met:
 - a. The applicant can demonstrate that all necessary public facilities will be installed concurrent with the construction of the project, or such facilities are adequately financed (through fees or other means); and
 - b. The project's improvements are consistent with applicable facility plans approved by the County or with agency plans where the County is a participant.
- ▲ **Policy PFS-1.4: Infrastructure Construction Coordination.** The County shall support efforts to provide a process for notification and information about all major infrastructure and construction projects, including transportation projects and new residential subdivisions, to a shared data base so utility providers have the opportunity to coordinate infrastructure deployment with projects.
- ▲ **Policy PFS-1.5: Maintenance of Quality and Service Levels.** The County shall routinely review the condition of public facilities and the status of public services to ensure that they are consistent with established quality standards and service levels.

GOAL PFS-2: Facility Funding. To ensure that adopted facility and service standards are achieved and maintained through the use of equitable funding methods.

- ▲ **Policy PFS-2.1 Fair Share Funding of Existing Facilities.** The County shall require that new development pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., a large percentage of a project's workforce is paid at primary wage earner levels of income), and when alternative sources of funding have been identified to offset foregone revenues.
- ▲ **Policy PFS-2.2: Funding Upgraded or New Facilities.** The County shall require that new development pay the cost of upgrading existing public facilities or construct new facilities that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., a large percentage of a project's workforce is paid at primary wage earner levels of income) and when alternative sources of funding have been identified to offset foregone revenues.
- ▲ **Policy PFS-2.3: Funding Public Services.** The County shall require, to the extent legally possible, that new development pay the cost of providing public services that are needed to serve the new development; exceptions may be made when new development generates significant public benefits and when alternative sources of funding have been identified to offset foregone revenues.
- ▲ **Policy PFS-2.4: Broad-based Funding Sources.** The County shall seek broad-based funding sources for public facilities and services that benefit current and future businesses in the Sunset Area.
- ▲ **Policy PFS-2.5: Tax-Exempt Bonds as Funding Source.** The County shall consider the use of public tax-exempt bonds to finance fees and other initial costs associated with new development. Such bonds could be applied to traffic fees, fire protection impact fees, capital facilities impact fees, and other fees used to finance capital facility construction which is typically charged prior to, or at issuance of, building or other construction permits.

- ▲ **Policy PFS-2.6: Fee Impact Considerations.** When adopting, amending, and imposing fees and developer exactions, the County shall consider the effects of such fees and exactions on project economics and the County's development goals. This consideration shall recognize any increase in the value of property resulting from County-granted entitlements.
- ▲ **Policy PFS-2.7: Fiscal Impact Analysis for Major Land Development Projects.** The County shall require the preparation of a fiscal impact analysis for all major land development projects. The analysis will examine the fiscal impacts on the County and other service providers which result from large-scale development. A major project is a residential project with 100 or more dwelling units or mixed use projects, including specific plans with 100 or more dwelling units and 10 acre or more of non-residential land uses (exclusive of open space/greenbelt).
- ▲ **Policy PFS-2.8 Commercial/Office/Industrial Economic/Market/Fiscal Analysis.** The County may require the preparation of an economic, market, or fiscal impact analysis for commercial, professional office, or industrial development on 10 or more acres of land. The determination to prepare an analysis will be based upon the potential for a project to impact County facilities and services or cause an economic impact in the Sunset Area.
- ▲ **Policy PFS-2.9: Consultation with Neighboring Cities.** The County shall consult with the cities of Roseville, Rocklin and Lincoln to require new development within city limits to mitigate impacts on facilities and services within the Sunset Area.

GOAL PFS-3: Water Supply. To provide a long-term reliable source of treated surface water to support urban development, agricultural production, and natural resource conservation in the Sunset Area.

- ▲ **Policy PFS-3.1: Water Supply Certification.** The County shall require applicants for new development approval to demonstrate the availability of a long-term, reliable surface water supply for all urban uses as well as recycled water, where available, as an optional water supply. The County shall require written certification from the water service provider that a long-term water supply is or will be available for the new development prior to occupancy.
- ▲ **Policy PFS-3.2: Efficiency and Demand Reduction.** The County shall promote efficient water use and reduced water demand by:

 - a. Requiring water-conserving design and equipment in new construction;
 - b. Requiring water-conserving landscaping and other conservation measures consistent with the Water Efficient Landscaping Ordinance, as well as the use of recycled water;
 - c. Requiring the retrofitting existing development with water-conserving devices as a condition of discretionary approval for any change of use or structures
 - d. Encouraging retrofitting existing development with water-conserving devices; and
 - e. Encouraging water-conserving agricultural irrigation practices.
- ▲ **Policy PFS-3.3: Recycled Water.** The County shall require the use of recycled water and the development of associated infrastructure where feasible to offset the demand for new water supplies.

GOAL PFS-4: Wastewater Collection, Treatment, and Disposal. To ensure adequate wastewater collection and treatment and the safe disposal of liquid waste.

- ▲ **Policy PFS-4.1: Wastewater Management.** The County shall coordinate with the Cities of Lincoln and Roseville to ensure efficient and effective management of wastewater. This includes ensuring that development projects proposed in the Sunset Area have access to sufficient capacity at either the

Lincoln Wastewater Treatment and Reclamation Facility or the City of Roseville Pleasant Grove Wastewater Treatment Plant.

- ▲ **Policy PFS-4.2: Efficient Water Use and Wastewater Reduction.** The County shall promote efficient water use and reduced wastewater system demand by:
 - a. Requiring water-conserving design and equipment in new construction;
 - b. Encouraging retrofitting with water-conserving devices; and
 - c. Designing wastewater systems to minimize inflow and infiltration to the extent economically feasible.
- ▲ **Policy PFS-4.3: Pretreatment of Commercial and Industrial Wastes.** The County shall require to the extent possible pretreatment of commercial and industrial wastes prior to their entering community collection and treatment systems.
- ▲ **Policy PFS-4.4: Recycled Water Irrigation Uses.** The County shall require the use of recycled water, wherever feasible, for irrigation, including commercial, industrial, and private landscaping, landscaping within public rights-of-way (e.g., medians), and agricultural lands.

GOAL PFS-5: Stormwater Drainage. To manage stormwater as a valuable resource that can recharge groundwater supplies, protect and enhance natural habitat and biodiversity, add value to new development or redevelopment projects, as well as reduce potential for flood water-related damage to structures or infrastructure.

- ▲ **Policy PFS-5.1: Natural Stormwater Drainage Systems.** The County shall encourage the use of natural stormwater drainage systems to preserve and enhance natural features. At the earliest planning stages, applicants for new development shall assess and evaluate how site conditions such as soils, vegetation, and flow paths will influence the placement of buildings and paved surfaces with a goal of incorporating the capture and treatment of runoff as part of the project design.
- ▲ **Policy PFS-5.4: Storm Drainage System Design.** The County shall ensure that storm drainage systems in new development are designed in conformance with the Placer County Flood Control and Water Conservation District's Stormwater Management Manual and the County Land Development Manual. The County shall require submission of a preliminary drainage report, prepared by a professional civil engineer registered in the State of California, as part of the discretionary development project review. The County shall further require that new development conforms with the applicable programs, policies, recommendations, and plans of the Placer County Flood Control and Water Conservation District.
- ▲ **Policy PFS-5.5: Stormwater Detention.** The County shall require that new development mitigate increases in stormwater peak flows to obtain an objective post-project mitigated peak flow that is equal to the estimated pre-project peak flow less 10% of the difference between the pre-project and unmitigated post-project peak flows. Projects that have significant impacts on the quantity of surface water runoff shall allocate land on-site as necessary for detaining post-project flows to meet this requirement. Detention facilities shall be constructed on the project site or within a larger project development area where joint facilities are warranted and approved by the County.
- ▲ **Policy PFS-5.6: Stormwater Retention.** The County shall require that new development mitigate increases in stormwater volume to retain the 100-year, 8-day design storm depth of 10.75 inches for the 200-foot elevation, unless another methodology has been agreed upon by Placer County. Retention of stormwater is to mitigate for increases in stormwater volumes due to lost storage capacity as a result of development (as opposed to detention, which is to mitigate for increases in stormwater peak flow rates). Mitigation measures should take into consideration impacts on adjoining lands in the unincorporated area and on properties in jurisdictions within and immediately adjacent to Placer County. New development may incorporate retention on-site, or at such time that a regional stormwater retention

program is developed, participate in the implementation of the regional program by paying regional retention mitigation fees, as deemed appropriate.

- ▲ **Policy PFS-5.7: Low-Impact Development.** The County shall require that new development mitigate the potential contamination of surface waters from urban development runoff through the use of low impact development (LID) features, site design measures, and water quality best management practices including, but not limited to, pretreatment water quality vaults, vegetated swales, infiltration/sedimentation basins, riparian and stream setbacks, oil/grit separators, porous pavement, rooftop and impervious surface area disconnection, soil quality improvement and maintenance, and tree planting and preservation.
- ▲ **Policy PFS-5.8: Stormwater Mitigation Coordination.** The County shall identify and coordinate mitigation measures with responsible agencies (e.g., California Regional Water Quality Control Board, Placer County Department of Health and Human Services - Division of Environmental Health, Placer County Department of Public Works and Facilities, CDRA [Community Development Resource Agency] - Engineering and Surveying Division, Placer County Flood Control and Water Conservation District) for the control of stormwater runoff, monitoring of stormwater discharges, and implementation of measures to control pollutant loads in urban stormwater runoff.

GOAL PFS-6: Solid Waste Disposal/Recycling. To ensure the safe and efficient disposal or recycling of solid waste generated in the Sunset Area.

- ▲ **Policy PFS-6.1: Maximize Waste Reduction.** The County shall promote maximum use of solid waste source reduction, recycling, composting, and environmentally-safe transformation of wastes.
- ▲ **Policy PFS-6.2: Solid Waste Facility Buffers.** The County shall support efforts of the Western Placer Waste Management Authority to ensure that landfills and other solid waste facilities (e.g., material recovery, composting) are buffered from incompatible development.
- ▲ **Policy PFS-6.3: Solid Waste Facility Compliance.** The County shall require that all new solid waste facilities and operations comply with applicable provisions of the Placer County Integrated Waste Management Plan.
- ▲ **Policy PFS-6.4: Encourage Use of Recycled Products.** The County shall encourage businesses to use recycled products in their manufacturing processes and consumers to buy recycled products.
- ▲ **Policy PFS-6.5: Recycling Market Development Zone.** The County should promote the recycling market development zone (RMDZ) in the Sunset Area in the area around the Western Placer Waste Management Authority's Material Recovery Facility.
- ▲ **Policy PFS-6.6: Placer County Franchise Area 1.** The County shall require new development in the Sunset Area to participate in County Franchise Area 1 for collection and disposal of solid waste.

GOAL PFS-9: Telecommunications. To promote state-of-the-art telecommunication services to support economic development and to meet the needs of employers and residents of the Sunset Area.

- ▲ **Policy PFS-9.1: Access and Availability.** The County shall work with service providers to ensure access to and availability of a wide range of state-of-the-art telecommunication systems and services.
- ▲ **Policy PFS-9.2: Telecommunication Facility Co-location.** The County shall encourage compatible co-location of telecommunication facilities.
- ▲ **Policy PFS-9.3: Telecommunications Technology in New Development.** The County shall require the installation of state-of-the-art internal telecommunications technologies in new large-scaled residential, office, and commercial developments.

GOAL NR-6: Energy Efficiency and Conservation. To encourage design and construction practices that result in greater energy efficiency and energy conservation.

- ▲ **Policy NR-6.2: Energy Efficient Construction.** The County shall encourage new construction to achieve third-party green building certification, such as the GreenPoint Rated program and the LEED rating system. This will include building and capital improvement design practices that reduce energy consumption, maximize energy conservation, promote passive solar energy generation or other on-site electricity generation, and incorporate natural ventilation.
- ▲ **Policy NR-6.4: Energy-Efficient Retrofits.** The County shall encourage energy conservation retrofits for existing buildings in the Sunset Area.
- ▲ **Policy NR-6.5: Water Efficient Landscape Design.** The County shall require all new development to comply with the County's Water Efficient Landscape Ordinance (WELO) to reduce water used for landscaping irrigation and to encourage the use of recycled water and graywater for landscaping purposes.
- ▲ **Policy NR-6.7: Residential Energy Efficiency.** The County shall encourage residential units to be designed to maximize energy efficiency. This should include consideration of the following design features:

 - a. Pre-plumbing and structural design to accommodate solar energy systems.
 - b. Installation of energy conservation appliances such as tankless water heaters and whole house fans in all residential units.
 - c. Installation of energy efficient AC units and heating system with programmable thermostat timers, to the extent feasible.
 - d. Use of low flow water fixtures such as low flow toilets and faucets, to the extent feasible.
- ▲ **Policy NR-6.8: Energy Efficient Lighting.** Require the use of energy efficient lighting for all street, parking, and area lighting, to the extent feasible.

IMPACTS AND MITIGATION MEASURES

Impact 4.15-1: Increased demand for water supply

Buildout of the net SAP and the PRSP areas would generate an estimated demand of 4,330 afy and 4,085 afy, respectively, for a total estimated demand of 8,415 afy. These water demand estimates consider system losses, the use of recycled water in the net SAP and PRSP areas, and water conservation measures anticipated for the PRSP. As described in the WSA for the SAP, the net SAP and PRSP areas were included in PCWA's 2015 UWMP as having a system demand of 9,656 afy, for which there is adequate supply in normal, dry, and multiple dry years. PCWA anticipates that water would be supplied through surface water supplies with groundwater supplies to be used as backup in drought or other water supply emergencies. The net SAP and PRSP water demand would be less than the water demand projected in the 2015 UWMP; thus, there would be sufficient water supply to meet demands of buildout of the net SAP and PRSP areas. Implementation of the project would have a **less-than-significant** impact on demand for water supply.

Net SAP Area

The total potable water average day demand for buildout of the net SAP area is estimated to be 4.346 mgd with an annual demand of 4,868 afy, which is the amount of potable water demand if there would be no recycled water system to serve the irrigation needs within the net SAP area. However, with implementation of a recycled water supply system in the net SAP area, potable water average day demand would be 3.581 mgd with an annual demand of 4,330 afy that also accounts for system losses of 8 percent (see Table 4.15-8;

PCWA 2017b:4; Placer County 2017a:10). Water supplied to the net SAP area would primarily be from surface water with groundwater provided as backup in drought or other water supply emergencies (PCWA 2017b:5). Additionally, the WSA prepared for the SAP assumes that the portion of the water supply associated with irrigation demand by landscape irrigation of parks and common areas would be provided by recycled water, which would reduce the overall potable water demand for the net SAP area.

Table 4.15-8 Net SAP Area Water Demand

Land Use Designation	Acres ¹	Dwelling Units	Water Demand Factor (gpd/ac or (gpd/ DU)	Total Average Day Demand (mgd)	Recycled Water Average Day Demand (mgd)	Potable Water Average Day Demand (mgd)	Customer Potable Water Demand (afy)	System Potable Water Demand ² (afy)
General Commercial	34.2	NA	1,121	0.038	0.009	0.030	33	36
Entertainment Mixed-Use	465.0	NA	2,443	1.136	0.118	1.018	1,141	1,232
Residential	52.0	375	312	0.117	0.013	0.104	116	126
Business Park	141.6	NA	1,121	0.159	0.036	0.123	138	149
Innovation Center	1,058.0	NA	1,121	1.186	0.267	0.919	1,029	1,111
Residential	187.0	2,083	312	0.650	0.047	0.136	675	729
Eco-Industrial	200.0	NA	1,121	0.224	0.088	0.136	152	164
Light Industrial	744.3	NA	1,121	0.834	0.188	0.646	724	781
Public Facility	2.3	NA	2	0.002	0	0.002	2	2
Preserve/Mitigation Reserve	1,955.4	NA	0	0	0	0	0	0
Urban Reserve ³	320.4	NA	0	0	0	0	0	0
Total	5,385.2	2,458	NA	4.436	0.766	3.581	4,010	4,330

Notes: gpd = gallons per day, ac = acre, DU = dwelling unit, mgd = million gallons per day, NA = not applicable, afy = acre-feet per year.

¹ Acres in this table are based on the amount of acres designated for each land use that would generate water demand.

² Includes an estimated 8% of water supply that goes toward system losses.

³ The Urban Reserve area is likely to occur outside the time frame considered in the WSA and, thus, was not considered as a future demand in the WSA.

Sources: PCWA 2017b:4, Placer County 2017a:10

As described in the WSA for the SAP, the land use area was included in PCWA's 2015 UWMP as having a system demand of 9,656 afy, for which there is adequate supply in normal, dry, and multiple dry years to (PCWA 2017b:6). The analyses completed in the *Sunset Area Plan Water, Wastewater and Recycled Water Technical Report* and *Placer Ranch Specific Plan Potable Water Master Plan*, identify a total demand of 8,324 afy (PCWA 2017b:6). Because the estimated demand is 1,332 afy lower than that assumed in the 2015 UWMP, there are sufficient supplies to meet the needs of the net SAP area. The WSA assumed that development of the Urban Reserve area would occur beyond a 30-year planning horizon, so it was not considered in the WSA. The additional supply of 1,332 afy would be available for the net SAP area for further refinement of land uses, including development of the Urban Reserve. (Adequacy of supplies is contingent on the availability of recycled water for the assumed outdoor use.) Assuming a water demand factor of 1,121 gallons per day per acre, the 320.4-acre Urban Reserve would be expected to have a water demand of 337 afy, which is less than the additional supply of 1,332 afy identified as available by the WSA.

To obtain service from PCWA, the developer would have to enter into facilities agreements with PCWA to provide any on-site or off-site pipelines or other facilities if they are needed to supply water for domestic or fire protection purposes and pay all fees and charges required by PCWA, including water connection charges. As engineering drawings are developed, PCWA and SAP consultants are coordinating to refine infrastructure needs to support water supply to the net SAP area (PCWA 2017b:6).

Through the integrated use of existing surface water entitlements, recycled water, and groundwater, PCWA has an adequate water supply to meet the anticipated buildout demands of the net SAP area in addition to

the rest of the buildout demands currently anticipated for 30 years within PCWA's projected service area in western Placer County in normal, single dry, and multiple dry years (PCWA 2017b:6). Because there are sufficient supplies to meet the net SAP water demands, the impact on demand for water supply would be less than significant.

PRSP Area

The total potable water demand under average year conditions at buildout of the PRSP area is estimated to be 4,378 afy (HydroScience 2018:4), which assumes no water conservation measures and no recycled water system to serve the irrigation needs. However, with implementation of a recycled water supply system and water conservation measures in the PRSP area, potable water annual demand would be 4,085 afy, which also accounts for system losses of 8 percent (see Table 4.15-9; PCWA 2017c:2; HydroScience 2018:4). Water supplied to the PRSP area would be from the same sources described above for the net SAP area, including irrigation water supplied by recycled water.

As noted in Section 4.15.1, the PRSP land use plan was revised between issuance of the NOP and completion of this Draft EIR. While the number of dwelling units decreased from the original land use plan, the change in the mix of densities is such that potable water demand increased slightly. The original land use plan anticipated a potable water demand of 3,994 afy (Placer County 2017b). The current land use plan would require 4,085 afy (HydroScience 2018:4).

As described in the WSA for the PRSP, the land use area was included in PCWA's 2015 UWMP as having a demand of 4,860 afy, for which there is adequate supply in normal, single dry, and multiple dry years (PCWA 2017c:2). Given the estimated potable water demand of 4,085 afy, PCWA has sufficient supplies to meet the needs of development in the proposed PRSP area (PCWA 2017c:2; Table 4.15-9; Firenzi, pers. comm. 2018).

As described above for the SAP, to obtain service from PCWA, the PRSP developer would have to enter into facilities agreements with PCWA to provide any on-site or off-site pipelines or other facilities if they are needed to supply water for domestic or fire protection purposes and pay all fees and charges required by PCWA, including water connection charges (PCWA 2017c:4).

Through the integrated use of existing surface water entitlements, recycled water, and groundwater, PCWA has adequate water supply to meet the anticipated demands of the PRSP area at buildout as well as those in the remainder of PCWA's projected service area in western Placer County in normal, single dry, and multiple dry years (PCWA 2017c:3). The impact on demand for water supply would be less than significant.

Table 4.15-9 PRSP Area Water Demand

Land Use Designation	Area (acres)	Dwelling Units	Water Demand Factor (gpd/ ac) or (gpd/ DU)	Total Demand (afy)	Recycled Water Demand (afy) ^{1,2}	System Potable Water Demand (afy) ^{3,4}
Residential						
Low Density Residential	442.1	2,210	429	1,062	0	1,147
Low Density Residential - Age-restricted	187.0	1,050	429	505	0	545
Medium Density Residential	112.2	872	312	305	0	329
High Density Residential ⁴	60.2	1,504	143	241	39	221
Non-Residential						
General Commercial	22.7	0	1,116	28	11	19
Commercial Mixed Use	48.8	0	1,116	61	24	42
Campus Park	331.0	0	1,482	550	161	433
University	301.3	0	Varies	1,398	244	1,266

Table 4.15-9 PRSP Area Water Demand

Public Facilities (Schools)	32.7	0	1,785	65	16	54
Public Facilities (County Facilities)	10.3	0	1,785	21	5	18
Paseos/Greenbelt	25.9	0	1,785	31	67	3
Parks and Recreation	69.8	0	1,071	84	181	8
Open Space Preserves	250.7	0	0	0	0	0
Placer Parkway	158.5	0	0	0	0	0
Major Roadways and Landscape Corridors	160.1	0	1,071	29	78	0
Total	2,213.3	5,636	NA	4,378	826	4,085

Notes: afy = acre-feet per year, NA = not available.

¹ A detailed summary of recycled water demand and recycled water conservation efforts is presented in the Placer Ranch Specific Plan Recycled Water Master Plan (Placer County 2017c) and Placer Ranch Water Conservation Plan (HydroScience 2017).

² Includes 8% system loss (PCWA 2017c:2).

³ Demand removes recycled water.

⁴ Some totals vary slightly from totals in the Potable Water Master Plan due to rounding.

Sources: HydroScience 2018:4; PCWA 2017c:2 and compiled by Ascent Environmental in 2018

Other Supporting Infrastructure

Pleasant Grove Retention Facility

The construction and operation of the Pleasant Grove Retention Facility would not generate demand for water supply. There would be no impact.

Off-Site Transportation and Utility Improvements

The off-site transportation and utility improvements would not generate demand for water supply. There would be no impact.

Conclusion

Buildout of the net SAP and PRSP areas would generate an estimated demand of 4,330 afy and 4,085 afy, respectively, for a total estimated demand of 8,415 afy. These water demand estimates consider system losses, the use of recycled water in the net SAP and PRSP areas, and water conservation measures anticipated for the PRSP. As described in the WSA for the SAP, the net SAP and PRSP areas were included in PCWA's 2015 UWMP as having a system demand of 9,656 afy, for which there is adequate supply in normal, single dry, and multiple dry years to meet this projected demand (PCWA 2017b:6). PCWA anticipates that water would be supplied through surface water supplies with groundwater supplies to be used as backup during drought or other water supply emergencies. Given that the water demand estimate for the net SAP and PRSP areas would be less than the water demand projected in the 2015 UWMP, there would be additional available supply of 1,241 afy for use in the net SAP and PRSP areas. Because there are sufficient water supplies to meet net SAP area and PRSP area demand, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 4.15-2: Increased demand for water supply conveyance and water treatment services

Buildout of the net SAP and PRSP areas would generate the need for water treatment and conveyance infrastructure, including pipelines and increased water treatment capacity. While existing WTPs have some capacity to serve new development, the amount of treatment capacity needed exceeds current available capacity. This impact would be **potentially significant**.

Net SAP Area

Existing PCWA conveyance infrastructure serves the existing uses within the net SAP area. To serve the entire SAP area, the water system would be split into two zones: the 280 Zone and 350 Zone (Placer County 2017a:20). Land east of Foothills Boulevard, which is PCWA's currently designated Sunset Industrial Zone, would be in the 350 Zone while land west of Foothills Boulevard would be in the 280 Zone. Pressure regulating stations would be required at points of connection (POCs) to reduce pressure between the zones.

The potable water supply system would be constructed in two major phases based on planned SAP development phasing (Placer County 2017a:20). Phase 1 would consist entirely of pipeline improvements within the 350 Zone east of Foothills Boulevard. Phase 2 would consist of pressure regulating stations and pipelines.

The Foothill WTP and Sunset WTP have approximately 2.5 mgd of capacity to treat additional water needed for the SAP and other projects within PCWA's Zone 1 (PCWA 2017a). The Ophir WTP has not yet been constructed, and timing and capacity is still under consideration (PCWA 2016b:2-10) and is generally dependent on anticipated need. As discussed in Impact 4.15-1, buildout of the SAP area would require 4,330 afy (or 3.86 mgd) of potable water. Because the existing water treatment capacity is insufficient to meet the need at buildout of the SAP area, this impact would be potentially significant.

PRSP Area

As shown in Exhibit 4.15-4, PCWA transmission main pipelines would be extended through the PRSP area. The water distribution system in the PRSP area would consist of looping pipelines that form a transmission main grid consisting of 12-inch to 42-inch-diameter mains. The pipelines would be installed within collector and arterial roadway corridors. The system would include a 5.16-million-gallon potable water storage tank in the northwestern portion of the PRSP area, near Placer Parkway. Prior to construction of the water storage tank, site-specific geotechnical analysis would be prepared to confirm site suitability for the storage tank. The key components of the proposed potable water infrastructure system are shown in Exhibit 4.15-4. Note that the PCWA water transmission pipeline that would be installed in the Placer Parkway right-of-way is not identified in Exhibit 4.14-4. Please refer to Exhibit 3-3 for the location of the PCWA pipeline in Placer Parkway.

Like the rest of the SAP area, the PRSP area would be served by PCWA's existing Foothill WTP and Sunset WTP, as well as the Ophir WTP once it is operational. As discussed in Impact 4.15-1, buildout of the PRSP area would require 4,085 afy (or 3.65 mgd) of potable water. Because the existing water treatment capacity is insufficient to meet the need at buildout of the PRSP area, this impact would be potentially significant.

Other Supporting Infrastructure

Pleasant Grove Retention Facility

The construction and operation of the Pleasant Grove Retention Facility would not generate demand for water supply and, thus, would not increase demand for water supply conveyance and treatment services. There would be no impact.

Off-Site Transportation and Utility Improvements

The off-site transportation and utility improvements would not generate demand for water supply and, thus, would not increase demand for water supply conveyance and treatment services. There would be no impact.

Conclusion

Buildout of the net SAP and PRSP areas would require the installation of pipelines and other assorted infrastructure required to deliver water to new customers in the net SAP and PRSP areas. Buildout would also generate an estimated demand of 4,330 afy and 4,085 afy, respectively, for a total estimated demand of 8,415 afy (7.51 mgd). As described above, the pipelines and conveyance infrastructure would be constructed within roadways rights-of-way or within other areas anticipated for construction activities. The existing Foothill WTP and Sunset WTP do not have sufficient capacity to accommodate the water treatment needs for buildout of the net SAP and PRSP areas. While the anticipated construction of the Ophir WTP

would have adequate capacity to serve the net SAP and PRSP areas, it has not yet been constructed. Because there is the need for additional water treatment facilities to serve the net SAP and PRSP areas, this impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 4.15-2: Ensure adequate water treatment capacity (Net SAP Area and PRSP Area)

Prior to approval of each small lot tentative map within the net SAP or PRSP areas, water demand shall be identified and water treatment capacity necessary to serve the proposed development in the small lot tentative map area shall be identified. No small lot tentative map(s) shall be approved within the net SAP or PRSP unless and until adequate water treatment capacity is identified.

Significance after Mitigation

While implementation of Mitigation Measure 4.15-2 would ensure that there is adequate water treatment capacity available to serve buildout of the net SAP and PRSP areas, these facilities are outside Placer County's jurisdiction. No additional feasible mitigation is available. Because Placer County cannot ensure that water treatment capacity would be available, this impact would be **significant and unavoidable**.

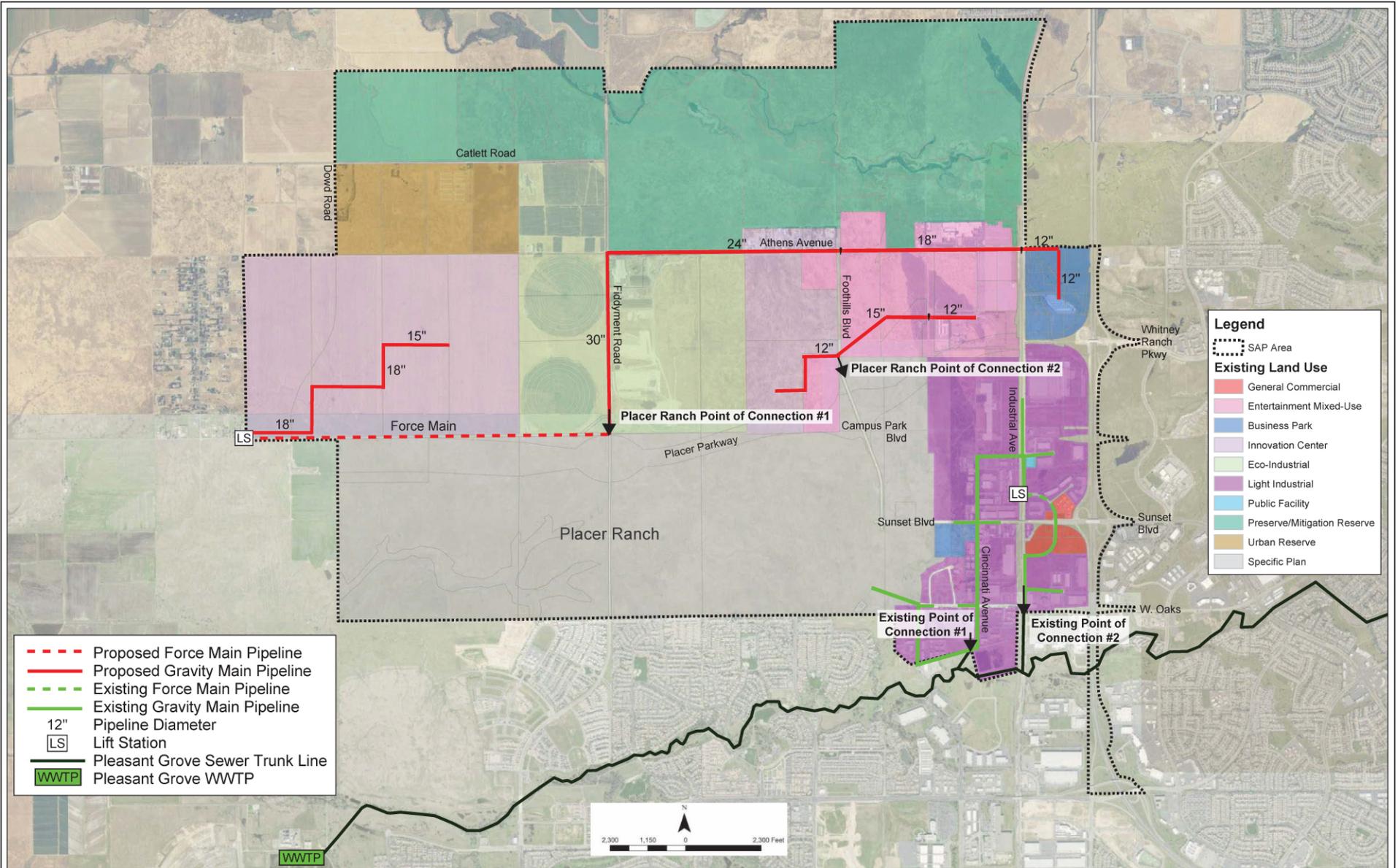
Impact 4.15-3: Increased demand for wastewater collection and conveyance services

Wastewater flows of 11.76 mgd PWWF and 5.95 mgd PWWF generated by buildout of the net SAP and the PRSP areas, respectively, would be served by new facilities within the plan areas and new off-site sewer lines that would connect to existing sewer conveyance infrastructure to carry wastewater to the PGWWTP. The necessary wastewater collection and conveyance facilities would be constructed and accepted by the County prior to building occupancy and in accordance with requirements of the agency providing service. With proposed upsizing of the 24-inch pipe crossing Pleasant Grove Creek, the existing City of Roseville sewer lines downstream from the net SAP and PRSP areas have sufficient capacity to convey wastewater flows from the project (HydroScience 2017:6), and the planned wastewater collection system would be designed to accommodate wastewater flows from the net SAP and PRSP areas. This impact would be **less than significant**.

Net SAP Area

Buildout of the net SAP area would generate an estimated 11.76 mgd PWWF that would be conveyed to the PGWWTP for treatment through a network of new and existing pipelines, largely within roadway rights-of-way (Placer County 2017a:15). The collection and conveyance system would include gravity sewer mains, lift stations, and force mains within the net SAP and PRSP areas, as well as off-site gravity sewer mains south of the PRSP area that would connect to the City of Roseville's Pleasant Grove sewer trunk line. Proposed sewer lines within the net SAP area would range from 6-inch to 30-inch pipes (Placer County 2017a:13). Preliminary design of wastewater conveyance infrastructure for the SAP and the points of connection to the PRSP wastewater conveyance system are shown in Exhibit 4.15-5. In addition to the *Sunset Area Water, Wastewater, and Recycled Water Technical Report* (Technical Report), prepared specifically for the net SAP area, a PRSP SSMP has been prepared by MacKay & Soms to analyze and design a wastewater collection and conveyance system that would carry flows generated in the net SAP and PRSP areas. Both reports identify points of connection at Fiddymont Road and Foothills Boulevard. The Technical Report also identifies two points of connection to existing sewer lines in Cincinnati Avenue and Industrial Avenue in the southeastern portion of the SAP area. The SSMP identifies a point of connection at the proposed Campus Park Boulevard (see Exhibit 3-10 in Chapter 3, "Project Description"). Alternatively, the wastewater flows in the eastern portion of the SAP area could be distributed between the two existing points of connection at Cincinnati Avenue and Industrial Avenue, identified in the Technical Report (Placer County 2017a), and the proposed point of connection at Campus Park Boulevard, identified in the SSMP (Placer County 2017f).

The PRSP SSMP analysis and preliminary design are based on total peak wet weather flows (PWWF) of 8.14 mgd from the net SAP area (Placer County 2017f:20). The Sunset Area Technical Report provides an estimate of 8.49 mgd PWWF from the net SAP area (Placer County 2017a:16). Preliminary estimates show that the wastewater conveyance infrastructure designed and proposed in the SSMP would have sufficient capacity to accommodate wastewater flows from the net SAP area, as calculated in the Technical Report.



Source: Placer County 2017

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Exhibit 4.15-5

Sunset Area Plan Wastewater System



HydroScience evaluated the ability of Roseville's collection system to convey wastewater flows from the project area (HydroScience 2017). Wastewater from the PRSP area would be conveyed south via a 27-inch pipeline that would connect to an existing 36-inch stub. The stub separates into two 24-inch pipes that cross beneath Pleasant Grove Creek and connect to an existing 36-inch sewer line. While the 36-inch stub and 60-inch sewer lines would have adequate capacity to convey project flows, the dual 24-inch lines would not (HydroScience 2017:6). The evaluation recommends that one of the dual 24-inch lines be upsized to a 27-inch line to provide adequate capacity (HydroScience 2017:6). This sewer line upgrade is included in the project description.

Wastewater generated by eventual development in the Urban Reserve lands was not included in the calculations of the Sunset Area Technical Report or the PRSP SSMP because it would be conveyed to the City of Lincoln Wastewater Treatment and Reclamation Facility (WWTRF), approximately 1.5 miles northeast of the Urban Reserve lands. Sewer lines and any other necessary conveyance infrastructure would be constructed within the net SAP area and existing right-of-way along Fiddymont Road north of the net SAP area.

Future proponents of projects in the Urban Reserve would need to consult with SPWA and the City of Lincoln, establish an agreement regarding connection to and use of their wastewater conveyance infrastructure, and demonstrate compliance with planning, engineering, and financing requirements. As required by Placer County General Plan Policy 4.D.2, developments outside an existing sewer service area are required to be annexed into the sewer service area. General Plan Policy 4.D.3 requires that project proponents provide written certification from the service provider that wastewater conveyance capacity is available, or that needed improvements would be completed prior to project occupancy. As part of the development review process and as required by SAP Policy PFS-1.2, project proponents would be required to demonstrate that wastewater collection infrastructure would be installed concurrent with project construction.

Design and construction of the SAP wastewater collection system would be in compliance with the County's LDM. Construction of new facilities could result in impacts on water quality, biological resources, and cultural resources from ground-disturbing activities; noise and emissions of criteria pollutants and greenhouse gases from vehicles and construction equipment; and temporary interference with traffic operations if project construction activities occur within existing roadways. These effects are addressed in this EIR in Sections 4.3, "Air Quality"; 4.4, "Biological Resources"; 4.5, "Archaeological, Historical, and Tribal Cultural Resources"; 4.7, "Greenhouse Gas Emissions," 4.9, "Hydrology and Water Quality"; 4.11, "Noise"; and 4.14, "Transportation and Circulation."

The wastewater collection and conveyance system to serve SAP area would be constructed prior to building occupancy and in accordance with requirements of the agency providing service. The PRSP SSMP designed and analyzed the proposed wastewater collection system based on the most current SAP wastewater flow projections and concluded that the PRSP wastewater collection system would have sufficient capacity to convey projected flows from the SAP area. The Sunset Area Technical Report identifies four points of connection to downstream wastewater collection infrastructure: two points of connection to Placer Ranch and two points of connection to existing wastewater collection infrastructure. Because there are existing and planned connections and the wastewater conveyance system has been designed to accommodate all anticipated project flows, this impact would be less than significant.

PRSP Area

The proposed wastewater collection system, consisting of gravity trunk pipelines, lift stations, and force mains (Exhibit 4.15-5), would convey an estimated 5.95 mgd PWWF from land uses within the PRSP area and an estimated 8.49 mgd PWWF from the SAP area to the PGWWTP (Placer County 2017f:32). As noted in Section 4.15.1, the PRSP land use plan was revised between issuance of the NOP and completion of this Draft EIR. While the modifications to the land use plan would slightly reduce the average dry weather flows (ADWF), the PWWF would remain the same as under the original land use plan (Placer County 2018a:3). The gravity pipelines and force mains would be constructed within the proposed roadways. The wastewater collection system would be divided into three major sewer sheds: a western shed area located west of Fiddymont Road, a central shed area located east of Fiddymont Road, and an eastern shed area located in the southeast portion of PRSP area (Placer County 2017f:7-8).

The western shed area would gravity flow toward a lift station on lot PR-94 on the south side of Sunset Boulevard. This lift station would then pump flows into a force main reception manhole located within the central shed area boundary on Sunset Boulevard just west of Fiddymment Road.

The central shed area would gravity flow toward the intersection of Fiddymment Road and Sunset Boulevard where it would converge with western shed flows, and be conveyed into existing and proposed off-site wastewater infrastructure. Wastewater would be carried off-site by a 42-inch gravity main along Fiddymment Road. Two design options were analyzed in the SSMP that would transport flows south off-site along the Fiddymment Road/Angus Road corridor: (1) a gravity main design and (2) a lift station/force main design. The 42-inch line would extend to a point of connection with an existing 30-inch sewer pipe stub located in Angus Road just north of Pleasant Grove Creek. The 30-inch sewer stub would be replaced with the 42-inch sewer line required to serve the net SAP area that would connect to two existing 24-inch sewer lines under Pleasant Grove Creek that connect to the 72-inch Pleasant Grove sewer trunk line. The modeling of the Roseville system's capacity to accommodate flows from the net SAP area and PRSP area noted that flows are limited where the two 24-inch lines cross beneath Pleasant Grove Creek. The modeling report noted that upsizing one of the 24-inch lines to a 27-inch line would provide adequate capacity (HydroScience 2017:6).

The eastern shed area would gravity flow to the south along Foothills Boulevard, east on Nichols Drive in an existing 10-inch sewer serving the Peaker Plant, and then south into the existing 20-inch sewer main in Duluth Avenue. The 10-inch sewer line would be replaced with an 18-inch sewer line. The existing off-site infrastructure would have sufficient capacity to convey peak flows from the project area's eastern sewer shed (HydroScience 2017:6) (see Appendix O). These flows would then be conveyed south through Duluth Avenue, and east along the City of Roseville boundary where they would discharge into the trunk 21-inch and 42-inch sewer mains maintained by the City of Roseville. This connection point from county to city is known as the Cincinnati Avenue connection where an existing flow meter gauges flows leaving Placer County and entering the City of Roseville. As part of the project, another flow meter would be installed on the Fiddymment Road sewer main.

Design of the PRSP area wastewater collection system in three sewer sheds allows for project phasing flexibility. Potential environmental effects that could occur as a result of the on-site and off-site wastewater collection facilities would be similar to those described above for the net SAP area.

Implementation of the project would include construction of new wastewater collection infrastructure and would connect to existing wastewater collection infrastructure in the City of Roseville. Modeling indicates that the Roseville system has sufficient capacity to accommodate net SAP area and PRSP area flows, although it is noted that a 24-inch line beneath Pleasant Grove Creek would need to be upsized to a 27-inch line (HydroScience 2017:6). As discussed above for the net SAP area, the PRSP project proponent would comply with Placer County General Plan Policy 4.D.2 and other County requirements to design a wastewater collection system that would be consistent with the County's LDM and establish an agreement regarding connection to and use of the City of Roseville's wastewater conveyance infrastructure, as well as demonstrating compliance with planning, engineering, and financing requirements that must be completed successfully in order to utilize existing off-site wastewater conveyance infrastructure as envisioned.

The necessary wastewater collection and conveyance system to serve PRSP area wastewater flows would be constructed prior to building occupancy and in accordance with requirements of the agency providing service. The PRSP SSMP was designed and analyzed based on the SAP area wastewater flows analyzed in the Sunset Area Technical Report, and the PRSP wastewater collection system would have sufficient capacity to accommodate PRSP-generated wastewater in addition to increased wastewater flows estimated for the net SAP area. For these reasons, impacts relative to wastewater collection and conveyance services would be less than significant.

Other Supporting Infrastructure

Pleasant Grove Retention Facility

The construction and operation of the Pleasant Grove Retention Facility would not generate wastewater and, thus, would not impact existing capacity of wastewater collection and conveyance systems and would not require the construction of new wastewater collection and conveyance infrastructure. There would be no impact.

Off-Site Transportation and Utility Improvements

The off-site transportation and utility improvements would not generate wastewater and, thus, would not impact existing capacity of wastewater collection and conveyance systems and would not require the construction of new wastewater collection and conveyance infrastructure. There would be no impact.

Conclusion

Buildout of the net SAP and PRSP areas would include construction of a wastewater collection and conveyance system sufficient to accommodate development at buildout. Wastewater conveyance and collection infrastructure would include force mains, gravity mains, lift stations, and pump stations within the net SAP and PRSP areas. New sewer lines would also be constructed off-site to convey wastewater flows from the net SAP and PRSP areas to the SPWA wastewater collection system and PGWWTP for treatment.

The wastewater collection and conveyance system would be constructed prior to building occupancy and in accordance with requirements of the agency providing service. With the proposed upgrade of the 24-inch line under Pleasant Grove Creek to a 27-inch line, the City of Roseville facilities downstream from the net SAP and PRSP areas would have sufficient capacity to receive wastewater flows from the project. The planned wastewater collection system has been designed to have sufficient capacity to accommodate all of the wastewater flows from the SAP area. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 4.15-4: Increased demand for wastewater treatment services

The wastewater flows generated by buildout of the PRSP and net SAP areas are estimated to be 1.99 and 3.78 mgd, respectively, for a combined total of 5.77 mgd ADWF. The PGWWTP currently treats 7.1 mgd ADWF, has an operating treatment capacity of 9.5 mgd ADWF, and is permitted to discharge 12 mgd ADWF in compliance with its NPDES Permit. The plant has available capacity to treat an estimated 2.4 mgd. While wastewater flows from the PRSP area alone could be treated at the PGWWTP, the wastewater collection system would be designed to convey combined buildout flows from both the net SAP and PRSP areas to the PGWWTP. Therefore, any volume beyond that allowed by the PGWWTP's existing NPDES permit would be require additional capacity and a new permit that would identify wastewater treatment requirements. Wastewater flows from the PRSP area would not cause permit limits to be exceeded, but the PGWWTP would not have sufficient capacity to treat the estimated combined wastewater flows from buildout of the net SAP and the PRSP areas. Placer County requires project proponents to obtain written confirmation from SPWA to demonstrate that wastewater treatment services would be provided. While wastewater treatment capacity is sufficient in the nearer term to accommodate buildout of the PRSP area (over approximately 20 years), it is currently insufficient to serve treatment needs from ultimate buildout of the net SAP (over approximately 80 years) and PRSP areas. The project's wastewater flows would require eventual expansion of the PGWWTP. The impact of increased demand for wastewater treatment services would be **significant**.

Net SAP Area

Buildout of the net SAP area would generate an estimated 3.78 mgd of wastewater during periods of ADWF, as shown in Table 4.15-10. This figure includes 0.2 mgd from the Lincoln 270 area between Industrial Boulevard and SR 65, which is not part of the net SAP area, but that could flow through the net SAP area to the PGWWTP (Table 4.15-10). To calculate flows for the net SAP area, flow rates consistent with the System

Evaluation report were applied to the proposed land uses. As shown in Exhibit 4.15-3, the portion of the net SAP area east of Fiddymont Road is located within the Regional Service Area Boundary of the PGWWTP, but the approximately 1,700-acre portion west of Fiddymont Road is outside the Ultimate Service Area boundary. This area is projected to generate an ADWF of 1.14 mgd. However, there are areas within the studied watershed that would generate little or no flow and some existing areas may be generating less flow than assumed in the Systems Evaluation.

The PGWWTP currently treats 7.1 mgd ADWF, has a treatment capacity of 9.5 mgd ADWF, and is permitted to discharge 12 mgd ADWF in compliance with NPDES Permit No. CA0084573/WDR No. R5-2014-0051. Available capacity at the treatment plant is 2.4 mgd; therefore, the treatment plant does not have sufficient capacity to serve the wastewater flows from the net SAP area, even if wastewater flows from Lincoln 270 lands are excluded. (Again, buildout of the net SAP area would occur in the distant future, over a period of 80 years or more.) Additional capacity is provided in the PGWWTP system by three storage basins with a combined storage capacity of 48.5 million gallons (City of Roseville 2017a:A 2-7).

On April 5, 2017, the City of Roseville approved a project to expand the PGWWTP treatment capacity, which would increase the treatment capacity from 9.5 mgd to 12 mgd (City of Roseville 2017c). Construction of the PGWWTP expansion project is anticipated to begin in 2018 and be completed within 2 years. Once the PGWWTP expansion project is complete, and with existing treatment flows, the estimated available capacity of the PGWWTP would be 4.9 mgd ADWF, which would be sufficient to serve net SAP buildout flows of 3.78 mgd.

Table 4.15-10 Net Sunset Area Plan Area Wastewater Flows

Land Use	Flow Rate (gpd/ac) or (gpd/du)	Area Size (acres)	EDUs ¹	ADWF (mgd)
General Commercial	850	34	-	0.03
Entertainment Mixed-Use	2,300	418	-	0.96
Residential	190	52	2,458	0.45
Casino ²	-	47	-	0.25
Business Park	850	142	-	0.12
Innovation Center	850	1,058	-	0.90
Eco-Industrial ³	850	200	-	0.17
EDUs ¹	190	-	200	0.04
Light Industrial	850	744	-	0.63
Public Facility	850	2	-	0.002
Preserve/Mitigation Reserve	-	1,943	-	0.00
Lincoln 270 Area ⁴	-	-	-	0.23
TOTAL	NA	4,827	2,458	3.782

Notes: ADWF = average dry weather flow, ac = acre, du = dwelling unit, EDU = equivalent dwelling unit, gpd = gallons per day, mgd = million gallons per day, NA = not applicable.

¹ EDUs not included in total residential dwelling units for the SAP. EDUs are generally defined as a unit of measure for the sewage generated from particular buildings, structures or uses. One equivalent dwelling unit is equal to an approximation of the amount of sewage generated by an average single-family residence.

² ADWF from Athens Avenue Sewer Study.

³ Only 200 acres of the Eco-Industrial land use designation generate sewage.

⁴ Area outside the SAP area, ADWF from Athens Avenue Sewer Study.

Source: Placer County 2017a:15

In compliance with Placer County General Plan Policy 4.D.3, the SAP project proponent would be required to obtain written confirmation from the SPWA that the PGWWTP has available capacity to serve the net SAP area prior to occupancy. Similarly, if Urban Reserve wastewater flows are conveyed to the City of Lincoln WWTRF, then written confirmation from the City of Lincoln that the WWTRF has available capacity to serve development in this area prior to occupancy. As new development comes on line, it is required to annex to CSA 28, Zone 2A3 through which the new development would be required to pay regional connection fees

that would be forwarded to SPWA as the CSA Zone of Benefit's fair share contribution toward payment of the bond debt related to the construction of the regional wastewater facilities.

Wastewater discharge of up to 12 mgd from the PGWWTP to Pleasant Grove Creek is permitted by NPDES permit number CA0084573/WDR No. R5-2014-0051, which identifies the plant's wastewater treatment requirements. At this level, net SAP area wastewater flows could be accommodated within permit limits. Cumulative flows exceeding discharge limits of 12 mgd would require expansion of the PGWWTP treatment capacity a new NPDES permit. Because the project would not be constructed without written confirmation of available treatment and discharge capacity from the SPWA, wastewater flows from the net SAP area would not cause permit limits to be exceeded, nor would it result in lack of compliance with wastewater treatment requirements of the CVRWQCB.

Although the PGWWTP has been approved for an expansion, which would result in sufficient capacity to serve the net SAP area, the existing available capacity at the PGWWTP, because of timing and other considerations, would be unavailable to serve the net SAP area. Proponents of future development would obtain written confirmation from SPWA, and the City of Lincoln if necessary, to demonstrate that wastewater treatment services would be provided, and no additional facilities would need to be constructed. However, because the planned expansion of the PGWWTP has not yet begun, and the timing of completion of this and potential future expansions of the PGWWTP are uncertain, the impacts on wastewater treatment services from development of the net SAP area would be potentially significant.

PRSP Area

Buildout of the PRSP area would generate an estimated ADWF of 1.99 mgd, as shown in Table 4.15-11. As noted in in Section 4.15.1, the PRSP land use plan was revised between issuance of the NOP and completion of this Draft EIR. The estimated ADWF of the original land use plan was 2.05 mgd (Placer County 2017a). The current land use plan, which includes a decrease in the number of dwelling units and commercial area, would generate a lower ADWF of 1.99 mgd (Placer County 2018a:3).

Table 4.15-11 Placer Ranch Specific Plan Area Wastewater Flows

Land Use	Flow Rate (gpd/ac) or (gpd/du)	Area Size (acres)	EDUs ¹	ADWF (mgd)
Low Density Residential	190	629.1	3,260	0.62
Medium Density Residential	190	112.2	872	0.17
High Density Residential	130 gpd/du or 2,040 gpd/ac	60.2	1,504	0.20
General Commercial	850	22.7	-	0.02
Community Mixed Use	2,300	48.8	-	0.11
Campus Park	850	331.0	-	0.28
Public Facilities (County facilities)	660	10.3	-	0.01
Public Facilities (schools)	170	32.7	-	0.01
University ²	2,304	251.2	-	0.58
Parks and Recreation	10	69.8	-	0.0007
Total	NA	1,568.0	5,636	1.99

Notes: ADWF = average dry weather flow, ac = acre, du = dwelling unit, EDU = equivalent dwelling unit, gpd = gallons per day, mgd = million gallons per day, NA = not applicable.

¹ EDUs not included in total residential dwelling units for the PRSP area. EDUs are generally defined as a unit of measure for the sewage generated from particular buildings, structures or uses. One equivalent dwelling unit is equal to an approximation of the amount of sewage generated by an average single-family residence.

² As determined from the Technical Memorandum No. 2b from Appendix D of the Systems Evaluation Report dated September 2009 (refer to Attachment 3), the Average Dry Weather Unit Flow Rate Factor for the Sac State-Placer Center was derived by dividing the total flow projection for the Sac State-Placer Center in the Placer Ranch UGA (0.68 mgd) by its corresponding acreage (295 acres), yielding 2,304 gpd per acre. Area size for the Sac State-Placer Center excludes open space area within the property.

Source: Placer County 2018a:3

Wastewater flows for the PRSP area were calculated similar to the method described above for the net SAP area. Wastewater generated by buildout of the PRSP area would be treated entirely at the PGWWTP. As shown in Exhibit 4.15-3, the eastern portion of the PRSP area is within the Regional Services Boundary and the western portion of the PRSP area is within the Ultimate Service Area Boundary for the PGWWTP. Available capacity at the treatment plant is 2.4 mgd; therefore, the treatment plant has sufficient capacity to serve the wastewater flows from buildout of the PRSP area. Additionally, a PGWWTP expansion project to increase its treatment capacity has been approved and is planned to begin construction in 2018, which would provide a greater available capacity to treat wastewater generated from buildout of the PRSP area. Storage ponds at the PGWWTP provide an additional 48.5 million gallons of capacity to store excess wastewater flows during peak periods.

Development in the PRSP area would comply with Placer County General Plan Policy 4.D.3, requiring the PRSP project proponent to obtain written confirmation from the SPWA that the PGWWTP has available capacity to serve development in the PRSP area prior to occupancy. As new development comes on line, it is required to annex to CSA 28, Zone 2A3 through which the new development would be required to pay regional connection fees that would be forwarded to SPWA as the CSA Zone of Benefit's fair share contribution toward payment of the bond debt related to the construction of the regional wastewater facilities.

As for the net SAP area described above, because development in the PRSP area would not be constructed without written confirmation of available treatment capacity from the SPWA and any additional treated wastewater discharge beyond that of the PGWWTP's existing NPDES permit would be required to obtain a new permit that would identify wastewater treatment requirements, wastewater flows from the PRSP area would not exceed wastewater treatment requirements of the CVRWQCB.

While the PGWWTP currently has sufficient capacity to serve the PRSP area, services are provided on a first-come, first-served basis, so it is possible that other developments could use the existing capacity before the PRSP area begins to develop. Planned facility expansions would ensure that there is sufficient capacity to handle flows from the PRSP area, but the timing of construction and completion is uncertain. Therefore, this impact would be potentially significant.

Other Supporting Infrastructure

Pleasant Grove Retention Facility

The construction and operation of the Pleasant Grove Retention Facility would not generate wastewater and, thus, would not impact existing capacity of wastewater treatment systems and would not require the construction of new or expansion of existing wastewater treatment infrastructure. There would be no impact.

Off-Site Transportation and Utility Improvements

The off-site transportation and utility improvements would not generate wastewater and, thus, would not impact existing capacity of wastewater treatment systems and would not require the construction of new or expansion of existing wastewater treatment infrastructure. There would be no impact.

Conclusion

The PGWWTP has sufficient capacity to treat wastewater flows from buildout of the the PRSP area, but not from the combined PRSP and net SAP areas, the latter of which would build out over a period of 80 years or more. While capacity is sufficient for the PRSP area, wastewater treatment services are provided on a first-come, first-served basis, so other development could use the existing capacity before the PRSP area begins to develop. The wastewater collection system would be designed to convey combined buildout flows of approximately 5.77 mgd from the net SAP and PRSP areas to the PGWWTP. The near term PGWWTP expansion project would increase treatment capacity to 12 mgd, but the plant would not have sufficient capacity to treat the ultimate wastewater flows of 5.77 mgd ADWF at buildout of the project area. Additional expansion(s), new NPDES permit(s), and/or other treatment alternatives would be required prior to ultimate buildout of the project over an 80-year timeframe. The increased demand for wastewater treatment services would be **significant**.

Mitigation Measures

Mitigation Measure 4.15-4a: Annex to SPWA's regional service area and PGWWTP's service area (Net SAP Area and PRSP Area)

Prior to improvement plan approval for development in the net SAP and PRSP areas that are outside the service boundaries of SPWA and PGWWTP, project proponents shall demonstrate to Placer County that the SPWA has approved expansion of the SPWA 2005 Regional Service Area Boundary to include the affected areas. Also, the project proponents shall demonstrate that SPWA has approved expansions of the PGWWTP service boundary to include the affected areas.

Mitigation Measure 4.15-4b: Confirm infrastructure capacity (Net SAP Area and PRSP Area)

Prior to improvement plan approval for development in the net SAP or PRSP areas, project proponents shall provide confirmation from SPWA and the City of Roseville that there is sufficient infrastructure and treatment capacity to serve the final design plan flows for the proposed development.

Future projects within the net SAP and PRSP areas shall participate financially in the construction of additional wastewater treatment capacity sufficient to accommodate projected flows through payment of connection fees facilitated through annexation into CSA 28, Zone 2A3. Project proponents shall also participate on a fair share basis in other financing mechanisms for any additional environmental review required to secure approvals necessary to increase wastewater discharges from the plant, including approval by the SPWA for expansion of the service area boundary. It is recognized that the project proponents shall rely on the City of Roseville (on behalf of the SPWA partners) to construct the wastewater treatment expansion needed to treat and discharge wastewater produced within the PGWWTP service area boundary, including buildout of the net SAP and PRSP areas.

Significance after Mitigation

Implementation of Mitigation Measures 4.15-4a and 4.15-4b would require the expansion of treatment capacity at the PGWWTP and expansion of the SPWA Regional Service Area Boundary to accommodate wastewater flows generated by buildout of the SAP area. Expansion of the PGWWTP was identified as part of the Wastewater Master Plan EIR (WWMP EIR) and West Roseville Specific Plan EIR (WRSP EIR). The WWMP EIR identified expansion of the PGWWTP to treat and discharge up to 29.5 mgd ADWF (City of Roseville 1996:2-10, 2-34 and 2-35). The WRSP EIR also analyzed expanding the PGWWTP onto a 20-acre city-owned parcel on the south side of the PGWWTP to treat and discharge up to 24.7 mgd ADWF (City of Roseville 2004:4.11-70 through 4.11-75). Project proponents for projects within the net SAP and PRSP areas would be required to pay their fair share of the costs of the PGWWTP expansion, and any applicable costs associated with additional environmental review and mitigation measures, through the payment of sewer connection fees. The capacity expansion would be required prior to construction of development within the net SAP and PRSP areas. If the capacity expansion cannot be completed in time to serve all of buildout within the net SAP and PRSP areas, then development may continue until existing capacity has been exhausted and the remaining development shall be curtailed until sufficient wastewater treatment and discharge capacity becomes available. Implementation of Mitigation Measure 4.15-4 would reduce the impact on demand for wastewater treatment capacity to a **less-than-significant** level because the measure would ensure that sufficient treatment capacity is available at the PGWWTP.

Impact 4.15-5: Construction of stormwater drainage infrastructure

Implementation of the SAP, including the PRSP, would increase impervious surfaces in the project area, which would increase stormwater runoff. SAP policies require new development to comply with County requirements, including the Placer County Flood Control and Water Conservation District's Stormwater Management Manual and the County Land Development Manual. Modeling and analysis indicate that compliance with these policies is achievable and feasible. Therefore, implementation of the SAP, including the PRSP, would have a **potentially significant** impact regarding stormwater infrastructure.

Net SAP Area

While some portions of the net SAP area are already developed, most of the site is vacant and undeveloped. Development of the net SAP area would result in new impervious surfaces such as buildings, parking lots, and roadways. Much of the net SAP area includes minimal impervious surfaces. At buildout, there would be a substantial increase in the amount of impervious surfaces compared to existing conditions (Placer County 2017g:Table 2, Table 4).

The specific location for retention has not yet been determined; however, regional retention facilities within the Natomas Cross Canal watershed are planned to be utilized (Placer County 2017g:23). The City of Roseville's Pleasant Grove Retention Facility is currently being evaluated for off-site retention in the Pleasant Grove Creek watershed. There are two potential sites within the Auburn Ravine watershed that could accommodate stormwater from the net SAP area, the City of Lincoln's Lakeview Farms and Scilacci Farms. Chapter 3, "Project Description," includes additional information regarding each facility. The City of Lincoln is currently developing Lakeview Farms near Coon Creek and the first phase of the project is planned for completion in 2018. Scilacci Farms is in the conceptual planning stages; therefore, its feasibility for volumetric storage for the net SAP area is uncertain, and it is not considered further in this EIR. If, in the future, the County elects to use Scilacci Farms as an option for volumetric retention for the net SAP area, environmental review would be required pursuant to CEQA.

The Pleasant Grove Retention Facility would function by diverting water from Pleasant Grove Creek into adjacent retention basins during storm events. Stormwater would be retained in these basins until downstream flood events end, after which the stored water would be discharged into Pleasant Grove Creek (CES 2017a). Lakeview Farms would accept stormwater runoff during high flows and allow infiltration in large, constructed wetlands. Exhibit 3-7 shows the location of the potential regional stormwater retention facilities.

Existing stormwater infrastructure within the net SAP area is minimal, and most of the runoff and drainage in the net SAP area sheet-flows to natural swales before dissipating or draining into surface waters. Conceptual stormwater infrastructure trunk lines were developed based on proposed buildout conditions. These trunk lines would be sized to accommodate runoff from the 100-year, 24-hour storm and would range from 36 inches in diameter to 144 inches in diameter depending on the contributing drainage area. The proposed stormwater infrastructure in the net SAP area would be sized to accommodate proposed buildout conditions. Individual development projects would comply with SAP and Placer County stormwater management policies and would design infrastructure with adequate capacity, the construction of which could result in physical impacts. This impact would be potentially significant.

PRSP Area

Most of the PRSP area is undeveloped land formerly used for agriculture. Implementation of the PRSP would result in new impervious surfaces associated with buildings, parking lots, and roadways. As development in the PRSP is built, the new impervious surfaces would increase the volume of stormwater from the PRSP area. The storm drainage master plan prepared for the PRSP area calculated that buildout of the PRSP would require approximately 358 acre-feet of retention in the Pleasant Grove Creek watershed and approximately 17 acre-feet in the Orchard Creek watershed (Placer County 2017h:26). Land use changes made in early 2018 would slightly reduce retention requirements (Placer County 2018b:4). (The total for the Pleasant Grove Creek watershed includes the University Creek watershed, which is a subarea within the Pleasant Grove Creek watershed.)

As described in SAP Policy PFC-5.6 and implemented by Mitigation Measure 4.9-1b, the County would require all development implemented through the PRSP area to demonstrate that it can accommodate the 100-year, 8-day storm as a condition of permit approval. The City of Roseville's Pleasant Grove Retention Facility is proposed for retention of the runoff from the Pleasant Grove Creek watershed, which includes the University Creek drainage. The City of Lincoln's Lakeview Farms is under consideration to accept runoff from the Orchard Creek watershed. At the Pleasant Grove Retention Facility, flows from University Creek would be retained in the northern basin, and flows from the main stem of Pleasant Grove Creek would be held in the south basin (CES 2017a). To minimize stormwater volume during these events, as the PRSP area builds out, retention would

occur within on-site facilities until the Pleasant Grove Retention Facility is completed and can accommodate the excess stormwater volume generated by development in the PRSP area.

In addition to PRSP area retention requirements, an existing retention basin in the PRSP area currently retains 10.9 acre-feet of stormwater volume within a drainage easement for the benefit of the off-site Nichols Drive Industrial Park, located within the net SAP area. At some point, the development of Lots PR-67 and PR-68, as well as the widening of Foothills Boulevard, would remove the existing basin. The PRSP area developer would either provide for on-site retention or participate in a regional stormwater retention program to offset this removal, as required by Mitigation Measure 4.9-1b.

The backbone stormwater infrastructure for the PRSP area was modeled using criteria from the *Placer County Flood and Water Conservation District Stormwater Management Manual* (see Exhibit 3-21, “PRSP Stormwater Drainage Infrastructure”) and was sized to accommodate proposed buildout conditions. Because future development in the PRSP area would undergo Placer County permit review to ensure compliance with SAP and Placer County stormwater management policies, it would not generate runoff that exceeds the capacity of the planned PRSP stormwater drainage system. However, the construction of stormwater drainage facilities could result in physical environmental effects. This impact would be potentially significant.

Other Supporting Infrastructure

Pleasant Grove Retention Facility

The Pleasant Grove Retention Facility would provide volumetric stormwater retention and would not, in and of itself, result in the need for expanded or new drainage facilities. The Pleasant Grove Retention Facility would be designed to operate at a capacity to serve upstream development areas, including the net SAP and PRSP areas. The construction of stormwater drainage infrastructure associated with buildout of net SAP and PRSP areas are addressed above and in other relevant sections of this EIR. This impact would be potentially significant.

Off-Site Transportation and Utility Improvements

The construction of off-site transportation and utility improvements would result in an increase in impermeable surfaces and would have the same potential construction stormwater effects as the proposed PRSP. This impact would be potentially significant.

Conclusion

Buildout of the net SAP and PRSP areas would require stormwater retention, which would likely be accommodated at regional retention facilities. While the exact infrastructure improvements needed to convey stormwater to these facilities cannot be known at this time, modeling and analysis indicate that compliance with Placer County and SAP policies is achievable and feasible. Construction of stormwater infrastructure and retention facilities could result in adverse physical environmental effects. Therefore, implementation of the SAP and PRSP would have a **potentially significant** impact regarding the construction of stormwater infrastructure.

Mitigation Measures

Implement Mitigation Measures 4.6-1a and 4.6-1b, as well as 4.6-1c, identified in Section 4.6, “Geology and Soils,” and Mitigation Measures 4.9-1a and 4.9-1b, identified in Section 4.9, “Hydrology and Water Quality.”

Significance after Mitigation

Implementation of Mitigation Measures 4.6-1a, 4.6-1b, 4.6-1c, 4.9-1a, and 4.9-1b would require specific measures related to water quality protections and review of permanent BMPs and preparation of Improvement Plans, including sizing of storm drainage facilities to convey, detain, and retain stormwater as required for the proposed individual development projects. These measures are designed to reduce potential impacts related to the construction of stormwater drainage infrastructure. With implementation of Mitigation Measures, the impact would be **less than significant**.

Impact 4.15-6: Increased demand for solid waste services

Buildout of the net SAP area and the PRSP area would create new sources of solid waste generation, including construction waste. Development in the net SAP area and PRSP area would comply with state-mandated solid waste recycling and diversion requirements for construction waste and operational waste of 65 percent and 50 percent, respectively. After the recycling and diversion requirements for construction waste in the net SAP area and PRSP area are met, a total of 192,695 cubic yards of construction waste would remain, which would be 0.8 percent of the remaining capacity at WRSL. Combined, operation of new uses in the net SAP area and PRSP area would generate 201 tons of solid waste on a daily basis, which would be 36 percent of the remaining available daily permitted processing capacity at the MRF. Annually, buildout of the net SAP area and PRSP area would result in the disposal of an estimated 49,004 cubic yards, which would be 0.2 percent of the remaining capacity at WRSL. Because implementation of the SAP, including the PRSP, would comply with all regulatory requirements that relate to the disposal and recycling of solid waste and because the MRF and WRSL have adequate capacity for disposal of solid waste generated by construction and operation of the net SAP area and PRSP area, this impact would be **less than significant**.

Net SAP Area

With implementation of the SAP (excluding the PRSP area), approximately 4,000 acres of undeveloped area in western Placer County would be developed with a mix of employment-generating land uses, with the potential to also provide residences for employees. Solid waste collection for the new development would be provided by Recology, solid waste would be processed at the WPWMA MRF, and disposed of at the WRSL.

Because the SAP area is largely undeveloped, little demolition would be necessary to implement the SAP, but construction of new buildings would generate construction waste. Construction waste generated by implementation of the SAP would amount to approximately 331,000 cubic yards (see Table 4.15-12). In accordance with Section 5.408 of the CALGreen Code, the project would implement a Construction Waste Management Plan for recycling and/or salvaging for reuse of a minimum of 65 percent of construction debris generated during project construction. After recycling and/or salvaging a minimum of 65 percent of construction waste, if waste haulers choose to take construction waste to WRSL, the project's remaining construction waste, 115,895 cubic yards. As of July 1, 2017, the WRSL has a remaining capacity of 24,468,271 cubic yards (WPWMA 2018). Based on that amount, construction waste from the net SAP area would be 0.5 percent of WRSL's remaining capacity.

Table 4.15-12 Estimated Waste Generated by Sunset Area Plan and Placer Ranch Specific Plan Construction

Construction Waste Source	Construction Waste Disposal Rate (pounds per square feet)	Building Area (square feet) ¹	Total Waste (pounds)	Total Waste (tons)	Total Waste Generated (cubic yards) ²	Total Waste Requiring Disposal (cubic yards) ³
Net SAP Area						
Residential Construction Waste	4.4	5,437,096	23,923,222	11,962	59,808	20,933
Nonresidential Construction Waste	3.9	27,827,600	108,527,640	54,264	271,319	94,962
Total			132,450,862	66,225	331,127	115,895
PRSP Area						
Residential Construction Waste	4.4	12,466,832	54,854,061	27,427	137,135	47,997
Nonresidential Construction Waste	3.9	8,440,513	32,918,000	16,459	82,295	28,803
Total			87,772,062	43,886	219,430	76,800
Total (net SAP area + PRSP area)			220,222,924	110,111	550,557	192,695

¹Total square feet of the residential units was calculated based on average square footage of similar types of residential development (2,212 square feet) near the net SAP and PRSP areas.

²The volume of construction waste was determined using a conversion rate of 400 pounds per cubic yard of construction debris.

³Total waste requiring disposal calculated by applying state-mandated solid waste recycling and diversion requirement of 65%.

Sources: CalRecycle 2004, EPA 2017

Operations of new uses in the net SAP area would result in generating approximately 125 tons per day and over 61,000 cubic yards per year of waste (see Table 4.15-13). The amount of waste generated by operation of the project would be less than shown in Table 4.15-13 because the project would be required to recycle a minimum of 50 percent of their waste, as required by AB 939. (It should also be noted that CalRecycle will soon be issuing new requirements aimed at meeting the target established by SB 1383 to achieve 50 percent reduction in the level of statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025.) With implementation of waste diversion and reduction requirements, it is estimated that approximately 30,528 cubic yards per year (or approximately 62.5 tons per day) of waste generated by the increase in residents and employees in the net SAP area would be disposed of in the WRSL. Between July 1, 2016 and June 30, 2017, a total of 367,974 cubic yards of airspace were consumed at the WRSL (WPWMA 2018). This equates to an average of approximately 756 tons per day. The permitted daily throughput of the WRSL is 1,900 tons per day (Placer County Environmental Health 2003). The remaining daily capacity between the permitted amount and the actual average daily amount leaves approximately 1,144 tons per day of available capacity. Operational waste disposal of approximately 62.5 tons per day represents approximately 5 percent of the remaining daily capacity. This analysis assumes that the full amount of daily waste generated by development in the net SAP area would be taken to the MRF for sorting and diversion of recyclable materials, which would be approximately 22 percent of the MRF's remaining capacity.

Development in the net SAP area would comply with all regulatory requirements that relate to the disposal and recycling of solid waste. Per capita disposal rates for unincorporated Placer County are below the target disposal rates established by AB 939 (CalRecycle 2017a). Future development within the net SAP area would implement SAP Policy PFS-6.1 to maximize waste reduction measures. Additionally, the Eco-Industrial designation within the net SAP area provides for ongoing operation of the landfill, as well as for industrial and manufacturing uses focused on alternative waste-to-energy technologies, recovery and reuse of materials, solid waste-related research and development, and related advanced manufacturing. Future development within the net SAP area would coordinate with Recology to provide solid waste collection services, which would be supported through service fees paid by customers.

The MRF and the WRSL have adequate capacity for disposal of solid waste generated by construction and operation of the net SAP area. This impact would be less than significant.

PRSP Area

Buildout of the PRSP area would result in new sources of solid waste and waste resulting from construction and operation of future development. Construction waste generated by implementation of the PRSP would amount to approximately 220,000 cubic yards (see Table 4.15-13). New uses in the PRSP area would generate approximately 76 tons per day and nearly 37,000 cubic yards of waste each year (see Table 4.15-13). As noted in Section 4.15.1, the PRSP land use plan was revised between issuance of the NOP and completion of this Draft EIR. The estimated solid waste that would be generated under the original land use plan was 233,000 cubic yards during construction and 81 tons per day or 39,000 cubic yards of waste each year. As shown in Table 4.15-13, the current land use plan would generate less solid waste during construction and operation than under the original land use plan. Construction and implementation of the PRSP would result in similar reductions in waste through compliance with state-mandated diversion requirements.

As described for the net SAP area, a Construction Waste Management Plan would be implemented for the PRSP area to ensure that a minimum of 65 percent of the construction debris generated during project construction would be recycled and/or salvaged. After recycling and/or salvaging, the project's remaining construction waste, 76,800 cubic yards, would be 0.31 percent of WRSL's remaining capacity.

As described above for the net SAP area, the amount of waste requiring disposal would be less than the amount of waste generated by the PRSP area (Table 4.15-13) because the project would be required to recycle a minimum of 50 percent of the waste, as required by AB 939. With implementation of waste diversion and reduction requirements, it is estimated that approximately 18,476 cubic yards per year or 38 tons per day of waste generated by the increase in residents and employees in the PRSP area would be

Table 4.15-13 Estimated Solid Waste Generated by Operation of the Sunset Area Plan and the Placer Ranch Specific Plan

Land Use Designation	Estimated Residents	Jobs	Non-Residential Disposal Rate (tons/employee/year)	Residential Disposal Rate (lb/resident/day)	Non-Residential Waste (tons/day)	Non-Residential Waste (tons/year)	Non-Residential Waste (cubic yards/year)	Residential Waste (tons/day)	Residential Waste (tons/year)	Residential Waste (cubic yards/year)	Generation Total (tons/day)	Generation Total (tons/year)	Generation Total (cubic yards/year)	Disposal Total (cubic yards/year) ¹
Net SAP Area														
General Commercial	0	440	1.52	7	1.83	669	892	0.00	0	0	1.83	669	892	446
Entertainment Mixed-Use	929	6,120	1.52		25.49	9,302	12,403	3.25	1,187	1,582	28.74	10,489	13,986	6,993
Business Park	0	2,210	0.79		4.78	1,746	2,328	0.00	0	0	4.78	1,746	2,328	1,164
Innovation Center	5,166	24,000	0.79		51.95	18,960	25,280	18.08	6,600	8,799	70.03	25,560	34,079	17,050
Eco-Industrial	0	7,920	0.64		13.89	5,069	6,758	0.00	0	0	13.89	5,069	6,758	3,379
Light Industrial	0	3,530	0.64		6.19	2,259	3,012	0.00	0	0	6.19	2,259	3,012	1,506
Total	6,095	44,220	NA	NA	104.12	38,005	50,673	21.33	7,786	10,382	125.46	45,791	61,055	30,528
PRSP Area														
University	13,219	5,733	0.38	7	5.97	2,179	2,905	46.27	16,887	22,515	52.24	19,066	25,420	12,710
Campus Park		7,354	0.79		15.92	5,810	7,746				15.92	5,810	7,746	3,873
General Commercial		593	1.52		2.47	901	1,201				2.47	901	1,201	601
Commercial Mixed Use		1,275	1.52		5.31	1,938	2,584				5.31	1,938	2,584	1,292
Total	13,219	14,955	NA	NA	29.67	10,828	14,436	46.27	16,887	22,515	75.94	27,715	36,951	18,476
Total (net SAP area + PRSP area)	19,314	59,175	NA	NA	133.79	48,833	65,109	67.60	24,673	32,897	201.40	73,506	98,006	49,004

Notes: lb = pounds, NA = not available.

¹ Total waste requiring disposal calculated by applying state-mandated solid waste recycling and diversion requirement of 50%.

Source: CalRecycle 2017b

disposed of in the WRSL. As discussed above, the WRSL has an estimated remaining permitted capacity of 1,144 tons per day. Operational waste disposal of approximately 38 tons per day represents approximately 3 percent of available daily remaining capacity. This analysis assumes the full amount of daily waste generated by the development in the PRSP area would be taken to the MRF for sorting and diversion of recyclable materials, which would be approximately 14 percent of the MRF's remaining capacity.

The MRF and the WRSL have adequate capacity for disposal of solid waste generated by construction and operation of the PRSP. This impact would be less than significant.

Other Supporting Infrastructure

Pleasant Grove Retention Facility

Construction and operation of the Pleasant Grove Retention Facility could result in removal of topsoil and removal of vegetation during ongoing maintenance. Any materials that are disposed of outside of the Pleasant Grove Retention Facility could be taken to the WPWMA MRF for sorting and disposal. The WRSL has existing capacity to accept over 24 million cubic yards. This impact would be less than significant.

Off-Site Transportation and Utility Improvements

Off-site transportation and utility improvements could result in some solid waste generated during construction of these facilities that would require disposal or recycling at the WRSL. The WRSL has a remaining capacity of over 24 million cubic yards. This impact would be less than significant.

Conclusion

Buildout of the net SAP area and PRSP area would create new sources of solid waste generation, including waste generated by the construction of new development. Development in the net SAP area and PRSP area would comply with state-mandated solid waste recycling and diversion requirements for construction waste and operational waste of 65 percent and 50 percent, respectively. After the recycling and diversion requirements for construction waste in the net SAP area and PRSP area are met, a total of 192,695 cubic yards of construction waste would remain, which would be 0.8 percent of the remaining capacity at WRSL. Combined, operation of new uses in the net SAP and PRSP areas would generate 201 tons of solid waste on a daily basis, which would be 36 percent of the available daily permitted processing capacity at the MRF. Annually, buildout of the net SAP area and PRSP area would result in the disposal of an estimated 49,004 cubic yards, which would be 0.2 percent of the remaining capacity at WRSL. Because implementation of the SAP and PRSP would comply with all regulatory requirements that relate to the disposal and recycling of solid waste and because the MRF and WRSL have adequate capacity for disposal of solid waste generated by construction and operation of the SAP and PRSP, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 4.15-7: Increased demand for electricity

Implementation of the SAP, including the PRSP, would increase demand for electricity by bringing new residential and non-residential electricity users to the area. The increased demand for electricity could require additional electricity generation and transmission facilities, as well as the need for distribution infrastructure. PG&E has existing and planned substations in the SAP area that would have sufficient capacity to serve the new development in the net SAP and PRSP areas. Distribution infrastructure would be installed concurrently with net SAP and PRSP development, thereby reducing potential environmental impacts. The impact would be **less than significant**.

Net SAP Area and PRSP Area

Development of the net SAP area and the PRSP area would require the extension of existing PG&E electrical facilities to serve new retail residential and non-residential customers. At full buildout, the net SAP area would have a peak electricity demand of approximately 168 megavolt amperes (MVA) (Placer County

2017d:3). At full buildout, the peak electric demand of development in the PRSP area is estimated to be approximately 67 MVA (Placer County 2018:3).

PG&E's Pleasant Grove Substation, located in the southeastern portion of the net SAP area, would serve the initial phases of development. Peak capacity for the Pleasant Grove Substation is 135 MVA, and peak demand is approximately 110 to 115 MVA (Placer County 2017d:3). There are no plans to expand the Pleasant Grove Substation.

A new substation, known as the Athens Substation, has long been planned for the east side of Industrial Avenue, just north of Twelve Bridges Drive. PG&E owns the site and anticipates starting construction as early as 2020. Once the Athens Substation is built, PG&E will off-load some demand from the Pleasant Grove Substation to the Athens Substation so that the Pleasant Grove substation has capacity for the demands of development in the net SAP area and PRSP area. The Athens Substation will have a capacity of 135 MVA (Placer County 2017d:3).

PG&E also plans a Placer Ranch Substation to be located immediately adjacent to PG&E's 230-kV transmission line and Roseville Electric's Peaking Plant #2. The substation would have a capacity of 135 MVA. PG&E expects construction to begin between 2030 and 2040, with actual timing driven by demand (Placer County 2017e:13).

Due to the projected demands of development in the SAP area at buildout, a fourth substation is anticipated to be needed in the SAP area (Placer County 2017d:4). A site has not yet been identified, but it would likely be located in the northwestern area of development within the net SAP area, and adjacent to PG&E's 230-kV transmission line. The Sunset Substation is expected to have a capacity of 135 MVA, but no extensions of transmission lines would be needed if the substation is located adjacent to the existing transmission lines. There is no anticipated date of construction for this substation as construction would be driven by demand.

In addition to substations, development of the net SAP area and the PRSP area would require installation of distribution systems. The requirements for the backbone and distribution system is identified in the technical reports prepared for the net SAP area (Placer County 2017d) and the PRSP area (Placer County 2017e). Backbone and distribution infrastructure would be installed concurrently with development in the net SAP area and the PRSP area. Because existing and planned PG&E substations could meet electricity demand of development in the SAP area and infrastructure would be installed during the development process, this impact would be less than significant.

Other Supporting Infrastructure

Pleasant Grove Retention Facility

Due to the nature of the facility, the construction and operation of the Pleasant Grove Retention Facility would not generate demand for electricity and, thus, would not impact existing capacity of electricity infrastructure and supply and would not require the construction of new or expansion of existing electricity infrastructure. There would be no impact.

Off-Site Transportation and Utility Improvements

Off-site transportation and utility improvements could result in some increase in demand for electricity, such as for lights along roadways or for monitoring equipment that might be used for off-site water, wastewater, or recycled water infrastructure. This impact would be less than significant.

Conclusion

While buildout of the net SAP area and PRSP area would generate demand for electricity, PG&E's existing and planned facilities would have capacity to serve development. Backbone infrastructure and distribution systems would also be required for new development and would be installed concurrently with new development. Because existing and planned capacity and infrastructure would be adequate to serve buildout of the net SAP area and PRSP area, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 4.15-8: Increased demand for natural gas

Implementation of the SAP, including the PRSP, would increase demand for natural gas by bringing new customers to the area. The increased demand for natural gas would require new distribution infrastructure. PG&E's existing Line 123 transmission main runs through the project area, and new development would be able to connect to the existing system. Distribution infrastructure would be installed concurrently with net SAP and PRSP development, thereby reducing potential environmental impacts. The impact would be **less than significant**.

Net SAP Area and PRSP Area

Development of the net SAP area and the PRSP are would require the extension of existing PG&E natural gas infrastructure to serve new customers. At full buildout, the net SAP area would have a peak natural gas demand of approximately 1,507 million cubic feet per hour (Placer County 2017d:5). At full buildout, the peak natural gas demand of development in the PRSP area is estimated to be approximately 703 million cubic feet per hour (Placer County 2018:4).

PG&E's Line 123 is a 12-inch transmission main that runs through the eastern portion of the net SAP and PRSP areas in a 10-foot-wide transmission pipeline easement. The technical reports prepared for the net SAP area (Placer County 2017d) and the PRSP area (Placer County 2017e) indicate that PG&E would supply natural gas to future development. As part of the development process, much of the infrastructure necessary to connect new customers to the existing system would be installed concurrently with project development. Because PG&E has capacity to serve the natural gas needs of development in the net SAP area and PRSP area and infrastructure would be installed concurrently with project development, this impact would be less than significant.

Other Supporting Infrastructure

Pleasant Grove Retention Facility

The construction and operation of Pleasant Grove Retention Facility would not generate demand for natural gas and, thus, would not impact existing capacity of natural gas infrastructure and supply and would not require the construction of new or expansion of existing natural gas infrastructure. There would be no impact.

Off-Site Transportation and Utility Improvements

The off-site transportation and utility improvements would not generate demand for natural gas and, thus, would not affect existing capacity of natural gas infrastructure and supply and would not require the construction of new or expansion of existing natural gas infrastructure. There would be no impact.

Conclusion

While buildout of the net SAP area and PRSP area would generate demand for natural gas, PG&E has capacity to serve development. Distribution infrastructure would also be required for new development and would be installed concurrently with new development. Because PG&E has adequate capacity and infrastructure would be installed to serve buildout of the net SAP area and PRSP area, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 4.15-9: Increased demand for communication services

Buildout of the net SAP area and PRSP area would increase demand for communications services and would require new communications infrastructure to provide cable, voice, and data services to these areas. These additional services would be provided by private telecommunications companies and would be funded through developer fees and future customer billing. All communications lines would be installed in roadway rights-of-way, so there would not be any environmental impacts beyond the construction impacts identified in this EIR. Therefore, the demand for communications services would be a **less-than-significant** impact.

Net SAP Area

Buildout of the net SAP area would increase demand for communications services, including cable, voice, and data services. As development within the net SAP area occurs, distribution lines for communications services infrastructure would be extended from existing infrastructure to individual parcels in conjunction with roadway improvements. All new telecommunication lines would be installed underground within the rights-of-way of roadways within the net SAP area. A backbone conduit and manhole system capable of supporting both copper and fiber systems would run along all the major roads. Cable television and telephone distribution lines to individual parcels would be extended from telecommunications infrastructure within the net SAP area, which would occur as development takes place.

The future communications services demand in the net SAP area could be met by a number of communications service providers that have infrastructure adjacent to the net SAP area. AT&T is the incumbent local exchange carrier (ILEC) and would provide telecom services to the net SAP area in accordance with its rules and regulations. Two AT&T Wire Centers would serve the net SAP area, the Pleasant Grove Exchange service area would serve the western portion and the Stanford Exchange would serve the eastern portion. Wave Broadband services, including cable, voice, and data services, could be extended to within the net SAP area from conduit structure with fiber stubbed west at Sunset Boulevard and Cincinnati Avenue, and at Nichols Drive and Duluth Avenue. Comcast communication services could be extended to the net SAP area from existing facilities stubbed to the south and southeast of the PRSP area. Consolidated Communications could also extend communication services infrastructure to the net SAP area from Sunset Boulevard to the east (Placer County 2017d:6-7).

Potential environmental effects that could occur as result of constructing the on-site or off-site communications infrastructure would include construction-related effects, including noise, dust, air quality emissions from construction vehicles, increased traffic congestion due to construction vehicles, potential disruption of utility lines, erosion, and water quality impacts. The potential effects related to constructing utility infrastructure, such as underground communication infrastructure, are addressed in Sections 4.1 through 4.16 in this EIR, and mitigation measures have been incorporated, where applicable, to reduce the environmental impacts of construction of the infrastructure improvements.

Buildout of the net SAP area would increase demand for communications services. These additional services would be provided by private telecommunications companies and would be funded through developer fees and future customer billing. In addition, the telecommunications companies would be given the opportunity to review and comment on any proposed development requiring new service. All phone and cable lines would be installed in roadway rights-of-way, so there would not be any environmental impacts beyond the construction impacts identified in this EIR. Therefore, the demand for communications services would be a less-than-significant impact.

PRSP Area

Buildout of the PRSP area would increase demand for communications services, including cable, voice, and data services. As development within the PRSP area occurs, distribution lines would be extended from existing infrastructure to individual parcels in conjunction with roadway improvements. All new telecommunication lines would be installed underground.

The future communications services demand in the PRSP area could be met by a number of communications service providers that have infrastructure adjacent to the PRSP area. AT&T is the ILEC and would provide telecom services to the PRP area in accordance with its rules and regulations. The Stanford Exchange (or Wire Center) would serve the PRSP area, with the extension of a large fiber trunk running south along Cincinnati from the CO then west along Sunset Avenue West, though fiber may have to extend south around the development and north up Fiddymont Road and/or Woodcreek Oaks Boulevard due to phasing. AT&T also has facilities stubbed north at Fiddymont Road and Woodcreek Oaks Boulevard.

Communications services from Wave Broadband, Comcast, and Consolidated Communications could be extended to the PRSP area in a way similar to that described above for the net SAP area (Placer County 2017e:20–24).

The Sac State–Placer Center would maintain its own telecommunications network consisting of an underground conduit system—with copper and fiber systems—connecting each campus building to a main distribution point. It would be designed to bring the AT&T, Wave Broadband, Comcast, and/or CCI feeds to its main distribution point (it could take feeds at several campus locations) and would then run the feed(s) through its own equipment. The network system would provide voice, data, internet, WiFi, TV/video, and security services throughout the campus.

The construction of new communications services infrastructure on- or off-site could result in potential environmental effects similar to those described above for the net SAP area. The potential effects related to constructing utility infrastructure, such as underground communication infrastructure, are addressed in Sections 4.1 through 4.16 in this EIR.

Buildout of the PRSP area would increase demand for communications services. These additional services would be provided by private telecommunications companies and would be funded through developer fees and future customer billing. In addition, the telecommunications companies would be given the opportunity to review and comment on any proposed development requiring new service. All phone and cable lines would be installed in roadway rights-of-way, so there would not be any environmental impacts beyond the construction impacts identified in this EIR. Therefore, the demand for communications services would be a less-than-significant impact.

Other Supporting Infrastructure

Pleasant Grove Retention Facility

The construction and operation of Pleasant Grove Retention Facility would not generate demand for communication services and, thus, would not require the construction of new or expansion of existing communication services infrastructure. There would be no impact.

Off-Site Transportation and Utility Improvements

The off-site transportation and utility improvements would not generate demand for communication services and, thus, would not require the construction of new or expansion of existing communication services infrastructure. There would be no impact.

Conclusion

Buildout of the net SAP area and PRSP area would increase demand for communications services and would require new communications infrastructure to provide cable, voice, and data services to these areas. These additional services would be provided by private telecommunications companies and would be funded through developer fees and future customer billing. In addition, the telecommunications companies would be given the opportunity to review and comment on any proposed development requiring new service. All phone and cable lines would be installed in roadway rights-of-way, so there would not be any environmental impacts beyond the construction impacts identified in this EIR. Therefore, the demand for communications services would be a **less-than-significant** impact.

Mitigation Measures

No mitigation is required.

Impact 4.15-10: Consistency with applicable general plan policies

The project was reviewed for consistency with the policies of the *Placer County General Plan* relating to utilities and found to be consistent. This impact would be **less than significant**.

The relevant goals and policies of the Placer County General Plan (Placer County 2013) regarding utilities are included in Section 4.15.3, “Regulatory Setting,” earlier in this section.

Development projects in the net SAP and PRSP areas would be required to fund their fair share of the construction for new public facilities required to serve projects, consistent with Goal 4.A and Policies 4.A.1 and 4.A.2. The WSAs prepared for the net SAP area and PRSP area indicate that water supply for the project area has been included in regional water supply planning assumptions and that there is adequate water supply to serve development in the net SAP and PRSP areas, consistent with Goal 4.C and Policy 4.C.1. As indicated in the technical reports prepared for the net SAP and PRSP areas, recycled water is anticipated to be used to meet water demands where appropriate, consistent with Goal 4.C and Policy 4.C.7.

While most of the project area is within the existing service boundaries for wastewater conveyance and treatment, some areas would need to be annexed to the appropriate service provider’s service area, consistent with Goal 4.D, Policy 4.D.1, and Policy 4.D.2. Development projects in the project area would include necessary infrastructure improvements to connect to existing systems and adequately serve planned development, consistent with Policy 4.D.4 and Policy 4.D.5.

Construction of stormwater infrastructure required to serve the project area would be subject to all applicable regulations regarding water quality, consistent with Policy 4.E.4, Policy 4.E.5, and Policy 4.E.10. Stormwater retention for development of the net SAP and PRSP areas would be coordinated with facilities in adjacent jurisdictions, consistent with Policy 4.E.11.

Development within the net SAP and PRSP areas would be served by existing solid waste providers with disposal at the MRF and WRSL, consistent with Goal 4.G, Policy 4.G.1, and Policy 4.G.12. Goal PFS-6 in the SAP and its associated policies seek to implement the goals and policies of the general plan, including Policy 4.G.2, Policy 4.G.7, Policy 4.G.8, and Policy 4.G.9. Potential impacts related to landfill odors and potentially incompatible land uses are discussed below in Impact 4.15-11.

New electricity, natural gas, and telecommunications distribution facilities required for development in the net SAP and PRSP areas would be underground with the exception of transformers, switches, interrupters, pedestals, and pad-mounted equipment (Placer County 2017d:1; 2017b:4). The undergrounding of utilities to the extent feasible is consistent with Policy 4.A.4.

Because the project is consistent with the applicable general plan policies as discussed, impacts related to general plan consistency would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 4.15-11: Potential impact on Western Regional Sanitary Landfill from incompatible land use that results in insufficient permitted capacity to serve waste disposal needs

The close proximity of incompatible land uses and the resulting increased odor complaints that are likely to occur with project implementation could result in increased public pressure and enforcement action. It is possible, but not likely, that such pressure could result in the need for WPWMA to modify WRSL operations, including possible diversion of waste to other facilities. Additionally, complaints related to the landfill and co-located operations could cause opposition to future expansion plans, and could jeopardize approval of the expansion. However, these are unlikely scenarios. WPWMA and its member agencies have a substantial investment in the WRSL and MRF, which are benefits to the region; WPWMA is planning near-term facility improvements; WPWMA remains actively engaged with the community and stakeholders about nuisance odor issues; and WPWMA continues to be proactive about implementing odor control measures, including pilot studies to investigate the feasibility of specific technologies. For these reasons, it would be speculative to conclude that public pressure would mount to such a degree to cause something as severe as diversion of waste to other facilities, landfill closure, or denial of expansion plans. Importantly, the results of research into similar facilities indicate that landfills that are the subject of odor complaints have been allowed to expand. For these reasons, this impact would be **less than significant**.

As described for Impact 4.10-2, regardless of the buffer distance established through policy, introduction of proposed residential development to the PRSP area and, to a lesser degree, to the net SAP area, is likely to increase the number of odor complaints received by WPWMA and the Placer County Air Pollution Control District. While mitigation is recommended to reduce the adverse effects of incompatible land uses, the impact would be significant and unavoidable (see Section 4.10, "Land Use"). Increased odor complaints could lead to increased public pressure to reduce odors at the facility, and, in the most extreme scenario, result in enforcement action to alter WRSL operations such that odors are reduced (e.g., changing the timing, volume, and manner of handling odorous materials, such as compost and green waste; implementing additional odor-control features and technologies).

Existing odor complaints/notifications are described in detail in Section 4.3, "Air Quality." Analysis in Impact 4.3-6 determined that the project would result in a significant and unavoidable impact with regard to objectionable odors affecting a substantial number of people. The potential for additional odor complaints/notifications because additional residential development would be placed closer to the WRSL is addressed in Impact 4.10-2. Impact 4.10-2 also includes a discussion of the range of potential operational changes that may result from increased odor complaints.

If nuisance complaints and public pressure were to mount to such a degree that WPWMA was required by enforcement action to alter WRSL operations, perhaps the most extreme potential change in operations, if other simpler measures prove insufficient, would be diversion of waste to another facility (such as Recology Ostrom Road Landfill, near Wheatland, which is not operating at capacity) to limit waste accepted at the WRSL, MRF, or compost facility. Limitation of the volume of waste accepted could adversely affect the ability of the WRSL to provide solid waste disposal services in the County, the MRF to provide recycling services that assist jurisdictions in meeting State waste diversion mandates such as those included in AB 939 and the CalGreen Code, and the compost facility from providing adequate capacity to handle the additional organics diversion mandated by SB 1383.

Another possible, although unlikely, outcome of substantial increased complaints related to the landfill or recycling facilities could be denial of future expansion plans. As part of the Waste Action Plan effort, WPWMA is identifying expansion needs for both the landfill and recycling facilities to accommodate growth in the area as well as provide expanded recycling services necessary to assist County jurisdictions with meeting recently-expanded State mandates related to organics and construction and demolition diversion. Some possible facility uses are contemplated on the parcel west of the existing WRSL, on the parcel north of that, and in the space east of the WRSL. Denial of the expansion plans could eventually place some of the waste disposal burden on local jurisdictions.

However, these scenarios, though possible, are not likely, and evaluation of potential impacts that could result from these scenarios would be speculative. WPWMA and its member agencies have a substantial long-term investment in the WRSL, MRF, and related operations. The WRSL began operations in 1979 to serve Placer County and the cities of Lincoln, Rocklin, and Roseville, and is the only remaining active landfill in Placer County. As such, these facilities are benefits to the region, providing cost-effective waste disposal, composting, and recycling operations. WPWMA is actively planning for near-term facility improvements as part of its Renewable Placer Waste Action Plan and anticipates initiating environmental review of a preferred concept in early 2019. Through this planning process and generally, WPWMA remains actively engaged with the community and stakeholders about nuisance issues, including odors, and continues to be proactive about implementing odor control measures, including pilot studies to investigate the feasibility of specific technologies (see Section 4.3, “Air Quality,” for additional discussion). While it is possible that public pressure and nuisance complaints could mount to such a degree that WPWMA would be required to undertake extreme measures, up to and including diversion of waste to other facilities and/or closure, it is more likely that stakeholder engagement, continued monitoring and response, and implementation of new technologies would allow continued operation of the facility until its anticipated closure date in 2058.

As discussed in more detail in Section 4.10, “Land Use” (see Impact 4.10-2, “Consistency and compatibility with the Western Regional Sanitary Landfill”), odor complaints related to land use inconsistency do not necessarily preclude landfill expansion. For example, although some operations of the Newby Island Recovery Park could be curtailed as part of a settlement agreement, the facility was still able to obtain a permit to expand. Additionally, despite odor complaints (many of which were eventually determined not to originate at the landfill), Chiquita Canyon Landfill was still allowed to expand. Therefore, based on existing and future operations at WRSL, and research into other similar facilities around the state, potential impacts on the WRSL and on waste disposal service would be **less than significant**.

Mitigation Measures

No mitigation is required.

CUMULATIVE IMPACTS

For utilities and service systems, the cumulative context includes the service areas of the various service providers. As detailed in Table 4.0-2, the cumulative setting generally includes more than 50,000 acres of approved development, including more than 100,000 residential units and millions of square feet of non-residential building floor area.

Cumulative Impact 4.15-12: Cumulative increase in demand for water supply

Cumulative development in the project area and beyond would result in some increased demand for water supply. PCWA’s 2015 UWMP noted that PCWA’s water supply is highly reliable (PCWA 2016b:6-4). PCWA calculates their 3-year minimum supply at 233,800 afy, 196,700 afy, and 196,700 afy for the years 2016, 2017, and 2018, respectively (PCWA 2016b:Table 6-3). PCWA delivers approximately 116,500 afy to customers within its system, and approximately 23,600 afy of untreated water to neighboring purveyors (PCWA 2016b:1-1).

The UWMP evaluated the availability of water supplies and anticipated demand for 25 years and buildout. Under average year, single dry year, and multiple dry year conditions, PCWA anticipates having water supplies that exceed demand (PCWA 2016b:Tables 7-1, 7-2, and 7-3). Thus, PCWA is currently able to meet all demands, and the UWMP concludes that PCWA would be able to meet all anticipated demands through buildout. It should be noted that the UWMP’s supply calculations do not include supply from groundwater or recycled water sources.

As discussed in Impact 4.15-1, the proposed land use plans for the net SAP area and PRSP area were included in the UWMP’s calculations, and the actual project calculations are lower than assumed by the UWMP (PCWA 2017b, 2017c). Because adequate water supply is available to accommodate buildout of the net SAP area and PRSP area, and because individual projects would be required to comply with applicable

codes and regulations and to acquire will-serve letters from water purveyors, thereby verifying adequate water supplies, cumulative water demand would be less than significant and contribution by development in the net SAP and PRSP areas to cumulative water demand would not be cumulatively considerable. This impact would be **less than significant**.

Cumulative Impact 4.15-13: Cumulative increase in demand for water supply conveyance and water treatment services

As discussed in Impact 4.15-2, PCWA's Foothill and Sunset WTPs currently serve the water treatment needs for Lower Zone 6 (i.e., areas of the watershed below Auburn). While these two facilities have available capacity, the capacity is available on a first-come, first-served basis. Approved projects that would also require treated water from the PCWA facilities include Lincoln Village 5 (City of Lincoln 2016), Lincoln Village 7 (City of Lincoln 2009), Lincoln Village 1 (City of Lincoln 2012), and Amoruso Ranch (City of Roseville 2016), and the rest of the projects identified in Table 4.0-2. Overall, projects in the cumulative setting would develop more than 50,000 acres in the region, adding more than 100,000 residential units and millions of square feet of non-residential building floor area. Because there is not sufficient treatment capacity for all approved and future projects, PCWA is planning to construct the Ophir WTP, which would provide capacity for approved and future projects. The timing and capacity of the Ophir WTP is still under consideration (PCWA 2016a:2-10).

Adequate water treatment would be required prior to project approval; however, the potential for insufficient capacity in the regional treatment systems to be available combined with uncertainty regarding construction and operation impacts could result in a significant cumulative impact. The demand for water conveyance and treatment under the SAP and PRSP would be a substantial contribution to significant cumulative impact. Implementation of Mitigation Measure 4.15-2, which requires confirmation of adequate water treatment capacity, would reduce the net SAP area and PRSP area contributions to the significant cumulative impact. Thus, implementing the SAP and PRSP would not result in a considerable cumulative contribution and this impact would be **less than significant**.

Cumulative Impact 4.15-14: Cumulative increase in demand for wastewater collection and conveyance services

The geographic area that is considered for cumulative impacts on the wastewater collection system includes the portions of the regional service area and urban service area boundaries included in the Systems Evaluation that contribute wastewater flows to the Pleasant Grove sewer trunk line that flows to the PGWWTP.

The cumulative projects that would contribute wastewater flows to the Pleasant Grove sewer trunk line include the buildout of Whitney Ranch and the SR 65 corridor areas located in the western portion of the SPMUD service area in the City of Rocklin, buildout of the North Roseville Specific Plan located south of the eastern portion of PRSP area, and buildout of the West Roseville Specific Plan, located south of the western portion of the PRSP area. These areas are within the regional service area boundary shown in Exhibit 4.15-3 and wastewater generated from these areas were included in the Systems Evaluation. Regional wastewater conveyance and treatment was planned for in the SPWA's Systems Evaluation, which considered buildout development within the 2005 Regional Service Area boundary based on the city and county general plans and specific plans as of June 2004, plus UGAs outside of the 2005 Regional Service Area boundary (RMC Water and Environment 2009:2-2 through 2-6, 2-12). The Systems Evaluation also included approved or near certain changes in zoning or development intensity for major planned development projects within Roseville, plus intensification in designated redevelopment areas in Roseville, Loomis, and Rocklin. Therefore, regional wastewater collection and conveyance facilities for buildout of the SPWA service area, including likely land use intensifications, have been planned for in the Systems Evaluation.

As described in Impact 4.15-3, the wastewater conveyance lines downstream of the PRSP area have sufficient capacity to collect and convey existing wastewater flows under peak conditions. Future peak wastewater flows would have to be determined based on the finalized net SAP and PRSP design sewer flows discharging to the Pleasant Grove Creek crossing sewer line and the Pleasant Grove sewer trunk line and it is anticipated that pipeline upsizing would likely be required and is therefore included as part of the project.

Impact 4.15-3 determined that the Pleasant Grove Creek crossing sewer line and the Pleasant Grove sewer trunk line would have sufficient capacity to convey peak wastewater flows from the net SAP and PRSP areas.

The Systems Evaluation estimated flows from PRSP area development to be 2.17 mgd ADWF (RMC Water and Environment 2009:3-5 and 3-6). Development in the PRSP area is anticipated to generate an estimated 1.99 mgd ADWF, which is lower than the wastewater flows anticipated by the Systems Evaluation. Presumably, PWWF from PRSP area development would also be lower than assessed in the Systems Evaluation. The portion of the net SAP area east of Fiddyment Road was included in the regional service area and ultimate service area boundaries; however, the portion of the net SAP area west of Fiddyment Road is outside of these service boundaries and is projected to generate 1.14 mgd ADWF, or 1.41 mgd ADWF including wastewater flows from Urban Reserve lands. These ADWFs from the western portion of the net SAP area, and anticipated PWWF, were not considered in the sewer model for the Pleasant Grove trunk sewer line and were not planned for in the Systems Evaluation. Therefore, under cumulative buildout conditions, the regional wastewater collection infrastructure downstream of the net SAP and PRSP areas may not have sufficient capacity to convey flows generated by development in the net SAP and PRSP areas in combination with the cumulative projects described above. Adequate wastewater collection facilities would be required prior to project approval; however, the potential for insufficient capacity in the regional wastewater collection systems to serve the net SAP and PRSP areas combined with uncertainty regarding construction and operation impacts could result in a significant cumulative impact. Wastewater flows from the net SAP and PRSP areas would result in a considerable contribution to a cumulative impact on demand for wastewater collection and conveyance services. This impact would be **significant**.

Mitigation Measures

Mitigation Measure 4.15-14: Ensure sufficient capacity in City of Roseville wastewater conveyance lines

Prior to development project improvement plans approval for the first development phase of the net SAP area and the first development phase of the PRSP area, the project proponents for future development within these plan areas shall update the net SAP area and PRSP area buildout peak wastewater flows based on each project's final design. If the project proponents find that the project-generated peak wastewater flows exceed the capacity of the Pleasant Grove Creek crossing sewer line and/or the Pleasant Grove sewer trunk line downstream of the net SAP area and PRSP area points of connection, the project proponents shall develop plans for and construct improvements that would allow for conveyance of each project's buildout wastewater flows. Development within the net SAP and PRSP areas shall pay its fair share toward the development, construction, and operation of any upsizing of these existing facilities or additional wastewater conveyance lines if existing facilities are not upsized. There is an existing reimbursement agreement for additional capacity in the Pleasant Grove Creek crossing between Placer County and West Roseville Development Company, Inc., dated May 3, 2008. Any negotiation of fair share fees associated with the crossing shall be in compliance with this agreement. The improvements shall be constructed to meet peak wet weather flows determined by final design plans, in the sewer lines downstream of the net SAP area and PRSP area points of connection with the Pleasant Grove Creek crossing sewer line and/or the Pleasant Grove sewer trunk line. The plans shall identify the timing of the improvements and confirm that the capacity of the lines would be available when needed by development within the net SAP and PRSP areas. Improvements shall include:

- ▲ replacing the existing City of Roseville wastewater conveyance lines with larger sewer lines that would increase capacity to serve future demand for wastewater conveyance or
- ▲ installing an additional wastewater conveyance line parallel to the existing City of Roseville lines that increases capacity to serve future demand for wastewater conveyance.

Significance after Mitigation

Implementation of Cumulative Mitigation Measure 4.15-14 would require the funding or installation of infrastructure to increase the capacity of City of Roseville's wastewater collection system. Because implementation of this mitigation measure would ensure adequate capacity in the City of Roseville wastewater collection system to accommodate project-generated wastewater under cumulative conditions

that would be constructed prior to when needed by project development, the impact would be reduced to a less-than-significant level. Implementation of Cumulative Mitigation Measure 4.15-14 would reduce the potential impact to SPWA wastewater conveyance capacity to a **less-than-significant** level because the measure would facilitate collection of sewer connection fees and any other operating costs due to the City of Roseville, the agency that owns downstream wastewater collection facilities.

The construction of the improvements identified in Cumulative Mitigation Measure 4.15-14 would occur within the footprint of the on-site and off-site improvements described in Chapter 3, "Project Description," or within City of Roseville easements containing existing wastewater conveyance infrastructure. Offsite improvements would be installed underground and would be limited to either replacement of existing pipelines or installing new pipelines parallel to existing lines. Potential environmental impacts of these measures are similar to those associated with construction of the proposed utility infrastructure and are discussed in Sections 4.1 through 4.16 of this EIR. These mitigation measures would not result in any additional significant impacts.

Cumulative Impact 4.15-15: Cumulative increase in demand for wastewater treatment services

The geographic area that is considered for cumulative impacts on wastewater treatment services consists of the PGWWTP regional service area boundary and ultimate service area boundary shown in Exhibit 4.15-3. Currently, the wastewater treatment plant has adequate capacity to serve existing wastewater treatment demand and has available capacity for additional flows up to 2.4 mgd ADWF.

Cumulative projects that would contribute demand for wastewater treatment at the PGWWTP include rezones and intensification within the regional service area boundary (including the West Roseville Specific Plan), Curry Creek Specific Plan, Regional University, Inviro Tech, Orchard Creek, Creekview Specific Plan, Sierra Vista Specific Plan, and Amoruso Specific Plan. Estimated buildout flows within the regional service boundary and the ultimate service area boundary are shown in Table 4.15-14. The Systems Evaluation for SPWA completed in 2009 assessed flows from these developments to plan for future wastewater treatment service needs. Table 4.15-14 is based on the flows assessed in the Systems Evaluation; however, revised flow estimates are provided where they have been updated. Excluding flows from the net SAP and PRSP areas, buildout ADWF for the SPWA regional service area boundary and ultimate service area boundary is estimated to be 21.96 mgd. The ADWF for buildout of the regional service area boundary and ultimate service area boundary including flows from the net SAP and PRSP areas is estimated to be 27.73 mgd.

As described under Impact 4.15-4, a project to expand treatment capacity of the PGWWTP to 12 mgd ADWF has been approved and is anticipated to begin construction in 2018, with completion anticipated after 2 years. With existing flows of 7.1 mgd ADWF, available capacity in the expanded PGWWTP would be an estimated 4.9 mgd ADWF. While the planned expansion would be able to treat some wastewater flows from the cumulative projects, the net SAP area, or the PRSP area, capacity to treat an additional 15.73 mgd of cumulative wastewater flows would be needed.

Table 4.15-14 Summary of Buildout Average Dry Weather Flows for the SPWA Service Boundaries

Description of Area	Wastewater Flows (mgd)
2005 PGWWTP Regional Service Area ¹	15.62
Curry Creek Specific Plan	2.72
Regional University	1.17
Inviro Tech	0.08
Orchard Creek	0.02
Creekview Specific Plan	0.37
Sierra Vista	1.37
Amoruso Ranch Specific Plan	0.61

Table 4.15-14 Summary of Buildout Average Dry Weather Flows for the SPWA Service Boundaries

Description of Area	Wastewater Flows (mgd)
pPlacer Ranch	1.99
Sunset Area Plan ²	3.78
Total¹	27.73
Evaluated Treatment Facility Capacity Expansion	29.50 ³
	24.70 ⁴
	25.67 ⁵

Notes: ADWF = average dry weather flow, mgd = million gallons per day.

¹ 2005 PGWWTP Regional Service Area wastewater flows were revised from the Systems Evaluation estimates to exclude flows from Placer Ranch; however, insufficient detail was available to exclude flows that were estimated for the Placer County portion of the regional service area boundary and ultimate service area boundary that contains the SAP area. Thus, the total estimate of wastewater flows for buildout within the SPWA service boundaries is conservative. The Regional Service Area boundary also includes anticipated flows from the West Roseville Specific Plan.

² SAP estimated wastewater flows include 0.23 mgd ADWF generated within the Lincoln 270 area, which is outside SAP area but included in the Athens Avenue Sewer Study.

³ The WWMP EIR included analysis of expanding the PGWWTP to 29.50 mgd ADWF.

⁴ The WRSP Final EIR included analysis of expanding the PGWWTP to 24.70 mgd ADWF.

⁵ The Systems Evaluation included analysis of expanding the PGWWTP to 25.67 mgd ADWF.

Sources: City of Roseville 1996:2-10, 2-34 and 2-35; City of Roseville 2004:4.11-70 through 4.11-75; City of Roseville 2010:4.12.3-19; City of Roseville 2011:4.12.3-18; City of Roseville 2016:4.12-13; Placer County 2008a:2-26; RMC Water and Environment 2009:ES-4, ES-14, 3-5 and 3-6

Expansion of the PGWWTP to 29.5 mgd ADWF was previously addressed in the WWMP EIR (City of Roseville 1996). Additionally, expansion of the PGWWTP to 24.7 mgd ADWF was previously addressed in the WRSP EIR (City of Roseville 2004). The Systems Evaluation discussed expansion of the PGWWTP to 25.67 mgd ADWF (RMC Water and Environment 2009). EIRs have been prepared for Amoruso Ranch Specific Plan (City of Roseville 2016), Creekview Specific Plan (City of Roseville 2011), Sierra Vista Specific Plan (City of Roseville 2010), and the Regional University (Placer County 2008a). Each of these EIRs identified mitigation measures that require implementation of those projects to mitigate impacts associated with the increased demand for wastewater treatment at the PGWWTP through financially supporting construction of the expansion sufficient to accommodate projected flows, contributing fair share funding toward the cost of environmental review, and implementing mitigation measures that would reduce environmental impacts associated with the PGWWTP expansion (City of Roseville 2004:4.11-75; City of Roseville 2010:4.12.3-23 through 4.12.3-25; City of Roseville 2011:4.12.3-26 through 4.12.3-28; City of Roseville 2016:4.12-18 through 4.12.3-28; Placer County 2008b:3-27). Expansion of the PGWWTP to serve the flows resulting from buildout of the SPWA service boundaries, including the net SAP and PRSP areas, could result in environmental impacts associated with construction to increase the capacity of the plant, loss of natural and other resources to expand the footprint of the facility, and degradation of water quality as a result of increased discharges to Pleasant Grove Creek. The NPDES discharge permit for the PGWWTP would need to be amended to reflect higher flows. The construction and operation of additional wastewater treatment facilities could result in potentially significant environmental effects. The incremental wastewater flows generated by development in the net SAP and PRSP areas would make a considerable contribution to a cumulative impact on the increase in demand for wastewater treatment services. This impact would be **significant**.

Mitigation Measures

Implement Mitigation Measure 4.15-4a: Annex to SPWA's regional service area and PGWWTP's service area, and Mitigation Measure 4.15-4b: Confirm infrastructure capacity.

Significance after Mitigation

Implementation of Mitigation Measures 4.15-4a and 4.15-4b would reduce the impact on demand for wastewater treatment capacity to a **less-than-significant** level because the measure would ensure that either additional treatment capacity is added to the PGWWTP or development is curtailed when wastewater treatment capacity is exhausted.

Implementation of Cumulative Mitigation Measures 4.15-4a and 4.15-4b requires the project proponents for the net SAP and PRSP areas to pay sewer connection fees for all appropriate construction- and operation-related mitigation measures identified to reduce potential impacts associated with PGWWTP treatment expansion that are described under Significance after Mitigation for Mitigation Measures 4.15-4a and 4.15-4b, above.

Cumulative Impact 4.15-16: Cumulative increase in demand for stormwater drainage infrastructure

Development projects within west Placer County and adjacent portions of Sutter County, Yolo County, and Sacramento County could result in increased stormwater runoff that could exceed the capacity of stormwater drainage systems. The projects listed in Table 4.0-2 include approved projects that would contribute to the cumulative impact on stormwater drainage infrastructure. Urban development increases volume and rate of stormwater runoff generated from an area through conversion of vegetated or pervious surfaces to impervious surfaces and by the development of drainage systems that connect these impervious surfaces to streams or other water bodies. In this way, development can increase the rate of runoff and eliminate storage and infiltration that would naturally occur along drainage paths. The increased extent of impervious surfaces in upper watershed areas may also create flooding concerns for lower watershed areas.

Projects implemented through the SAP and all other regional projects (see Table 4.0-2) would be required to conduct project-specific environmental review and demonstrate their compliance with CVRWQCB, county, and municipal stormwater regulation and ordinances, including the need for stormwater retention. Overall, development of the projects listed in Table 4.0-2 would develop more than 50,000 acres of land in the region, including more than 100,000 new residential units and millions of square feet of non-residential building floor area. Projects would have to demonstrate adequately sized stormwater conveyance, detention, and volumetric retention facilities in order to obtain construction approval. Therefore, contributions by development in the net SAP and PRSP areas to stormwater-related flooding or an effect on stormwater drainage systems would not be cumulatively considerable. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 4.15-17: Cumulative increase in demand for solid waste services

The cumulative setting for solid waste services consists of the WPWMA service area, including unincorporated western Placer County and the cities of Rocklin, Lincoln, Roseville, Loomis, Auburn, and Colfax. Future development in the unincorporated county and these cities would further increase the amount of waste processed at the MRF and disposed of at the WRSL. Table 4.0-2 lists the projects included in the cumulative conditions. Overall, these projects would develop more than 50,000 acres of land in the region, including more than 100,000 new residential units and millions of square feet of non-residential building floor area.

Buildout of the WPWMA service area would contribute to increased demand for processing at the MRF and for disposal of solid waste at the WRSL. Although the capacity of the landfill and the MRF are anticipated to serve existing and future development within the WPWMA service area, implementation of cumulative projects would result in reducing the life of the MRF and landfill, which would require expansion of these facilities to continue to serve the existing and future development. Because the cumulative projects would contribute to the need to expand the MRF and WRSL or solid waste would need to be transported elsewhere, cumulative demand for solid waste services would be a potentially significant cumulative impact.

As of July 1, 2017, the WRSL has a remaining total capacity of 24,468,271 cubic yards. Based on WPWMA's estimate of future disposal rates, WPWMA believes sufficient disposal capacity at the WRSL will be available until 2058 (WPWMA 2018). As described under Impact 4.15-6, construction waste generated by development in the net SAP and PRSP areas would account for an estimated 0.8 percent of the remaining landfill capacity after meeting recycling and salvage requirements. Annually, after meeting diversion requirements, solid waste generated by development in the net SAP and PRSP areas would account for an estimated 0.2 percent of the remaining landfill capacity. The MRF is currently operating with available

capacity to receive an additional 559 tons per day. Operational waste from development in the net SAP and PRSP areas would generate 201 tons of solid waste on a daily basis, which accounts for approximately 36 percent of the available daily waste capacity at the MRF. The demand for solid waste services generated by development in the net SAP and PRSP areas in combination with solid waste generated by cumulative projects could result in a substantial increase in solid waste demand of the anticipated life of the WRSL and MRF resulting in the need to expand the capacity of the landfill and the MRF.

The SAP Eco-Industrial designation includes the existing WRSL and allows for expansion of the landfill. WPWMA owns undeveloped land adjacent to the existing landfill and is in the early planning stages of developing alternatives for expanding the landfill. Additionally, while the MRF is currently permitted to process 1,750 tons per day, the MRF facility has a daily processing capacity of 2,200 tons per day (Placer County 2017:2). Although there may be potential capacity to expand the MRF permitted capacity and landfill storage capacity, there are no specific plans at this time for increasing capacity of these facilities to meet cumulative demand.

Currently the MRF has permitted processing capacity up to 1,750 tons per day and the WRSL is anticipated to be able to accept waste until 2058. However, the need for increased processing capacity at the MRF and the final closure date at the WRSL would be influenced by several factors, including regional growth rates, economic conditions, and the efficiency of waste recovery. Depending on these factors, waste from the net SAP and PRSP areas in combination with other cumulative development, would shorten the lifespan of the MRF and the WRSL. As a result, both facilities would need to be expanded and/or solid waste would need to be transported elsewhere. Development within the service area of the WRSL, including the net SAP area, PRSP area, and cumulative projects, would be required to pay collection fees, a portion of which could be used to service bonds necessary to fund any potential WRSL expansions. In any case, development in accordance with the PRSP and SAP would be required to comply with SAP PFS 1-3, respectively, which require demonstration of adequate capacity of utilities and services, including solid waste disposal, prior to project approval. In addition, implementation of the SAP and PRSP, as well as the cumulative projects within Placer County, would be required to comply with Placer County General Plan Policy 4.A.2 through which new development must demonstrate that all necessary public facilities are constructed or adequately financed at the time of the development review process with the County. The SAP, PRSP, and cumulative projects within Placer County would also be required by Placer County General Plan Policies 4.B.1 and 4.B.2 to pay their fair share of the cost of all existing public facilities and the cost of upgrading existing facilities or constructing new facilities that would be needed to serve the new development. These policies would serve to avoid any project contribution to significant adverse effects related to solid waste disposal. The impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 4.15-18: Cumulative increase in demand for electricity

As discussed in Impact 4.15-7, PG&E has adequate capacity and infrastructure to serve the electricity demands of development in the net SAP and PRSP areas, as well as other development in the area. Population increases associated with the more than 100,000 new residential units resulting from cumulative projects would be relatively slow, allowing for PG&E to construct additional infrastructure as necessary to meet demand. As part of the approval process for individual projects, project proponents would be required to provide proof from PG&E that the development would be served by the utility. With compliance with County requirements for obtaining will-serve letters, development in the net SAP and PRSP areas would not result in a considerable contribution to a cumulative impact related to increased demand for electricity. The impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 4.15-19: Cumulative increase in demand for natural gas

As discussed in Impact 4.15-7, PG&E has adequate capacity and infrastructure to serve the natural gas demands of development in the net SAP and PRSP areas, as well as other development in the area. Population increases associated with the more than 100,000 new residential units resulting from cumulative projects would be relatively slow, allowing for PG&E to construct additional infrastructure as necessary to meet demand. As part of the approval process for individual projects, project proponents would be required to provide proof from PG&E that the development would be served by the utility. With compliance with County requirements for obtaining will-serve letters, development in the net SAP and PRSP areas would not result in a considerable contribution to a cumulative impact related to increased demand for natural gas. The impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 4.15-20: Cumulative increase in demand for communication services

The geographic area that is considered for cumulative impacts on demand for communication services consists of western Placer County, which is served by AT&T, Wave Broadband, Comcast, and Consolidated Services. There is currently sufficient infrastructure and service capacity to support existing demand.

Cumulative projects identified in Table 4.0-2 that could be served by these communications providers include the West Roseville Specific Plan, Amoruso Ranch, Lincoln 270, Creekview Specific Plan, and Whitney Ranch. Construction of new communications infrastructure would be funded through developer fees and future customer billing. Because communications infrastructure would be constructed as demand from these cumulative projects occurs and any potential environmental effects of constructing that infrastructure is addressed and mitigated, as necessary, by the cumulative projects, cumulative impacts on demand for communication services from these projects would be less than significant.

Because, as described above, communication facilities for the project would be provided through planned improvements and phased along with buildout of the net SAP and PRSP areas, and mitigation measures have been incorporated to reduce the environmental impacts of construction of the infrastructure improvements, the contributions of the net SAP and PRSP areas to this cumulative impact would not make a cumulatively considerable contribution to a cumulative impact on demand for communications services. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

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