# 4.17 UTILITIES AND SERVICE SYSTEMS

This chapter of the Draft Environmental Impact Report (EIR) describes the potential impacts to utilities and service systems associated with the adoption and implementation of the proposed project. This includes impacts on utilities and service systems, including water supply and demand, wastewater (sewage) conveyance and treatment, solid waste collection and disposal systems, storm drainage systems, and energy infrastructure. In each section of this chapter, a summary of the relevant regulatory framework and existing conditions is followed by a discussion of project impacts and cumulative impacts from implementation of the proposed project.

## 4.17.1 WATER

### 4.17.1.1 ENVIRONMENTAL SETTING

#### Regulatory Framework

*Federal Regulations*

Safe Drinking Water Act

The Safe Drinking Water Act, the principal federal law intended to ensure safe drinking water to the public, was enacted in 1974 and has been amended several times. The Safe Drinking Water Act authorizes the United States Environmental Protection Agency (USEPA) to set national standards for drinking water, called the National Primary Drinking Water Regulations, to protect against both naturally occurring and human-made contaminants. These standards set enforceable maximum contaminant levels in drinking water and require all water providers in the United States to treat water to remove contaminants, except for private wells serving fewer than 25 people. In California, the State Water Resources Control Board (SWRCB) conducts most enforcement activities. If a water system does not meet standards, it is the water supplier's responsibility to notify its customers.

America's Water Infrastructure Act of 2018

America's Water Infrastructure Act (AWIA), signed into law on October 23, 2018, authorizes federal funding for water infrastructure projects, expands water storage capabilities, assists local communities in complying with the Safe Drinking Water Act and Clean Water Act (CWA), reduces flooding risks for rural, western, and coastal communities, and addresses significant water infrastructure needs in tribal communities.[1] Additionally, the AWIA requires that drinking water systems that serve more than 3,300 people develop or update risk assessments and emergency response plans. Risk assessments and emergency response plans must be certified by the USEPA within the deadline specified by the AWIA.

[1] John Barasso, October 10, 2018, *Congress Passes America's Water Infrastructure Act*, https://www.barrasso.senate.gov/public/index.cfm/2018/10/congress-passes-america-s-water-infrastructure-act.

*State Regulations*

## Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act, which was passed in California in 1969 and amended in 2013, is the basic water quality control law for California. Under this Act, the SWRCB has authority over State water rights and water quality policy. This Act divided the state into nine regional basins, each under the jurisdiction of a Regional Water Quality Control Board (RWQCB) to oversee water quality on a day-to-day basis at the local and regional level. RWQCBs engage in a number of water quality functions in their respective regions. RWQCBs regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. The EIR Study Area is within the jurisdiction of the North Coast RWQCB (Region 1).

## SWRCB Division of Drinking Water

The California Division of Drinking Water regulates public water systems within California; oversees water recycling projects; permits water treatment devices; and supports and promotes water system security. The Division of Financial Assistance provides funding opportunities for drinking water system improvements; provides support for small water systems and for improving technical, managerial, and financial capacity; and certifies drinking water treatment and distribution operators. The Field Operations Branch of the Division of Drinking Water is responsible for the enforcement of the federal and California Safe Drinking Water Acts and the regulatory oversight of approximately 7,500 public water systems to ensure the delivery of safe drinking water to all Californians. In this capacity, Field Operations Branch staff perform field inspections, issue operating permits, review plans and specifications for new facilities, take enforcement actions for noncompliance with laws and regulations, review water quality monitoring results, and support and promote water system security.

## Urban Water Management Planning Act (Senate Bills 610 and 221)

The California Urban Water Management Planning Act and Section 10620 of the Water Code require that all urban water suppliers in California that provide water to more than 3,000 customers or supply more than 3,000 acre-feet per year (AFY)[2] prepare and adopt an Urban Water Management Plan (UWMP) and update it every five years. The act is intended to support efficient use of urban water supplies. It requires the UWMP to 1) compare water supply and demand over the next 20 years for normal years, single dry years, and multiple dry years, 2) describe demand management measures in a water shortage contingency plan as an appendix, 3) report progress toward meeting a 20 percent reduction in per-capita urban water consumption by 2020, and 4) determine current and potential recycled water uses.

The City of Santa Rosa's most recent UWMP was adopted by the City Council on June 8, 2021, and the Amended 2020 Water Shortage Contingency Plan was adopted by the City Council on November 30, 2021[3]. The next UWMP is due to the DWR by July 1, 2026.

[2] One acre-foot is the amount of water required to cover one acre of ground (43,560 square feet) to a depth of one foot.

[3] City of Santa Rosa Urban Water Contingency Plan, https://www.srcity.org/856/Water-Supply-Planning, accessed August 16, 2024.

Senate Bill (SB) 610 and SB 221 were enacted to 1) ensure better coordination between local water supply and land use decisions and 2) confirm that there is an adequate water supply for new development. The following projects that are subject to the California Environmental Quality Act are required to prepare a Water Supply Assessment (WSA):

- Residential developments consisting of more than 500 dwelling units.
- Shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- Commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- Hotel or motel, or both, having more than 500 rooms.
- Industrial, manufacturing, or processing plant or industrial park planned to employ more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- Mixed-use project that includes one or more of the projects specified above.
- Project that would demand an amount of water equivalent to, or greater than, the amount of water required for 500 dwelling units.

SB 221 requires written verification that there is sufficient water supply available for new residential subdivisions that include over 500 dwelling units. The verification must be provided before commencement of construction for the project.

### Sustainable Groundwater Management Act of 2014

In the midst of a major drought in 2014, a three-bill legislative package was signed into law, collectively known as the Sustainable Groundwater Management Act (SGMA). The Governor's signing message states "a central feature of these bills is the recognition that groundwater management in California is best accomplished locally." Under SGMA, local and regional agencies in groundwater basins that are designated as medium and high priority must form groundwater sustainability agencies (GSA) that oversee the preparation and implementation of groundwater sustainability plans (GSP).

Most of the EIR Study Area is within the Santa Rosa Plain Groundwater Subbasin, which is one of three subbasins within the larger Santa Rosa Valley Groundwater Basin. The two other groundwater subbasins in the EIR Study Area along the eastern edge of the city are the Santa Rosa Valley–Rincon Valley Subbasin and the Kenwood Valley Subbasin. These subbasins are designated as very low priority and are not required to prepare a GSP.

The City of Santa Rosa formed a GSA with Sonoma County Water Agency (Sonoma Water); Sonoma County; the cities of Cotati, Rohnert Park, and Sebastopol; the town of Windsor; Gold Ridge Resources Conservation District; Sonoma Resource Conservation District; and an organized group of mutual water

and public utilities regulated companies (known as Independent Water Systems). The GSP was prepared in December 2021 and was approved by the Department of Water Resources (DWR) in January 2023.[4]

## Water Conservation Act of 2009

The Water Conservation Act of 2009 (SB X7-7) requires all urban retail water suppliers to increase water use efficiency. The legislation sets an overall goal of reducing per capita water use by 20 percent by 2020, with an interim goal of a 10 percent reduction in per capita water use by 2015. Effective in 2016, urban retail water suppliers who do not meet the water conservation requirements established by this bill are not eligible for State water grants or loans. The SB X7-7 requires that urban water retail suppliers determine baseline water use and set reduction targets according to specified standards. Demonstration of compliance with this regulation is a required component of each urban water supplier's UWMP. The City of Santa Rosa is in compliance with its target reduction.

## 2018 Water Conservation Legislation

In 2018, the California Legislature enacted two policy bills (SB 606 and Assembly Bill [AB] 1668) to establish a regulatory framework for "Making Conservation a California Way of Life." The framework addresses both urban and agricultural water use and seeks to implement state-wide, long-term improvements in water conservation and drought planning to adapt to climate change and longer and more intense droughts in California.[5] Overall, the framework is intended to ensure California is resilient to a hotter and drier climate with anticipated periods of water scarcity, and lessen the need for emergency water use reductions that have been previously enacted by SWRCB during periods of drought.

Specific to urban retail water suppliers, DWR and SWRCB were tasked with establishing new water use efficiency standards for:

- Indoor residential water use;
- Outdoor residential water use;
- Commercial, industrial, and institutional water use for landscape irrigation with dedicated meters; and
- Water loss.

The indoor residential water use standard was set in statute with the passage of SB 1157 in 2022. As a result, California Water Code defines a 55-gallon-per-person daily standard for indoor residential use until 2025, at which time it decreases to 47 gallons, and further decreases to 42 gallons by 2030. The outdoor residential water use standard and outdoor commercial water use standard, established as landscape efficiency factors, become progressively more efficient across three timesteps as presented in Table 4.17-1, *Outdoor Water Use Standards for Residential and Commercial Accounts*. The water loss standard is the maximum allowable "real" water loss measured in gallons per connection per day for each supply system

[4] Santa Rosa Plain Groundwater Sustainability Agency, Groundwater Sustainability Plan, https://santarosaplaingroundwater.org/gsp/, accessed August 12, 2023.

[5] California Department of Water Resources, 2021, 2018 Water Conservation Legislation, https://water.ca.gov/Programs/Water-Use-And-Efficiency/2018-Water-Conservation-Legislation, accessed August 23, 2023.

in an urban water supplier's service area. Real losses are defined as the volume of annual leakage due to physical water leakage in a supplier's distribution system.

TABLE 4.17-1 OUTDOOR WATER USE STANDARDS FOR RESIDENTIAL AND COMMERCIAL ACCOUNTS

| Year | Residential Landscape Efficiency Factors | Commercial Landscape Efficiency Factors |
|---|---|---|
| Present – 6/30/2035 [a] | 0.80 | 0.80 |
| 7/01/2035 – 6/30/2040 | 0.63 | 0.63 |
| 7/01/2040 – Onward | 0.55 | 0.45 |

Note:
a. The outdoor commercial water use standard becomes effective July 1, 2028. Prior to this date, the outdoor commercial water budget is equal to actual annual deliveries made to all accounts with dedicated irrigation meters.
Source: California Department of Water Resources, 2021, 2018 Water Conservation Legislation, https://water.ca.gov/Programs/Water-Use-And-Efficiency/2018-Water-Conservation-Legislation, accessed August 23, 2023.

Collectively, the water use efficiency standards and local service are characteristics (such as population and landscape area) that establish individual Urban Water Use Objectives (UWUOs) per urban retail water supplier that cannot be exceeded on an annual basis. Urban retail water suppliers are required to calculate and report their UWUOs alongside their actual usage in an annual water use report. The first reports were due to the SWRCB on January 1, 2024, and are required every January 1 thereafter. The final proposed "Making Conservation a California Way of Life" regulation was published by the SWRCB on July 26, 2024, and is anticipated to become effective January 1, 2025.

The legislation also includes changes to UWMP preparation requirements. These changes include additional requirements for Water Shortage Contingency Plans (WSCPs), expansion of dry year supply reliability assessments to a five-year drought period, and establishment of annual drought risk assessment procedures and reporting.

## Mandatory Water Conservation

Following the declaration of a state of emergency on July 15, 2014, due to drought conditions, the SWRCB adopted Resolution No. 2014-0038 for emergency regulation of statewide water conservation efforts. These regulations, which went into effect on August 1, 2014, were intended to reduce outdoor urban water use and have all California households voluntarily reduce their water consumption by 20 percent. Urban water suppliers with 3,000 or more service connections were required to report monthly water consumption to the SWRCB.

In January of 2022, following the Governor's proclamation of a drought state of emergency for all counties, the SWRCB adopted the prohibited wasteful water uses emergency regulations. These include the prohibition of the following wasteful water use practices: 1) the application of potable water to outdoor landscapes in a manner that causes excess runoff; 2) the washing of vehicles without an automatic shut-off nozzle; 3) the application of potable water to driveways and sidewalks; 4) the use of potable water in nonrecirculating ornamental fountains; and 5) the application of potable water to outdoor landscapes during and within 48 hours after at least 0.25 inch of rainfall. In June of 2022 additional emergency water conservation regulations were enacted prohibiting the irrigation of non-functional turf at commercial, industrial, and institutional accounts, and the implementation of

conservation actions under Level 2 of urban water suppliers' Water Shortage Contingency Plans. As of June 5, 2024, the emergency regulations expired.

In October of 2023, AB 1572 was signed into law by the Governor, prohibiting the irrigation of non-functional turf at commercial, industrial, and institutional sites (with exceptions for areas irrigated with recycled water or harvested rainwater). The irrigation prohibitions become effective in stages between 2027 and 2031, beginning with state and local government facilities. Under the law, urban water suppliers must adopt the same irrigation prohibitions into their local regulations.

### Water Conservation in Landscaping Act of 2006

The Water Conservation in Landscaping Act (AB 1881) requires cities and counties to adopt the State of California's Model Water Efficient Landscape Ordinance (MWELO) or a comparable landscape water conservation ordinance that is at least as effective as the State's MWELO in conserving water.

The MWELO was revised in July 2015 via Executive Order B-29-15 to address the ongoing drought and to build resiliency for future droughts. The 2015 revisions to the MWELO increased water efficiency standards for new and retrofitted landscapes through more efficient irrigation systems, greywater usage, and on-site stormwater capture and by limiting the portion of landscapes that can be covered in turf. Each city and county is required to submit annual reports to DWR that document how the agency is achieving compliance with the State MWELO and how many projects were subject to the ordinance during the annual reporting period. Recently, MWELO went through a round of revisions in 2024 to reduce ambiguity and improve clarity of the requirements as well as reorganize the content to better adhere to the landscape design process. The 2024 revisions did not modify or add new requirements to MWELO.

The City of Santa Rosa adopts its own ordinance in Santa Rosa City Code (SRCC) Title 14, Chapter 14-30, *Water Efficient Landscape*. The ordinance applies to all new and rehabilitated landscape projects that require a building or grading permit, plan check, design review, or utilities certificate.

### California Water Code

The Water Code states that the water resources of the State must be put to beneficial use and that waste or unreasonable use of water must be prevented. The code is divided into several sections for provisions regarding water quality, formation of irrigation districts and water districts, safe drinking water, and water supply and infrastructure improvements.

### California Plumbing Code

The latest version of the California Plumbing Code was issued in 2022 and became effective as of January 1, 2023. The code is updated on a three-year cycle. It specifies technical standards for the design, materials, workmanship, and maintenance of plumbing systems. One of the purposes of the plumbing code is to prevent conflicting plumbing codes within local jurisdictions. Among many topics covered in the code are water fixtures, potable and nonpotable water systems, and recycled water systems. The City of Santa Rosa adopts the California Plumbing Code under SRCC Section 18-24.010, *Citation of California Plumbing Code*.

### California Building Code: CALGreen

The California Building Standards Commission adopted the nation's first green building standards in July 2008, the California Green Building Standards Code, also known as CALGreen. CALGreen applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure in California. The code establishes building standards for sustainable site development, including water efficiency and water conservation measures that typically reduce water consumption by 20 percent.

CALGreen is updated every three years to allow for consideration and possible incorporation of new low flow plumbing fixtures and water efficient appliances. The mandatory provisions of CALGreen became effective January 1, 2011, and the latest 2022 version became effective on January 1, 2023. The building efficiency standards are enforced through the local building permit process. The City of Santa Rosa has regularly adopted each new CALGreen update under SRCC Section 18-42.010, *Citation of California Green Building Standards Code*.

### California Health and Safety Code

A portion of the State Health and Safety Code is dedicated to water issues, including testing and maintenance of backflow prevention devices, coloring of pipes carrying recycled water, and programs addressing cross-connection control by water users.

## *Regional Regulations*

### Santa Rosa Plain Subbasin Groundwater Sustainability Plan

Santa Rosa is within the Santa Rosa Plain Subbasin, which has been designated as a medium-priority groundwater basin and is not in critical overdraft.[6] The City of Santa Rosa formed a GSA with Sonoma Water, which prepared the GSP; Sonoma County; the cities of Cotati, Rohnert Park, and Sebastopol; the town of Windsor; Gold Ridge Resources Conservation District; Sonoma Resource Conservation District; and an organized group of mutual water and public utilities regulated companies (known as Independent Water Systems). The GSP was prepared in December 2021 and was approved by the DWR in January 2023.[7] The GSP establishes a standard for sustainability of groundwater management and use and lays out a management process for how the basin will achieve this standard by 2042.[8]

[6] Department of Water Resources, SGMA Data Viewer, https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#currentconditions, accessed April 5, 2023.

[7] Santa Rosa Plain Groundwater Sustainability Agency, Groundwater Sustainability Plan, https://santarosaplaingroundwater.org/gsp/, accessed August 12, 2023.

[8] Santa Rosa Plain Groundwater Sustainability Agency and Sonoma Water, December 2021, *Groundwater Sustainability Plan: Santa Rosa Plain Groundwater Subbasin*, http://santarosaplaingroundwater.org/wp-content/uploads/000_Santa_Rosa_GSP_508.pdf, accessed April 5, 2023.

### Sonoma Water

Sonoma Water, previously known as the Sonoma County Water Agency, provides water supply, wastewater management, and flood protection to Sonoma County. Sonoma Water is a special district that provides wholesale water supply to several cities and water districts within Sonoma and Marin Counties. Sonoma Water mostly depends on the Russian River for water supply, with groundwater from the Santa Rosa Plain Subbasin as a secondary source (during drought conditions or when supplies from the Russian River are constrained). Sonoma Water delivers water to Santa Rosa under the provisions of the Restructured Agreement for Water Supply (Restructured Agreement), which was executed in June 2006. Sonoma Water has water rights to extract an annual maximum of 75,000 acre-feet from the Russian River, and an annual maximum of about 3,870 acre-feet per year from three groundwater wells in the Santa Rosa Plain. Of this total available supply, Santa Rosa is currently entitled to receive a total annual volume of up to 29,100 acre-feet. This amount of water makes the City the largest consumer of water in the Sonoma Water service area.[9]

In the 2020 UWMP, Sonoma Water states that there will be sufficient water supplies available to meet the demand of its water retailers for normal years and multiple dry years through 2045, with a potential shortage of water starting in 2030 for single dry years due to low water levels in Lake Sonoma and Lake Mendocino.[10]

## *Local Regulations*

### Santa Rosa City Code

The SRCC includes various directives to ensure the efficient use of water in Santa Rosa. The SRCC is organized by title, chapter, and section, and in some cases, articles. Most provisions related to water supply and conservation are in Title 14, *Potable and Recycled Water*, and Title 18, *Buildings and Construction*, as follows:

- Charter Chapter 26, *Water and Sewer Rates, Connection/Demand Fees; and Miscellaneous Fees and Charges.* The City Council is able to establish water and sewer rate changes as well as rates for connections to the City's utility system. All funds that are collected must be used for providing services and maintenance of the City's water and sewer systems.
- Chapter 14-04, *Potable Water and Recycled Water Service*. This chapter outlines the water services in the City and establishes the water shortage rate structure. The water shortage rate structure is how a water shortage emergency is declared and how emergency charges are implemented.

[9] Sonoma Water, 2021, *2020 Urban Water Management Plan,* https://www.sonomawater.org/media/PDF/Water%20Resources/Water%20Supply/UWMP/Sonoma%20Water%202020%20UWMP_June%202021-ADA.pdf, accessed August 9, 2023.

[10] Sonoma Water, 2021, *2020 Urban Water Management Plan,* https://www.sonomawater.org/media/PDF/Water%20Resources/Water%20Supply/UWMP/Sonoma%20Water%202020%20UWMP_June%202021-ADA.pdf, accessed August 9, 2023.

- Chapter 14-08, *Potable Water Rates*. This chapter establishes the rates for the delivery of potable water and recycled water as well as the fixed monthly charges. This chapter also specifies the fire line protection service charge for lines that connect to the City's potable water system.
- Chapter 14-12, *Wells*. This chapter provides procedures and regulations for the construction, placement, and destruction of existing and abandoned water wells, test wells, test holes, and excavations. Permits are required for these activities. In addition, all developed parcels in zones of groundwater contamination are required to connect to the City's potable water supply system.
- Chapter 14-25, *Recycled Water Regulations*. This chapter states that all areas served by potable water service within the Recycled Water Project Area are eligible for recycled water service, and the City reserves the right to require customers to use recycled water in lieu of potable water for approved uses. The City maintains and updates a Recycled Water User's Guide that details the requirements and rules for the City's recycled water system. The City also issues a Recycled Water Use Permit to each site, which grants permission to use recycled water in accordance with the rules, regulations, and standards.
- Chapter 14-30, *Water Efficient Landscape*. This chapter establishes the City's Water Efficient Landscape Ordinance (WELO) as required by California's Government Code Section 65591, which requires local agencies to adopt water efficient landscape regulations. The WELO, which initially went into effect January 2010 was most recently updated in 2016. The chapter applies to all new public and private projects with landscaping that require a building or grading permit, plan check, design review, or utilities certificate. This includes office, commercial, industrial, and institutional landscaping; park and greenbelt landscaping; multiple-family residential; and single-family residential developments.
- Chapter 18-24, *California Plumbing Code*. This chapter adopts the California Plumbing Code which specifies technical standards for the design, materials, workmanship, and maintenance of plumbing systems, including requirements for water conservation systems.
- Chapter 18-42, *California Green Building Standards Code*. This chapter adopts by reference, with the additions, insertions, deletions and changes listed throughout, the California Green Building Standards Code which establishes building standards for sustainable site development, including water efficiency and water conservation measures that typically reduce water consumption by 20 percent.

### Santa Rosa 2020 Water Master Plan Update

The 2020 Water Master Plan (WMP) Update is an update to the 2014 WMP and was triggered by the events during the 2017 Tubbs Fire. The goal of the WMP Update is to develop and implement water reliability measures to minimize loss of service and improve recovery times under emergency operating conditions. The report includes a systemwide fire flow evaluation and methods to improve system reliability in the upper pressure zones, such as the Fountaingrove area, with pump supply and interties between pressure zones. Also included are recommendations for filling the Proctor Heights tanks more quickly. Finally, the Supervisory Control and Data Acquisition reliability and redundancy evaluation provided options for increasing the reliability and response of the system during emergency situations.

Priorities and recommendations for system improvements are provided in Chapter 9.0 of the WMP, *Recommendations and Costs*.[11]

## Santa Rosa 2020 Urban Water Management Plan

The City of Santa Rosa adopted its current 2020 UWMP in June 2021 in compliance with the Urban Water Management Planning Act, the Water Conservation Act of 2009, and Sections 10610 to 10656 of the California Water Code.[12] All urban water suppliers are required to prepare, adopt, and file a UWMP with the DWR every five years.

The 2020 UWMP describes water demands, water supply sources, and supply reliability for its service area in five-year increments for normal years, single dry years, and multiple dry years. The UWMP also provides water supply contingency planning in case of shortage emergencies, demand management measures to increase water use efficiency, and current and planned water conservation efforts. The UWMP states that there will be sufficient supplies to meet existing and future demands through 2045 for normal years, but that there could be a shortage of water supplies in single-dry years and multiple-dry years under the worst-case scenario.

The City 2020 UWMP has been prepared in accordance with the Urban Water Management Planning Act.[13] The 2020 UWMP addresses the City's water system and includes a description of the water supply sources, historical and projected water use, and a comparison of water supply to water demands during normal, single-dry, and multiple-dry years. The 2020 UWMP describes water demands, available water supply sources, and supply reliability for its service area in five-year increments for normal years, single-dry years, and multiple-dry years up to year 2045. The 2020 UWMP also provides a water shortage contingency plan, demand management measures to increase water use efficiency, and current and planned water conservation efforts.

The Water Conservation Act of 2009, also known as SBX7-7, requires that urban water suppliers reduce their per capita water use by 20 percent by 2020. As reported in the UWMP, the City met this goal in 2020 with a per capita water demand of 99 gallons per capita per day (gpcd) as compared to the target goal of 126 gpcd.[14]

[11] Santa Rosa Water, February 7, 2022, *2020 Water Master Plan Update: Water System Reliability Study*, https://www.srcity.org/DocumentCenter/View/34912/2020-Water-Master-Plan-Update---Water-System-Reliability-Study, accessed August 24, 2023.

[12] Sonoma Water, 2021, 2*020 Urban Water Management Plan,* https://www.sonomawater.org/media/PDF/Water%20Resources/Water%20Supply/UWMP/Sonoma%20Water%202020%20UWMP_June%202021-ADA.pdf, accessed August 9, 2023.

[13] Sonoma Water, 2021, 2*020 Urban Water Management Plan,* https://www.sonomawater.org/media/PDF/Water%20Resources/Water%20Supply/UWMP/Sonoma%20Water%202020%20UWMP_June%202021-ADA.pd, accessed August 9, 2023f.

[14] Sonoma Water, 2021, 2*020 Urban Water Management Plan,* https://www.sonomawater.org/media/PDF/Water%20Resources/Water%20Supply/UWMP/Sonoma%20Water%202020%20UWMP_June%202021-ADA.pdf, accessed August 9, 2023.

## Water Shortage Contingency Plan

The WSCP was adopted as part of the 2020 UWMP in June 2021 and amended in November 2021 to update the Excess Use Penalty structure and revise the demand offset requirements for new construction, which are described in further detail below. The revised requirement is a 1:1 ratio of water demand offset when Stages 5 through 8 of the WSCP are implemented.

The WSCP describes eight shortage levels and the corresponding demand reduction actions which would be taken to reduce water usage by a range from 10 percent to more than 50 percent. Measures include restrictions and prohibitions on end users, increased marketing and outreach to customers, water waste prevention and enforcement, rate structure changes, and aggressive promotion of existing and temporary water conservation programs, incentives, and enhancements to help customers conserve water. These measures have successfully helped the community conserve water during previous droughts, achieving on average 20 to 25 percent reduction in water use. The City has also implemented an Excess Use Penalties program to penalize usage of individual accounts that exceed water allocations. Together, these actions are anticipated to adequately reduce projected demands in a single-dry year scenario to match available supplies.

## Water Demand Offset Policy

The water demand offset (WDO) policy was adopted by the City in March 2022 and applies when Stages 5 through 8 of the WSCP are implemented. It requires new construction to offset its water demand to achieve a net zero impact and applies to all new projects that will increase water demand and be subject to new or increased water connection fees. The provisions of the policy apply at the time that an application for a building permit is submitted.[15]

All construction projects must complete and submit to the City a WDO application and pay the WDO Fee, which is based on the type of residential or commercial, industrial, or institutional development. The applicant can also propose an alternative compliance method with a detailed description of how the water demand offsets would be achieved and submit supporting studies, plans, reports, and/or analyses. The City will provide a WDO Agreement that must be notarized and recorded in the Official Records of Sonoma County. Any WDO Fees collected by the City will be used to implement projects or programs to achieve the required water demand offsets, such as bathroom conversions, high efficiency residential clothes washer upgrades, or rebates for ornamental turf conversions at multi-family units or commercial, industrial, or institutional land uses.

## Santa Rosa Groundwater Master Plan

The City's Groundwater Master Plan (GMP) was prepared in 2013 prior to enactment and implementation of the SGMA and the preparation of the GSP for the Santa Rosa Plan Subbasin. However, it still provides a comprehensive resource that describes the operation of the City's two production wells, three emergency

[15] City of Santa Rosa, 2022, *Water Demand Offset Policy*.

supply wells, and one landscape irrigation well.[16] The GMP also provides the framework for developing a monitoring well network, development of a groundwater database, and recommended projects and programs to provide emergency groundwater supplies.

### Santa Rosa Water Distribution Standard Specifications

Revised in October 2018, the Water Distribution Standard Specifications include construction specifications, standard plans, and the regulations for separation between water mains and non-potable pipelines. Also, the Water Distribution Standard Specifications include distribution system design standards for water mains, connections to water mains, sizing criteria, soil cover, valves, laterals, meters, fire hydrants, and pressure requirements.[17] Established to assist developers and their engineers, the Water Distribution Standard Specifications provides guidelines for the design of water mains, laterals, and connections, and establishes the minimum acceptable design criteria. More stringent requirements may be imposed by Santa Rosa Water based on specific project conditions.

### Recycled Water Standards

Revised in October 2018, the Recycled Water Standards include design standards, standard plans, construction specifications, and an engineer's list of approved items.[18] Established to assist developers and their engineers, the Recycled Water Standards provide procedures and guidelines for the design and construction of recycled water mains and connections and establishes the minimum acceptable design criteria. More stringent requirements may be imposed by Santa Rosa Water based on specific project conditions.

### Capital Improvement Program

The Capital Projects Engineering Division is responsible for the design and construction of projects to rehabilitate, upgrade, and expand the City's infrastructure, including sewer collection system projects and Laguna Treatment Plant projects. The capital projects are funded primarily through sewer and water rates, development fees, and grants. The City's Capital Improvement Program (CIP) is a five-year financial plan for the maintenance and expansion of the City's infrastructure. The CIP identifies public facility improvements that are needed, provides a design and construction schedule, and identifies funding for these projects.[19] Some of the CIP programs that have currently been approved and are in the planning or construction phase include the following water infrastructure projects:

[16] City of Santa Rosa, September 2013, *Groundwater Master Plan*, https://www.srcity.org/DocumentCenter/View/14031/Groundwater---2013-Master-Plan, accessed August 23, 2023.

[17] City of Santa Rosa, October 18, 2018, Water Distribution Standard Specifications, https://www.srcity.org/DocumentCenter/View/18370/Water-Design-Standards, accessed August 24, 2023.

[18] City of Santa Rosa, October 18, 2018, Recycled Water Standards, https://www.srcity.org/DocumentCenter/View/17624/Recycled-Water-Design-Standards, accessed August 24, 2023.

[19] City of Santa Rosa, 2023, Capital Improvement Program, https://www.srcity.org/690/Capital-Improvement-Program, accessed August 29, 2023.

- Cobblestone Drive Zone R2-R4 Water Main Connection: To improve fire protection in Cobblestone neighborhood.
- Cleveland Avenue and St. Rose District Sewer and Water Improvements.
- Emergency Well Pump Station—A Place to Play: Convert existing test well to emergency groundwater well along with design and construction of a well pump station.
- Geysers-Delta Pond Connection Improvements: Upsize water main to allow higher flows of recycled water to be delivered to Delta Pond.
- Slater Street and Lewrosa Way Sewer and Water Main Replacement Project.
- Terra Linda and Buena Vista Sewer and Water Replacement.
- Emergency Groundwater Supply Development.
- North Trunk Sewer Replacement and Water Main Upgrade.
- Albany, Clement and Malano Sewer and Water Improvements.
- E. Haven Drive Sewer and Water Improvements in Grace neighborhood.
- Controller and Radio Upgrades at Water Pump Stations.
- Emergency Groundwater Wells at Oakmont Treatment Plant and Speers Roads.
- Seismic Upgrades and Improvements at Reservoirs F9A and R16 and Fire Pump Additions.
- Backup Generators at Water and Wastewater Facilities.
- Dotti Farm Recycled Water Pipeline Improvements.

## Existing Conditions

Santa Rosa Water is the urban water supplier for the EIR Study Area. Sonoma Water is the wholesale water provider to the City and supplies primarily surface water from the Russian River. The GSAs, including the City and Sonoma Water, have the responsibility and authority to manage groundwater in the EIR Study Area. Santa Rosa Water also coordinates and conducts water conservation programs within the City's service area. A WSA has been prepared for the proposed General Plan 2050 on July 10, 2023, by Santa Rosa Water and is provided in Appendix D, *Water Supply Assessment*, of this Draft EIR. However, information in this section has been updated slightly to reflect minor changes in conditions,

### *Water Distribution System*

Santa Rosa Water operates and maintains a potable water distribution system within the EIR Study Area that consists of 20 booster pump stations, 624 miles of water mains, 24 aboveground reservoirs (tanks), 6 groundwater wells, a well treatment facility, and over 54,000 service connections. The existing water distribution system is shown on Figure 4.17-1, *Water Distribution System*.

Santa Rosa Water also owns, maintains, and operates a recycled water distribution system that provides nonpotable water for landscape irrigation to 32 connections, including multi-family residences, commercial, and institutional/governmental customers.[20] The City's water distribution system is divided into 18 major pressure zones and serviced by 624 miles of water mains ranging in size from 4 to 24 inches.

[20] Sonoma Water, 2021, 2*020 Urban Water Management Plan,* https://www.sonomawater.org/media/PDF/Water%20Resources/Water%20Supply/UWMP/Sonoma%20Water%202020%20UWMP_June%202021-ADA.pdf, accessed August 9, 2023.

Most connections are served by laterals that branch from 6-inch- to 12-inch diameter-water mains. Pipe materials consist of asbestos cement, polyvinyl chloride (PVC), high-density polyethylene (HDPE), ductile iron, and cement mortar lined and coated steel. Water is delivered to Santa Rosa Water through a transmission and delivery system owned and operated by Sonoma Water, as shown previously on Figure 4.17-1. There are several Sonoma Water aqueducts and pipelines that traverse the EIR Study Area and connect to Santa Rosa Water through a series of turnouts, check valves, and direct connections serving City pump stations. There are 59 physical connections between the City's distribution system and Sonoma Water's system, including 39 pressure-reducing valves, 16 check valves, and 4 pumping stations.[21]

The 2014 WMP provided a hydraulic model of the existing distribution infrastructure and recommended improvements needed for future buildout and to meet fire flow requirements. Many of these improvements have since been implemented through the City's CIP. An update to the WMP was prepared in 2020 and evaluates fire flow performance, system reliability, water quality, and Supervisory Control and Data Acquisition reliability and redundancy.[22] The recommendations include fire flow improvements in areas where the fire flow goals of 1,500 gallons per minute (gpm) at pressures of 20 pounds per square inch for a duration of two hours cannot currently be met and include fire flow facility improvements for tanks and pump stations to meet fire flow goals in four pressure zones. Also included are opportunities to increase the reliability of the distribution system by adding pumps, interties between pressure zones, and utilizing the Proctor Heights Tanks.

### *Water Supply Sources*

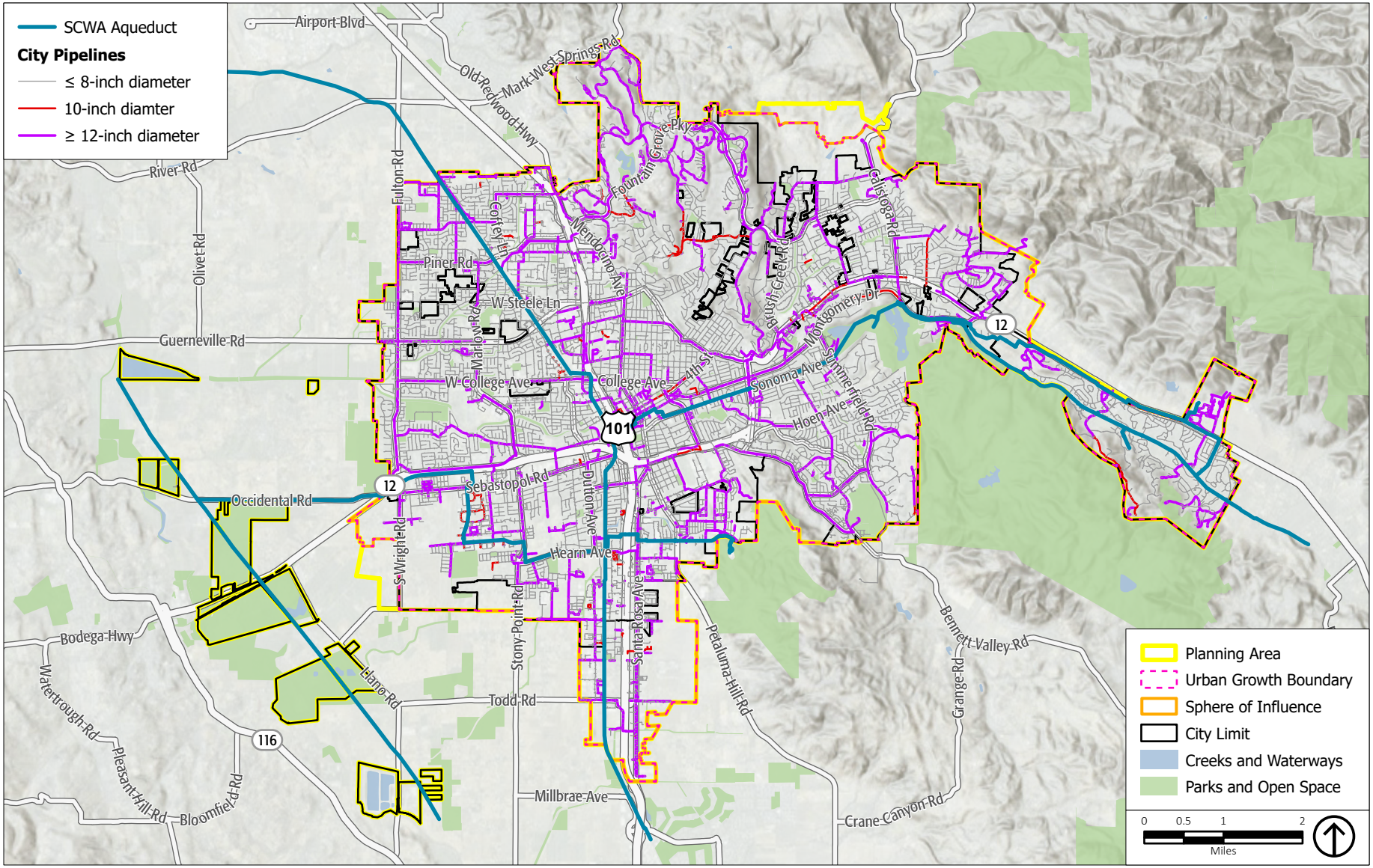
Santa Rosa Water currently has three sources of water supply: 1) potable water from Sonoma Water (a regional water wholesaler); 2) groundwater from the City's wells, and 3) non-potable water (recycled water) from the Santa Rosa Regional Water Reuse System for urban landscape irrigation.[23]

Approximately 93 percent of the City's potable water supply is purchased from Sonoma Water under the provisions of the Restructured Agreement for Water Supply, which was executed in June 2006. Sonoma Water obtains almost all of its water supplies as surface water from the Russian River (approximately 99 percent). The rest of the water supplied by Sonoma Water is pumped from three groundwater wells in the Santa Rosa Plain Subbasin. However, none of the groundwater is delivered to Santa Rosa; it feeds into the Cotati Aqueduct.

[21] Sonoma Water, 2021, 2*020 Urban Water Management Plan,* https://www.sonomawater.org/media/PDF/Water%20Resources/Water%20Supply/UWMP/Sonoma%20Water%202020%20UWMP_June%202021-ADA.pdf, accessed August 9, 2023.

[22] Santa Rosa Water, February 7, 2022, *2020 Water Master Plan Update: Water System Reliability Study*, https://www.srcity.org/DocumentCenter/View/34912/2020-Water-Master-Plan-Update---Water-System-Reliability-Study, accessed August 24, 2023.

[23] City of Santa Rosa, July 10, 2023, *SB 610 Water Supply Assessment (WSA) for the Santa Rosa General Plan 2050*. See Appendix D, *Water Supply Assessment*, of this Draft EIR. Note that information summarized here from the WSA has been updated slightly to reflect minor changes in conditions.




Source: ESRI, 2022; City of Santa Rosa, 2023; PlaceWorks, 2024.

Figure 4.17-1
Water Distribution System

Santa Rosa Water produces approximately seven percent of its potable water supply from six groundwater wells. Two of the wells are actively pumped (Farmers Lane Wells Nos. W4-1 and W4-2 and three (Carley, Peter Springs, and Leete) are emergency potable supply wells that are operated to provide landscape irrigation to an adjacent park and school landscaping, and augment supplies in Lake Ralphine (Howarth Park). These wells are available and approved by the California Division of Drinking Water to be on standby for emergency potable use. One well (Farmers Lane Well No. 3) is operated to provide minor amounts of landscape irrigation only. A summary of the wells and their status is provided in Table 4.17-2, *Santa Rosa Municipal Groundwater Wells*.

TABLE 4.17-2 SANTA ROSA MUNICIPAL GROUNDWATER WELLS

| Well Name/Number | Well Status |
|---|---|
| Farmers Lane (W4-1) | Active |
| Farmers Lane (W4-2) | Active |
| Farmers Lane (W4-3) | Not connected to City's potable water distribution system; used strictly for minor landscape irrigation |
| Carley (W2-1) | Used for landscape irrigation and on standby for emergency potable water supply |
| Peter Springs (W2-2) | Used for landscape irrigation and on standby for emergency potable water supply |
| Leete (W1) | Used for landscape irrigation and on standby for emergency potable water supply |

Source: City of Santa Rosa, July 10, 2023, *SB 610 Water Supply Assessment (WSA) for the Santa Rosa General Plan 2050.* See Appendix D, *Water Supply Assessment*, of this Draft EIR. Note that information summarized here from the WSA has been updated slightly to reflect minor changes in conditions.

Santa Rosa Water also has two additional municipal wells that are either out of service or inactive. The Freeway Well (W3) is out of service due to groundwater contamination and the Sharon Park Well (W6) is inactive due to severe sanding. A state funded study of the Freeway Well contamination issue recommended that the well be formally abandoned to reduce the risk of the well acting as a "conduit" for migration of the contaminant plume. A capital project is proceeding to properly abandon this well consistent with county well ordinance standards. For the past three years, the City has pumped between 1,126 and 1,323 acre-feet per year (AFY) of groundwater for its municipal water supply. The California Division of Drinking Water has permitted the City's groundwater wells for production of up to 2,300 AFY of potable water supply.[24]

Additionally, the City owns and operates the Laguna Treatment Plant Regional System, which provides high quality tertiary treated water that is approved for irrigation of urban landscapes, playgrounds, golf course, public parks, agricultural crops, and vineyards. Most of the recycled water is piped to Sebastopol and Rohnert Park as well as to the Geysers Recharge Project and to farmlands and vineyards outside of the city limits of Santa Rosa. In 2020, the City used approximately 108 AFY of recycled water within its service area and the projected future use of recycled water through 2045 is expected to be about 140 AFY, accounting for less than 1 percent of urban water use.

A summary of the existing and future sources of water for the City is provided in Table 4.17-3*, City of Santa Rosa Existing and Future Water Supplies (acre-feet)*.

[24] City of Santa Rosa, July 10, 2023, *SB 610 Water Supply Assessment (WSA) for the Santa Rosa General Plan 2050*. See Appendix D, *Water Supply Assessment*, of this Draft EIR. Note that information summarized here from the WSA has been updated slightly to reflect minor changes in conditions.

TABLE 4.17-3 CITY OF SANTA ROSA EXISTING AND FUTURE WATER SUPPLIES (ACRE-FEET)

| Water Supply Sources | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 |
|---|---|---|---|---|---|---|
| Surface Water (from Sonoma Water) | 18,024 | 29,100 | 29,100 | 29,100 | 29,100 | 29,100 |
| Groundwater (from City wells) | 1,253 | 2,300 | 2,300 | 2,300 | 2,300 | 2,300 |
| Recycled Water (for urban use only) | 110 | 140 | 140 | 140 | 140 | 140 |
| **Total** | **19,387** | **31,540** | **31,540** | **31,540** | **31,540** | **31,540** |

Source: City of Santa Rosa, July 10, 2023, SB 610 Water Supply Assessment *(WSA) for the Santa Rosa General Plan 2050*. See Appendix D, *Water Supply Assessment*, of this Draft EIR. Note that information summarized here from the WSA has been updated slightly to reflect minor changes in conditions.

In addition to the existing water supply, in October 2023, the City completed an adaptive Water Supply Alternatives Plan.[25] The first objective identified in the Water Supply Alternatives Plan was to establish a water supply resiliency and reliability goal for Santa Rosa's future, informed by discussions with the City's Water Department staff, an external group of community leaders, the community at large, and the Board of Public Utilities. The City created a goal of expanding and diversifying its potable water supply portfolio to enhance its resiliency and mitigate the potential impacts of future water supply shortages caused by severe and/or prolonged droughts or catastrophic service interruptions. New supplies could augment existing City groundwater production capacity (approximately 1,300 AFY, with an average of 2 million gallons per day over approximately 6.5 months per year). This is an ongoing project that has not been fully studied as of the release of this Draft EIR.

### *Existing Water Demand*

Table 4.17-4, *Santa Rosa 2020 Existing Water Demand*, presents the water demand for 2020, as presented in the 2020 UWMP for the EIR Study Area. Single-family homes represent over half of the 2020 total demand at 51 percent. Multifamily homes account for about 17 percent of the total demand. Commercial, industrial, and institutional/governmental represent a combined 14 percent of total demand.[26] Water losses account for approximately 7 percent of the water demand and the other category includes billed uses, such as fire lines, construction meters, and municipal yard meters, and unbilled uses, such as firefighting and hydrant flushing. In addition, the City of Santa Rosa used 110 acre-feet of recycled water in 2020 for urban irrigation uses.

TABLE 4.17-4 SANTA ROSA EXISTING WATER DEMAND

| Land Use | AFY |
|---|---|
| Single Family | 9,863 |
| Multi-Family | 3,309 |
| Commercial | 2,020 |
| Industrial | 304 |
| Institutional/Governmental | 308 |

[25] City of Santa Rosa, Our Water Future, www.srcity.org/OurWaterFuture, accessed June 2024.

[26] Sonoma Water, 2021, 2*020 Urban Water Management Plan,* https://www.sonomawater.org/media/PDF/Water%20Resources/Water%20Supply/UWMP/Sonoma%20Water%202020%20UWMP_June%202021-ADA.pdf, accessed August 9, 2023.

TABLE 4.17-4 SANTA ROSA EXISTING WATER DEMAND

| Land Use | AFY |
|---|---|
| Landscape | 1,991 |
| Losses | 1,284 |
| Other | 198 |
| Recycled Water | 110 |
| **Total** | **19,387** |

Note: AFY = Acre-feet per year
Source: Sonoma Water, 2021, 2*020 Urban Water Management Plan,* https://www.sonomawater.org/media/PDF/Water%20Resources/Water%20Supply/UWMP/Sonoma%20Water%202020%20UWMP_June%202021-ADA.pdf, accessed August 9, 2023.

Water agencies must also demonstrate compliance with their established water use targets, pursuant to SB X7-7. The calculated water use target for Santa Rosa is 126 gpcd. The actual 2020 demand was 99 gpcd. Thus, the City successfully met the 2020 target.[27]

### *Water Supply Reliability*

As reported in the 2020 UWMP, Table 4.17-5, *Santa Rosa Projected Normal, Dry, and Multiple Dry Year Supply and Demand (AFY)*, provides the project water demand and supply in the Santa Rosa Water service area for a normal year, single dry year, and multiple dry years from 2025 through 2045.

TABLE 4.17-5 SANTA ROSA PROJECTED NORMAL, DRY, AND MULTIPLE DRY YEAR SUPPLY AND DEMAND (AFY)

| | 2025 | 2030 | 2035 | 2040 | 2045 |
|---|---|---|---|---|---|
| **Normal Year** | | | | | |
| Supply Total | 31,540 | 31,540 | 31,540 | 31,540 | 31,540 |
| Demand Total | 21,660 | 23,083 | 23,652 | 24,329 | 25,097 |
| *Difference* | 9,880 | 8,457 | 7,888 | 7,211 | 6,443 |
| **Single Dry Year [a]** | | | | | |
| Supply Total | 22,660 | 20,639 | 20,937 | 20,978 | 21,689 |
| Demand Total | 21,660 | 20,639 | 20,937 | 20,978 | 21,689 |
| *Difference* | 1,000 | 0 | 0 | 0 | 0 |
| **Multiple Dry Years [a]** | | | | | |
| **First Year** | | | | | |
| Supply Total | 22,660 | 24,083 | 24,652 | 25,329 | 26,097 |
| Demand Total | 21,660 | 23,083 | 23,652 | 24,329 | 25,097 |
| *Difference* | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| **Second Year** | | | | | |
| Supply Total | 22,660 | 24,083 | 24,652 | 25,329 | 26,097 |
| Demand Total | 21,660 | 23,083 | 23,652 | 24,329 | 25,097 |
| *Difference* | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |

[27] Sonoma Water, 2021, 2*020 Urban Water Management Plan,* https://www.sonomawater.org/media/PDF/Water%20Resources/Water%20Supply/UWMP/Sonoma%20Water%202020%20UWMP_June%202021-ADA.pdf, accessed August 9, 2023.

TABLE 4.17-5 SANTA ROSA PROJECTED NORMAL, DRY, AND MULTIPLE DRY YEAR SUPPLY AND DEMAND (AFY)

| | 2025 | 2030 | 2035 | 2040 | 2045 |
|---|---|---|---|---|---|
| **Third Year** | | | | | |
| Supply Total | 22,660 | 24,083 | 24,652 | 25,329 | 26,097 |
| Demand Total | 21,660 | 23,083 | 23,652 | 24,329 | 25,097 |
| *Difference* | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| **Fourth Year** | | | | | |
| Supply Total | 22,660 | 24,083 | 24,652 | 25,329 | 26,097 |
| Demand Total | 21,660 | 23,083 | 23,652 | 24,329 | 25,097 |
| *Difference* | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| **Fifth Year** | | | | | |
| Supply Total | 22,660 | 24,083 | 24,652 | 25,329 | 26,097 |
| Demand Total | 21,660 | 23,083 | 23,652 | 24,329 | 25,097 |
| *Difference* | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |

Note: AFY = Acre-feet per year.
a. Single and multiple dry years assume implementation of WSCP Stage 1 reductions of 10 percent.
Source: Sonoma Water, 2021, 2*020 Urban Water Management Plan,* https://www.sonomawater.org/media/PDF/Water%20Resources/Water%20Supply/UWMP/Sonoma%20Water%202020%20UWMP_June%202021-ADA.pdf, accessed August 9, 2023.

As shown in Table 4.17-5, there will be a surplus of water available during normal years, with Sonoma Water supplying 29,100 AFY, the City pumping up to 2,300 AFY of groundwater, and a recycled water supply of 140 AFY. During a single-dry year, Sonoma Water projects that Santa Rosa's water allotment could be reduced by 16 to 19 percent. However, the City would implement the WSCP to reduce customer demands to match available supplies for the years 2030 through 2045. Sonoma Water's 2020 UWMP does not anticipate a reduction in supplies to its retail customers for multiple dry years. Therefore, the City's water supply would not exceed demand and there would be surplus water available through 2045 for multiple dry year events.[28]

## 4.17.1.2 STANDARDS OF SIGNIFICANCE

Implementation of the proposed project would result in significant impact to water supply if it would:

1. Require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects.
2. Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
3. In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact with respect to water supply.

[28] Sonoma Water, 2021, 2*020 Urban Water Management Plan,* https://www.sonomawater.org/media/PDF/Water%20Resources/Water%20Supply/UWMP/Sonoma%20Water%202020%20UWMP_June%202021-ADA.pdf, accessed August 9, 2023.

## 4.17.1.3 IMPACT DISCUSSION

**USS-1 Implementation of the proposed project would not require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects.**

Implementation of the proposed project would have a significant impact if it would result in the construction of new water treatment facilities or the expansion of existing facilities that would have a significant effect on the environment. With implementation of the proposed project water demand would increase throughout the EIR Study Area due to increases in population and employment.

The current and projected water demands from the 2020 UWMP are provided in Tables 4.17-3 and 4.17-4. Buildout under the proposed project would result in increases in single-family and multifamily residences as well as new retail, commercial, office, industrial, and public/institutional land uses. The net increase in housing units and commercial/industrial/institutional square feet associated with the proposed General Plan 2050 is provided in Table 4.17-6, *Proposed General Plan 2050 Buildout*. The City subsequently prepared a WSA based on the information provided in this table to evaluate the water demand and available supplies with implementation of this project, as discussed in the following section. The WSA is provided in Appendix D, *Water Supply Assessment*, of this Draft EIR.

TABLE 4.17-6 PROPOSED GENERAL PLAN 2050 BUILDOUT

| Land Use | Net Increase | Units |
|---|---|---|
| Detached Residential | 11,810 | Dwelling Units |
| Attached Residential | 12,280 | Dwelling Units |
| Retail | 945,000 | Square Feet |
| Office | 2,100,000 | Square Feet |
| Industrial | 1,500,000 | Square Feet |
| Public/Institutional | 727,000 | Square Feet |
| Park/Public Landscape | 3,092,760 | Square Feet |
| Hotels | 69 | Rooms |
| Education | 4,797 | Students |

Source: City of Santa Rosa, Planning & Economic Development, 2023.

## Water Demand Analysis

The proposed increase in water demand is summarized in Table 4.17-7, *Water Demand Increase: Proposed General Plan 2050.* The detailed discussion and calculations are provided in Appendix D, *Water Supply Assessment*, of this Draft EIR. The City uses a Residential Equivalency Factor (REF) consistent with the land uses provided in Table 4.17-7. One REF is equivalent to the average water use of one detached residential unit per year, which is estimated to be 65,345 gallons per year. Attached residential water use requires minimal landscape irrigation and averages to be about 70 percent of the detached residential water use.

Non-residential land use categories were converted to REFs based on land use and equivalent water use per the California Water Code 10912(a).

TABLE 4.17-7 WATER DEMAND INCREASE: PROPOSED GENERAL PLAN 2050

| Land Use | DUs | Square Feet | Rooms/Students | REF Conversion Factor | REFs |
|---|---|---|---|---|---|
| Detached Residential | 11,810 | - | - | 1 REF/unit | 11,810 |
| Attached Residential | 12,280 | - | - | 0.7 REF/unit | 8,575 |
| Retail | - | 945,000 | - | 1 REF/1000 SF | 945 |
| Office | - | 2,100,000 | - | 1 REF/500 SF | 4,200 |
| Industrial | - | 1,500,000 | - | 1 REF/1,300 SF | 1,154 |
| Public/Institutional | - | 727,000 | - | I REF/500 SF | 1,454 |
| Hotel | - | - | 69 | 0.75 REF/room | 52 |
| Education | - | - | 4,797 | 0.11 REF/student | 536 |
| **Total** | **24,090** | **8,364,760** | **-** | **-** | **29,823** |
| **Total - AFY** | | | | | **6,484** |

Notes: AFY = Acre-feet per year; REF = Residential Equivalency Factor.
Source: City of Santa Rosa, July 10, 2023, *SB 610 Water Supply Assessment (WSA) for the Santa Rosa General Plan 2050.* See Appendix D, *Water Supply Assessment*, of this Draft EIR. Note that information summarized here from the WSA has been updated slightly to reflect minor changes in conditions.

The proposed project would result in a water demand increase of 29,823 REFs x 65,345 gallons per REF, for a total of approximately 5,980 AFY of additional demand. The project water demand should also include non-revenue water, which historically accounts for about 7 percent of total water sales and a small adjustment of 0.8 percent to account for other miscellaneous water sales. Nonrevenue water includes water used for fire protection and training, water system flushing, sewer cleaning, system leaks, and water used by unauthorized connections and meter inaccuracies. Miscellaneous water sales occur through municipal yard meters and temporary water meters (primarily for construction sites). The addition of nonrevenue water (454 AFY) and other sales (50 AFY) increased demand by 504 AFY, bringing the total project demand to 6,484 AFY. Table 4.17-8, *Total Water Demand, 2050*, provides the baseline water demand plus the net increase for buildout of the proposed project to generate the total water demand in 2050.

TABLE 4.17-8 TOTAL WATER DEMAND, 2050

| Land Use | AFY |
|---|---|
| Baseline Water Demand (2019) | 17,832 |
| General Plan – Net Increase | 6,484 |
| **Total 2050 Water Demand** | **24,316** |

Note: AFY = Acre-feet per year.
Source: City of Santa Rosa, July 10, 2023, *SB 610 Water Supply Assessment (WSA) for the Santa Rosa General Plan 2050.* See Appendix D, *Water Supply Assessment*, of this Draft EIR. Note that information summarized here from the WSA has been updated slightly to reflect minor changes in conditions.

The projected water demand in 2050 with buildout of the proposed project of 24,316 AFY is less than the projected water demand in the 2020 UWMP of 25,097 AFY for the year 2045 under normal conditions. Therefore, the projected increases in population, housing units, and building construction have been accounted for in the 2020 UWMP. However, to determine long-term reliability of water supplies, the analysis must also consider single dry years and multiple dry years. A detailed analysis of the normal year,

single dry year, and multiple dry year scenarios is presented in the City's WSA, which is provided in Appendix D, *Water Supply Assessment*, of this Draft EIR, and summarized in Table 4.17-9, *Water Supply and Demand with Proposed General Plan 2050 Buildout (AFY)*.

TABLE 4.17-9 WATER SUPPLY AND DEMAND WITH PROPOSED GENERAL PLAN 2050 BUILDOUT (AFY)

| | 2028 | 2033 | 2038 | 2043 |
|---|---|---|---|---|
| **Normal Year** | | | | |
| Supply Total | 31,540 | 31,540 | 31,540 | 31,540 |
| Demand Total | 20,032 | 21,269 | 22,796 | 24,316 |
| *Difference* | 11,508 | 10171 | 8,744 | 7,224 |
| **Single Dry Year** | | | | |
| Supply Total | 21,447 | 20,818 | 20,962 | 21,405 |
| Demand Total | 20,032 | 21,369 | 22,796 | 24,316 |
| *Difference* | 1,415 | *-552* | *-1,834* | *-2,911* |
| **Multiple Dry Years** | | | | |
| Supply Total | 23,514 | 24,424 | 25,058 | 25,790 |
| Demand Total | 20,032 | 21,369 | 22,796 | 24,316 |
| *Difference* | 3,481 | 3,055 | 2,263 | 1,474 |

Note: AFY = Acre-feet per year
Source: City of Santa Rosa, July 10, 2023, SB 610 Water Supply Assessment *(WSA) for the Santa Rosa General Plan 2050*. See Appendix D, *Water Supply Assessment*, of this Draft EIR. Note that information summarized here from the WSA has been updated slightly to reflect minor changes in conditions.

While no shortage of water supplies would occur under normal years or a consecutive five-year drought, a shortage is expected to occur under a single dry year scenario beginning in 2031. Water shortages would range from about 3 percent to 12 percent of the water supplies and would easily be addressed by implementing the City's WSCP. Shortage Levels of 1 to 3 would result in a reduction of water use between 10 and 20 percent, which would account for the potential shortage of water supplies in a single dry year. The City may also implement the WDO policy for new construction and the Excess Use Penalties program for excessive water usage. These actions are anticipated to reduce projected demands in a single-dry year scenario to match available supplies. The WSA concludes that the City has adequate existing water supplies to meet the demands of the proposed project plus existing demands with implementation of demand management measures as needed during dry years.

The surface water that the City purchases from Sonoma Water is of high quality and does not require treatment other than the addition of chlorine for residual disinfection and sodium hydroxide to adjust the pH. Sonoma Water pumps water from the Russian River in a process called riverbank filtration. Six collector wells are located beneath the riverbed at depths of about 100 feet below ground surface, and the water is pumped through natural sands and gravels that act as a filtering system. In addition to Sonoma Water's sampling program, Santa Rosa Water collects weekly water quality samples from the City's distribution system for testing. The water supplied to Santa Rosa Water customers meets or exceeds all state and federal drinking water standards.

There are no water treatment plants that supply water to Sonoma Water or Santa Rosa Water; therefore, implementation of the proposed project would not require new water treatment facilities. Also, Sonoma Water and Santa Rosa Water's current water transmission and distribution systems are adequate for meeting the existing and future needs of their respective service areas. In addition, both water providers have robust CIPs to expand and upgrade their distribution systems to accommodate potential future

development. Accordingly, no new water treatment or distribution facilities would be needed, and Santa Rosa Water would monitor and upgrade the water distribution system with projects described in the CIP to accommodate potential future development. As such, no significant impact would occur.

In addition, Chapter 5, *Safety, Climate Resilience, Noise, and Public Services and Facilities,* of the proposed General Plan 2050 contains goals, policies, and actions that require planning and development decisions to consider impacts to water supplies and resources. The following goal, policies, and actions would serve to minimize potential adverse impacts to water supplies with future development:

- Goal 5-9: Provide adequate and high-quality city services for water, wastewater, recycled water, stormwater, and solid waste.
  - Policy 5-9.1: Ensure water quality, water service delivery, and wastewater treatment are sufficient to meet the needs of current and future residents.
    - Action 5-9.1: Continue to use high-quality water from the Sonoma Water aqueduct system as the primary water supply.
    - Action 5-9.2: Continue to require that water supply capacity and infrastructure are in place prior to occupancy of new development.
    - Action 5-9.3: Maintain water, wastewater, and recycled water system integrity and capacity by continuing to prioritize maintenance and preserve funding for maintenance, rehabilitation, and replacement of existing infrastructure.
    - Action 5-9.4: Evaluate cost and other implications of new initiatives to avoid impacting funding and resources needed for proper management of existing infrastructure.
    - Action 5-9.5: Ensure that new programs and infrastructure do not impact funding of existing infrastructure maintenance, rehabilitation, and replacement.
    - Action 5-9.6: Study the impacts of potential future annexations on water delivery and on the collection and treatment of wastewater.
    - Action 5-9.7: Decline requests for extension of water beyond the Urban Growth Boundary, except in cases of existing documented health hazards and in areas where the City has entered into prior contractual agreements to provide services, in collaboration with the County and Local Agency Formation Commission (LAFCO).
    - Action 5-9.8: Evaluate the City's long-term water supply strategies, including development of new sources of water supply, enhanced water-efficiency programs, and implementation of appropriate growth-control measures, if deemed necessary by the City.
    - Action 5-9.9: Work with State agencies to identify water quality issues and apply for remediation funds, as needed.
    - Action 5-9.10: Implement the Water Supply Alternatives Plan to mitigate potential impacts of climate change, drought, and natural or human-caused catastrophic events by enhancing water supply resiliency and reliability.

- Action 5-9.11: Continue working with the Santa Rosa Plain Groundwater Sustainability Agency to implement the Groundwater Sustainability Plan and achieve sustainability of local groundwater resources.

- Policy 5-9.2: Maintain water quality and encourage Santa Rosa Water customers to save water.
  - Action 5-9.12: Regularly monitor water quality to maintain high levels of water quality for human consumption and for other life systems in the region.
  - Action 5-9.13: Require new development projects to provide water-efficient landscaping in accordance with the City's Water Efficient Landscape Ordinance.
  - Action 5-9.14: Continue to comply with statewide regulations for long- term urban water use efficiency.
  - Action 5-9.15: Promote water efficiency through public education, incentives, rebates, technical assistance, and information about indoor and outdoor water use efficiency measures.
  - Action 5-9.16: Provide information and explore incentive opportunities to encourage property owners to install catchment, graywater systems, and other water recycling systems; remove paving; and install low-impact development features, such as permeable pavers, bioswales, and other green infrastructure components.
- Policy 5-9.3: Ensure that water distribution lines are adequate for existing and future populations.
  - Action 5-9.17: Continue to require that developers improve water distribution infrastructure if needed to serve the demands of new development.
  - Action 5-9.18: Continue to identify funding sources for water infrastructure projects on the Capital Improvement Program list.
  - Action 5-9.19: Evaluate both the upfront (capital) and ongoing maintenance cost commitments of new projects and/or programs prior to approval.
  - Action 5-9.20: Evaluate costs and benefits of new and existing water projects before diverting funding/resources needed for proper management of existing infrastructure.
  - Action 5-9.21: Actively maintain an inventory of existing infrastructure and operations and maintenance requirements (staffing and budget) in addition to capital, operations, and maintenance needs of planned infrastructure.
- Policy 5-9.4: Ensure that adequate wastewater capacity is available to serve existing and future needs of the city.
  - Action 5-9.28: Improve stormwater management to increase infiltration, provide treatment, promote groundwater recharge, reduce flood risk, capture trash, and enhance the environment.
  - Action 5-9.29: Implement mitigation measures to mimic the pre-development water balance through infiltration, evapotranspiration, and capture and reuse of stormwater.

- Action 5-9.30: Evaluate stormwater capture and reuse consistent with goals of the Santa Rosa Citywide Creek Master Plan and the MS4 National Pollutant Discharge Elimination System (NPDES) permit to preserve natural conditions of waterways, minimize channelization of creeks, and protect water quality, and identify, educate, and label to promote community awareness that storm drains flow untreated into creeks.
- Action 5-9.32: Employ a multi-benefit "one-water" approach for new capital projects to include stormwater quality (low-impact development features) on a large scale, flood mitigation, creek restoration, and increased groundwater recharge.

- Policy 5-9.6: Identify and work with partners to address impacts from groundwater threats and solid waste.
  - Action 5-9.39: Consult with appropriate regional, State, and federal agencies to monitor water quality and address local sources of groundwater and soil contamination, including underground storage tanks, septic tanks, and industrial uses, as necessary, to achieve State and federal water quality standards.
  - Action 5-9.41: Identify solid waste and hazardous waste facilities that do not comply with standards for preventing contamination of air, water, and soil with hazardous waste, and work with owners to upgrade those facilities to meet those standards, prioritizing facilities in Equity Priority Areas.

In summary, because no new water treatment or distribution facilities would be needed to accommodate potential future development, and compliance with the City's requirements for new construction, water-efficient landscaping, and the proposed General Plan 2050 goal, policies, and actions listed above, impacts would be *less than significant* with respect to the need for new and/or expanded water facilities.

Significance without Mitigation: Less than significant.

## USS-2 Implementation of the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

As previously shown in Table 4.17-8, the water demand for implementation of the proposed project was estimated to be an additional 6,484 AFY. Adding this increase to the existing demand results in a water demand of 24,316 AFY in 2050. This is less than the projected water demand presented in the 2020 UWMP of 24,957 AFY for the year 2045.

To ensure that there would be sufficient water available for implementation of the proposed project, Santa Rosa Water also prepared a WSA, which is provided in Appendix D, *Water Supply Assessment*, of this Draft EIR. The WSA concluded that the City has adequate water supplies to meet existing demands plus the additional demand associated with the proposed project, with the implementation of demand management measures as needed during dry years.

As described under impact discussion USS-1, Chapter 5, *Safety, Climate Resilience, Noise, and Public Services and Facilities,* of the proposed General Plan 2050 contains goals, policies, and actions that require local planning and development decisions to consider impacts to water supplies and resources. The same proposed General Plan 2050 goal, policies, and actions listed under impact discussion USS-1 would also contribute to ensuring sufficient water supplies to serve the proposed project.

Additionally, potential future development over the buildout horizon of the proposed project would be required to implement the water-efficient requirements of the California Plumbing Code (SRCC Chapter 18-24) and CALGreen (SRCC Chapter 18-42) as well as the MWELO (SRCC Chapter 14-30) requirements for water efficient landscaping. Future projects that meet the criteria under California Water Code Section 10912 would be required to prepare a WSA that demonstrates that project water demands would not exceed water supplies. In addition, residential, commercial, and industrial water usage can be expected to decrease in the future as a result of the implementation of water conservation practices. In the case of a water shortage, the City would implement the WSCP, as outlined in the 2020 UWMP. This includes enacting the WDO Policy for new construction when water shortages are at Stages 5 through 8 and Excess Use Penalties for customers that use more than their allocation. The City would continue to implement conservation efforts, demand management measures, and water use restrictions as per the WSCP.

Compliance with the SRCC and proposed General Plan 2050 goals, policies and actions, implementation of the WSCP during dry periods, and continued water conservation efforts would reduce water demand with respect to water supplies. In summary, buildout associated with the proposed project would not result in a shortage of water supplies and impacts would be *less than significant.*

Significance without Mitigation: Less than significant.

## USS-3 Implementation of the proposed project would not, in combination with past, present, and reasonably foreseeable projects, result in a cumulative impact with respect to water supply.

The area considered for cumulative water supply impacts is the service areas of Sonoma Water and Santa Rosa Water. Future projects within these service areas would result in increases in water demand. However, cumulative water demands would not require building new water treatment facilities. The surface water supplied by Sonoma Water to its retail water purveyors does not require treatment other than chlorination and the addition of sodium hydroxide for pH adjustment.

All new development projects that meet the SB 610 criteria, such as residential projects with more than 500 dwelling units, would be required to prepare WSAs. The water purveyors would review such projects for adequacy of water supply and the water purveyors would update their respective UWMPs every five years to ensure that there are adequate water supplies and contingency plans for future residents and customers. All new developments would require the implementation of water efficiency and water conservation measures, pursuant to CALGreen (SRCC Chapter 18-42) and City's WELO (SRCC Chapter 14-30) irrigation requirements. Water supply deficits in dry years would be met by implementing the WSCPs and other water conservation efforts.

All cumulative projects would require compliance with Sonoma County and City ordinances as well as local, State, and federal regulatory requirements. Existing and future regulations would result in a reduction in per capita water use over time, which would ensure that cumulative impacts with respect to water supply would be *less than significant.*

Significance without Mitigation: Less than significant.

# 4.17.2 WASTEWATER

## 4.17.2.1 ENVIRONMENTAL SETTING

### Regulatory Framework

*Federal Regulations*

#### Clean Water Act

The CWA of 1972 regulates the discharge of pollutants into watersheds throughout the nation. It is the primary federal law that governs water pollution and is implemented by the USEPA. Under the CWA, the USEPA sets wastewater standards and makes it unlawful to discharge pollutants from a point source into any navigable waters without obtaining a permit. Point sources include any conveyances, such as pipes and man-made drainage channels, from which pollutants may be discharged.

#### National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established as part of the CWA to regulate municipal and industrial discharges to surface waters of the United States. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable connections and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities. Wastewater discharge is regulated under the NPDES permit program for direct discharges into receiving waters and by the National Pretreatment Program for indirect discharges to a wastewater (sewage) treatment plant.

*State Regulations*

#### State Water Resources Control Board

On May 2, 2006 the SWRCB adopted Statewide General Waste Discharge Requirements ([WDRs] Order No. 2006-0003) and a monitoring and reporting program (Order No. WQ-2013-0058-EXEC) for all publicly owned sanitary sewer collection systems in California with more than one mile of sewer pipes. The order provides a consistent statewide approach to reducing sanitary sewer overflows (SSO). The WDRs require public agencies that own or operate sanitary sewer systems to develop and implement sewer system

management plans (SSMP) and report all SSOs to the SWRCB's online reporting system. The SWRCB has delegated authority to nine RWQCBs to enforce these requirements within their regions.

#### 2021 Winery Order

The SWRCB recently developed general WDRs for winery process water for activities that generate winery waste and discharge it to land for reuse or disposal. Winery Order No. WQ 2021-002-DWQ was adopted in January 2021 and is applicable statewide. Facilities that produce wine or grape juice and generate between 10,000 and 15 million gallons of process water per year that is discharged to land for irrigation or through a septic-subsurface disposal system are required to enroll in the Winery Order. Applicants are required to submit to the SWRCB an electronic Notice of Intent that contains information on winery effluent flows and process water generation, treatment, reuse, and disposal. Applicants must also pay an application fee and an annual fee, based on process water flow rates.

### *Regional Regulations*

#### North Coast Regional Water Quality Control Board

The North Coast RWQCB (Region 1) issues and enforces NPDES permits in the EIR Study Area, which includes permits for wastewater treatment plants (WWTP) and industrial waste discharges. NPDES permits allow the RWQCB to regulate where and how waste is disposed, including the discharge volume and effluent limits of waste and the monitoring and reporting responsibilities of the discharger. The RWQCB is also charged with conducting inspections of permitted discharges and monitoring permit compliance. The North Coast RWQCB reissued an NPDES permit in 2020 (Order No. R1-2020-0012) for the Santa Rosa Regional Water Reuse System and the Laguna Treatment Plant.

#### RWQCB Water Quality Trading Framework for Laguna de Santa Rosa Watershed

The North Coast RWQCB adopted Resolution No. R1-2018-0025 in 2018 approving the Water Quality Trading Framework for the Laguna de Santa Rosa Watershed. This resolution replaces the previous Santa Rosa Nutrient Offset Program, which was established in 2008, and is available for both the City of Santa Rosa and the Town of Windsor as an approved method for complying with the "no net loading" effluent limitations for total phosphorus in the NPDES permit. This allows the City to implement ecologically beneficial projects within the watershed that offset the potential phosphorus loading from discharge for the Laguna Treatment Plant. These offset projects must be completed in advance of any discharge and have a specified life and credit time period. The recent revision to the NPDES permit (Order No. R1-2021-0041) clarifies that credits from projects where ecological uplift is provided on permanently protected lands are no longer subject to expiration.

### *Local Regulations*

#### Santa Rosa City Code

The SRCC includes various directives that pertain to wastewater in Santa Rosa. The SRCC is organized by title, chapter, and section, and in some cases, articles. Most provisions related to wastewater are in Title 15, *Sewers, and* Title 20, *Zoning,* as follows:

- Chapter 26, *Water and Sewer Rates, Connection/Demand Fees; and Miscellaneous Fees and Charges.* The City Council is able to establish water and sewer rate changes as well as rates for connections to the City's utility system. All funds that are collected must be used for providing services and maintenance of the City's water and sewer systems.
- Chapter 15-04, *Administration*. This chapter describes the responsibilities of the City to maintain the wastewater collection system and the responsibilities of property owners to maintain the sewer service laterals, cleanouts, and backflow devices that connect to the City's collection system. It also states that the owner of any parcel with a private sewage system that is within 200 feet of the City's sewer system is required to connect to the City's sewer system.
- Chapter 15-06, *General and Pretreatment Enforcement*. This chapter describes the enforcement mechanisms and process for undertaking enforcement actions for violators of wastewater discharge permits or pretreatment requirements. The chapter also outlines the fees for wastewater discharge permit applicants, monitoring and inspection procedures, and reviewing and responding to accidental discharges and construction.
- Chapter 15-08, *Pretreatment*. This chapter provides a classification system for users that need to submit a wastewater discharge permit to the City based on each user's waste quality and flow rate and provides a basis for sewer use charges. The chapter incorporates pretreatment standards in accordance with federal and State standards and local limits. The Director of Utilities may require a permit holder to prepare a slug control plan if deemed necessary.
- Chapter 15-16, *Sewer Connections*. This chapter specifies the design criteria and standard plans and specifications that must be followed for constructing sewer service laterals or connections to the City's sewer system. The chapter specifies connection fees and non-residential and industrial demand factors, which are the basis of the connection fees, also known as sewer demand fees.
- Chapter 15-20, *Sewer Charges*. This chapter states that sewer charges will be levied in order to operate and maintain the existing sewer system and to provide for the expansion of the system with future development. The amounts and rate schedules for fees and charges are determined by the Board of Public Utilities and may include construction charges, connection or demand fees, sewer use permit fees, and fixed monthly service charges for sewer users. The collected fees are deposited into the wastewater capital recovery fund and the sewer utility fund for the operation, maintenance, and expansion of the City's wastewater collection system.
- Chapter 15-28, *Private Sewage Systems*. Construction of a private sewage system requires a permit from the Sonoma County Permit and Resources Management Department and must be on a property that is at least two acres in size with less than 30 percent slope for the leach field and must not be within close proximity to a City sewer line. Permits applications and plans must be submitted to the County Environmental Health Department and conform with County Health Department standards.
- Chapter 20-30, *Standards for All Development and Land Uses*. Article 10.20.100, *Septic Tank Area Requirements*, states that a septic tank may be allowed where no public sanitary sewer is accessible or within 500 feet, if the parcel is more than two acres and meets County Health Department standards.

## NPDES Permit for Regional Water Reuse System and Laguna Treatment Plant

The North Coast RWQCB reissued an NPDES permit in 2020 (Order No. R1-2020-0012) for the Santa Rosa Regional Water Reuse System and the Laguna Treatment Plant located at 4300 Llano Road in Santa Rosa. The City of Santa Rosa conveys wastewater from within the EIR Study Area to the WWTP and also accepts wastewater from the cities of Cotati, Rohnert Park, and Sebastopol and unincorporated areas of Sonoma County. The permit establishes an average dry weather flow of 21.34.9 million gallons per day (MGD).[29] The facility is permitted to discharge tertiary treated wastewater to Santa Rosa Creek, an unnamed ditch tributary to Laguna de Santa Rosa, and Laguna de Santa Rosa from October 1 through May 14 but is limited to no more than 5 percent of the flow of the receiving water, as measured at the Hacienda Bridge (USGS Guage). During the dry season, tertiary treated recycled water is distributed for irrigation on authorized use sites and for recharging the steam fields at the Geysers Recharge Project. The NPDES permit includes effluent limitations, water recycling specifications and requirements, and receiving water limitations. A monitoring and reporting program is also included as part of the NPDES permit. The permit was amended in 2021 (Order. No. R1-2021-0041) to revise the Water Quality Training Framework for Laguna de Santa Rosa and clarify that the credits for long-term and multi-benefit projects do not expire.

## Santa Rosa Sewer System Management Plan

The latest Santa Rosa SSMP was certified in April 2019 and revised in July 2019.[30] The purpose of the SSMP is to properly manage, operate, and maintain all parts of the sanitary sewer system in order to minimize the number of SSOs and mitigate any SSOs that do occur. The SSMP describes how the sanitary sewer system is operated and maintained, efforts to minimize infiltration and inflow, design and performance standards, overflow emergency response plan, a fats, oil and grease control program, and monitoring and audit requirements. As required by law, the SSMP must be updated every five years and must be developed in compliance with the requirements of the SWRCB Waste Discharge Requirements Order No. 2006-003-DWQ, Amended Monitoring and Reporting Program Order No. WQ 2008-002-EXEC, and Order No. WQ 2013-0058-EXEC.

## Santa Rosa Sanitary Sewer System Master Plan Update

Most recently updated in August 2023, the Sanitary Sewer System Master Plan (Sanitary SSMP) is used to support ongoing wastewater collection system capital improvement projects as well as management and operation of the sanitary sewer system.[31] The Sanitary SSMP provides a description of the model used to estimate dry weather and wet weather wastewater flows in the City's existing sewer collection system and calculate future wastewater flow rates based on project population and employment increases. Additionally, the Sanitary SSMP provides a summary of areas that should be prioritized over the next

[29] To go up to 25.9 MGD, Santa Rosa Water would have to show that the needed capacity improvements have been made to support this higher flow without increasing discharge. (Mike Prinz, Deputy Director of Water Reuse Operations, Santa Rosa Water, August 6, 2024)

[30] Santa Rosa Water, revised July 3, 2019, *Sewer System Management Plan (SSMP)*, https://www.srcity.org/DocumentCenter/View/24182/Santa-Rosa-Water-Sewer-System-Management-Plan-PDF, accessed August 28, 2023.

[31] City of Santa Rosa, October 2014, *Sanitary Serwer System Master Plan Update*, https://www.srcity.org/DocumentCenter/View/13828/Sewer---2014-Master-Plan, accessed August 28, 2023.

several CIP cycles. A condition assessment was completed and identified sections of Llano and Robles Trunk Sewers as the highest priorities and rankings for the likelihood of failure (LOF) and consequence of failure (COF) in the sewer system. Los Alamos Trunk Sewer, the Cross Town Trunk Sewer, and the Airport Trunk Sewer were also identified for recommended size upgrades for several sewer pipelines.

### Santa Rosa Regional Water Reuse System Master Plan

The Regional Water Reuse System Master Plan, prepared in February 2018, provides a description, capacity, and condition of the Laguna Treatment Plant and environmental laboratory, biosolids management facilities, and recycled water distribution and discharge system. The report also identifies opportunities to meet future needs through long term planning and major projects and programs as well as recommended capital improvement projects and a 20-year investment program.[32]

### Incremental Recycled Water Program and Master Plan

The August 2007 update to the Recycled Water Master Plan (RWMP) was prepared to assist the City in deciding how to manage additional wastewater flows into the City's Regional Water Reuse System.[33] The RWMP also describes methods for managing current and future flows that are discharged. The sum of these flows is the incremental flow to be addressed by the Incremental Recycled Water Program (IRWP). The RWMP formulates a course of actions for implementing facilities under the IRWP to manage the incremental flow. The primary objectives of the IRWP are to provide wastewater treatment, recycling, and disposal for the Santa Rosa Regional Water Reuse System to accommodate projected growth; develop and operate the wastewater treatment and disposal system; and maintain a system and components that are economically feasible and continue to be successfully financed.

### Sewer Design Standards

Adopted in October 2018, the Sanitary Sewer Standard Specifications includes sanitary sewer system design standards, standard plans, construction specifications, and an engineer's list of approved items.[34] Established to assist developers and their engineers, the Sanitary Sewer Standard Specifications provides guidelines for the design of sewer utilities projects and establishes the minimum acceptable design criteria. More stringent requirements may be imposed by the Director of Santa Rosa Water based on specific project conditions.

[32] City of Santa Rosa, February 2018, *Regional Water Reuse System Master Plan*, https://www.srcity.org/DocumentCenter/View/37627/Regional-Water-Reuse-Master-Plan---2018, accessed August 28, 2023.

[33] City of Santa Rosa, July 2007, *Incremental Recycled Water Program: August 2007 Update to the Recycled Water Master Plan*, https://www.srcity.org/DocumentCenter/View/13970/Incremental-Recycled-Water-Program---2007-Master-Plan, accessed April 5, 2023.

[34] City of Santa Rosa, October 18, 2018, Sanitary Sewer Standard Specifications, https://www.srcity.org/DocumentCenter/View/18368/Sewer-Design-Standards, accessed April 7, 2023.

### Capital Improvement Program

The Capital Projects Engineering Division is responsible for the design and construction of projects to rehabilitate, upgrade, and expand the City's infrastructure, including sewer collection system projects and Laguna Treatment Plant projects. The capital projects are funded primarily through sewer and water rates, development fees, and grants. The City's CIP is a five-year financial plan for the maintenance and expansion of the City's infrastructure. The CIP identifies public facility improvements that are needed, provides a design and construction schedule, and identifies funding for these projects.[35] Some of the CIP programs that have currently been approved and are in the planning or construction phase include the following sewer and wastewater infrastructure projects:

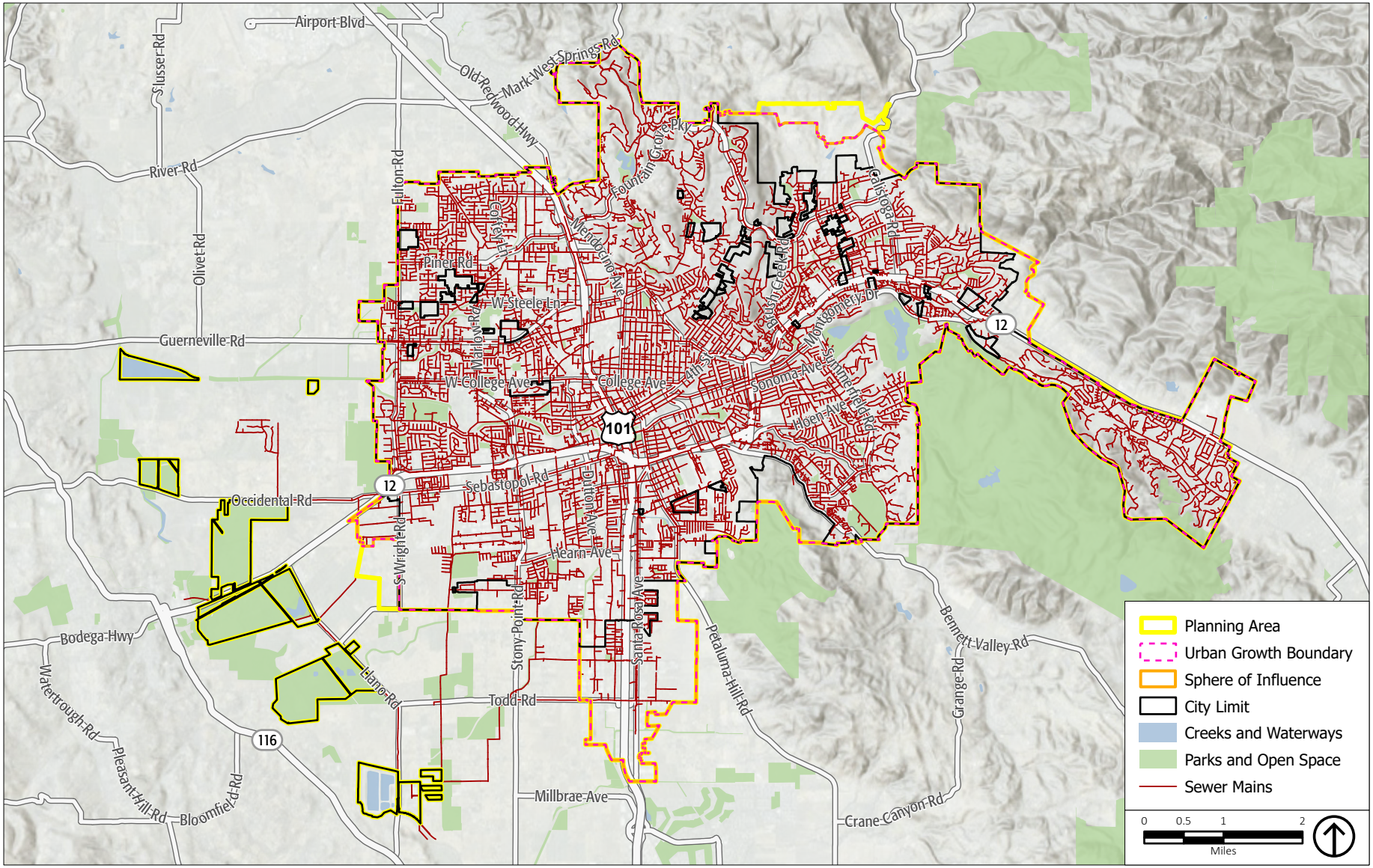
- North Trunk Sewer Replacement– Mendocino Avenue to Terra Linda Drive.
- Albany, Clement and Malano Sewer and Water Improvements.
- Laguna Treatment Plan Disinfection Improvements: Replace the existing UV system.
- Terra Linda and Buena Vista Sewer and Water Replacement.
- Mendocino Avenue Easement South of Dawson Road Sewer Main Replacement.
- E. Haven Drive Sewer and Water Improvements in Grace neighborhood.
- Los Alamos Trunk Sewer Replacement: Streamside Drive to Elaine Drive.
- Los Alamos Trunk Sewer Replacement: Elaine Drive to Melita Road at Santa Rosa Creek.
- Laguna Treatment Plant Waste Gas Burner Replacement.
- Cleveland Avenue and St. Rose District Sewer and Water Improvements.
- Controller and Radio Upgrades at Water Pump Stations and Sewer Lift Stations.
- Robles Trunk Lining.
- Fulton Road Sewer Main Improvements.
- Laguna Treatment Plant Emergency Generator Fuel Tank and Fleet Fueling Station Replacement.
- Backup Generators: Water and Wastewater Facilities.
- Llano Trunk Rehabilitation.
- Cross Town Trunk Lining.
- Slater Street and Lewrosa Way Sewer and Water Main Replacement.

## Existing Conditions

### Wastewater Collection

The City of Santa Rosa's sewer collection system serves a population of approximately 175,300 people with 50,512 connections. It consists of 587 miles of gravity sewer pipelines, 6.4 miles of force mains, and 17 lift stations. The location of the sewer pipelines within the EIR Study Area are shown on Figure 4.17-2, *City of Santa Rosa Sewer Collection System.* The sewer pipes range in size from 4 to 66 inches and are of various ages, dating back to the 1970s. Collected wastewater is conveyed to the Laguna Treatment Plant and is treated to tertiary (recycled) water standards.

[35] City of Santa Rosa, 2023, Capital Improvement Program, https://www.srcity.org/690/Capital-Improvement-Program, accessed August 29, 2023.




Source: ESRI, 2022; City of Santa Rosa, 2023; PlaceWorks, 2024.

Figure 4.17-2
City of Santa Rosa Sewer Collection System

The Santa Rosa Water Department, Operations Division, operates and maintains the sewer collection system within the EIR Study Area. This includes the following tasks:[36]

- Perform regularly scheduled collection system maintenance, including hydroflushing, rodding, cleaning, closed circuit television (CCTV), and smoke testing.
- Minimize Inflow/Infiltration using data collected from flow monitors to determine the sources of inflow/infiltration and regularly inspect sources with the aid of smoke testing and CCTV.
- Minimize the number and impacts of SSOs and provide emergency response, cleanup, notification, and follow up for all SSOs in accordance with the Overflow Emergency Response Plan.
- Provide education to residents and businesses about the impact of fats, oil, and grease in the collection system.

The City is in the process of upsizing and replacing portions of the sewer collection system, as recommended in the 2014 Sanitary SSMP. Most notably, the prioritized projects focus on trunk line replacement in several areas to limit the inflow of stormwater into the sewer system. Also, the City is optimizing the use of both City and the Laguna Treatment Plant's wet weather storage ponds via flow meters to prevent surcharging during future storm events.

There also are several satellite wastewater collection systems operated and maintained by the cities of Cotati, Rohnert Park, and Sebastopol that convey wastewater to the Laguna Treatment Plant. The City of Santa Rosa maintains the sewer collection system of South Park County Sanitation District under contract. Each city and sanitation district is responsible for compliance with the State and local waste discharge requirements.

## Wastewater Treatment

The Laguna Treatment Plant, also known as the Santa Rosa Regional Water Reuse System, is owned and operated by the City of Santa Rosa. The Laguna Treatment Plan is at 4300 Llano Road in Santa Rosa and provides tertiary treated effluent (recycled water) using primary sedimentation, biological secondary treatment (activated sludge) with alum coagulation, flocculation, and clarification, followed by tertiary filtration and ultraviolet light (UV) disinfection.

Tertiary treated effluent is discharged to an effluent pond system with a maximum capacity of 1.65 million gallons prior to entering either the recycled water distribution system or prior to discharge to Santa Rosa Creek and/or Laguna de Santa Rosa during the permitted discharge period from October 1 to May 14. The effluent pond system allows the City to control the timing, location, and volume of discharge to protect beneficial uses of the receiving waters and provide a source of recycled water during the discharge

[36] Santa Rosa Water, revised July 3, 2019, *Sewer System Management Plan (SSMP)*, https://www.srcity.org/DocumentCenter/View/24182/Santa-Rosa-Water-Sewer-System-Management-Plan-PDF, accessed August 28, 2023.

prohibition period.[37] Nearly 100 percent of the recycled water produced by the facility is used for landscape and agricultural irrigation and recharge of the Geyser's geothermal steam field.

Biosolids produced during the treatment process are thickened, anaerobically digested, and dewatered. Approximately one-third of the biosolids are transported to the Lystek facility in Fairfield, where it is processed using thermal hydrolysis and transformed into a Class A biosolids fertilizer product. The remainder of the biosolids are applied to agricultural land.

As previously discussed, the Laguna Treatment Plant also accepts wastewater from the cities of Cotati, Rohnert Park, and Sebastopol, as well as the South Park County Sanitation District. The facility also accepts hauled waste, including domestic septage, chemical toilet waste, grease trap waste, non-hazardous commercial and industrial waste, groundwater, grey water, and landfill leachate. Liquid wastes such as septage, greywater, and rinse water directly enter the liquid stream in the Laguna Treatment Plant. High strength wastes, such as kitchen grease from restaurants, food processing facility wastes, and wastes from breweries and wineries, are offloaded into dedicated tanks and pumped directly to the anaerobic digesters for treatment.

The Laguna Treatment Plant is permitted to treat 21.34 MGD as an average daily dry weather flow and is designed with a peak wet weather flow of 64 MGD. The average dry weather flow in 2022 was 13.1 MGD. No discharge to receiving waters occurred in 2022.[38] Wastewater flows from the City of Santa Rosa have ranged between 72 percent and 73.5 percent of the total wastewater flow for the past six years. For fiscal year 2021/2022, Santa Rosa's flows to the Laguna Treatment Plant were 4,388.95 MG, with total flows to the Laguna Treatment Plant being 6,008.68 MG, representing 73.04 percent of flows for that year. Santa Rosa's contribution to the wastewater flow to the plant in 2022 was calculated to be about 10.6 MGD.

### 4.17.2.2 STANDARDS OF SIGNIFICANCE

Implementation of the proposed project would result in significant wastewater related impact if it would:

4. Require or result in the relocation or construction of new or expanded wastewater treatment or facilities, the construction or relocation of which could cause significant environmental effects.
5. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
6. In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact with respect to wastewater facilities.

[37] North Coast Regional Water Quality Control Board, 2020, Waste Discharge Requirements and Water Recycling Requirements for the City of Santa Rosa, Santa Rosa, Regional Water Reuse System, Laguna Treatment Plant, Sonoma County, Order No. R1-2020-0012.

[38] City of Santa Rosa, February 24, 2023, *2022 Annual Report: Regional Water Reuse System – Laguna Treatment Plant*, https://www.srcity.org/DocumentCenter/View/31637/2022-Santa-Rosa-Regional-Water-Reuse-System-Annual-Report, accessed September 7, 2023.

## 4.17.2.3 IMPACT DISCUSSION

**USS-4 Implementation of the proposed project would not require or result in the relocation or construction of new or expanded wastewater treatment or facilities, the construction or relocation of which could cause significant environmental effects.**

Buildout of the proposed project would result in an increase in wastewater, which includes liquid and solids, with the addition of 24,090 new housing units and 8,364,760 square feet of non-residential land use. Wastewater collected in the EIR Study Area would be conveyed to the Regional Water Reuse System/Laguna Treatment Plant for treatment. Other cities (Cotati, Rohnert Park, and Sebastopol) and the South Park County Sanitation District also convey wastewater to this facility and are included in this analysis.

An estimate of the amount of additional wastewater generated by the proposed project was determined, as shown in Table 4.17-10, *Wastewater Demand Increase, Proposed General Plan 2050.* The wastewater demand factors were derived in consultation with the City of Santa Rosa and assumed that 80 percent of the total water demand consisted of indoor water use and that 100 percent of the indoor water use became wastewater.

TABLE 4.17-10 WASTEWATER DEMAND INCREASE, PROPOSED GENERAL PLAN 2050

| Category | Amount | Units |
|---|---|---|
| Water Demand | 5,339,136 | GPD |
| Wastewater Factor | 0.8 | |
| Wastewater Demand | 4,271,309 | GPD |
| **Wastewater Demand Increase with General Plan 2050** | **4.27** | **MGD** |
| | | |
| Existing Wastewater Demand | 13.1 | MGD |
| Increase for Santa Rosa with GP Buildout | 4.27 | MGD |
| Increase for Other Contributors | 0.6 | MGD |
| **Total** | **17.97** | **MGD** |

Notes:
a. Assumes 80 percent of total water demand is indoor water and that 100 percent of indoor water becomes wastewater.
b. GPD = gallons per day; MGD = million gallons per day.
c. Existing wastewater demand from 2022 Regional Water Reuse System Annual Report.
d. Projected 2035 wastewater flows for Cotati, Rohnert Park, and Sebastopol from 2014 Sanitary Sewer System Master Plan Update.
Sources: City of Santa Rosa, 2023; PlaceWorks, 2023.

The increase in wastewater demand with buildout of the proposed project is estimated to be approximately 4.27 MGD. Combined with the existing average daily flow of 13.1 MGD and the increase with other contributors to the Laguna Treatment Plant flow rates, the estimated total wastewater flow rate in 2050 is estimated to be approximately 18 MGD.

The Laguna Treatment Plant is currently permitted for an average daily flow rate of 21.34 MGD. As noted previously, capacity up to 25.9 MGD ADWF is permitted if the City can show the improvements necessary to achieve that flow. In addition, the facility has an effluent pond system with a maximum capacity of 1.65

million gallons that can control surges in volume during wet weather conditions and the facility also recycles approximately 6.6 billion gallons of wastewater per year. Also, the treatment plant is undergoing system upgrades as part of the CIP.

Therefore, the Laguna Treatment Plant will be able to accommodate the future wastewater flows from Santa Rosa and the other contributors to the facility's wastewater flow rates. In addition, the assumptions used in calculating future wastewater flow are conservative (i.e., they represent a "worst case scenario"), as wastewater flows to WWTPs continue to decline with water conservation efforts.[39]

In conjunction with upgrades to the Laguna Treatment Plant, the City of Santa Rosa is also implementing sewer collection improvement projects as recommended in the 2014 Sanitary SSMP. The goal is to replace portions of the sewer infrastructure with larger pipe sizes to accommodate future growth, improve wet weather capacity, and reduce inflow/infiltration. Completion of the Laguna Treatment Plant and sewer system upgrades should minimize the potential for future SSOs and the wastewater system will be able to accommodate the increases in wastewater flows with buildout of the EIR Study Area.

In addition, sewer demand fees (i.e., connection fees) are imposed on all new developments to recover a proportionate share of costs for existing and future wastewater system facilities and new or expanded connections to the City's wastewater system. Property owners are also required to pay monthly sewer service charges. These fees are also used to fund wastewater collection and treatment system improvements designated in the CIP and routine repair and maintenance by the Santa Rosa Water Department.

Chapter 5, *Safety, Climate Resilience, Noise, and Public Services and Facilities,* of the proposed General Plan 2050 contains goals, policies, and actions that require planning and development decisions to consider impacts to wastewater collections systems and treatment facilities. In addition to the goals, policies, and actions listed under impact discussion USS-1, the following goal, policy, and actions would serve to minimize potential adverse impacts to wastewater infrastructure with future development:

- Goal 5-9: Provide adequate and high-quality city services for water, wastewater, recycled water, stormwater, and solid waste.
  - Policy 5-9.4: Ensure that adequate wastewater capacity is available to serve existing and future needs of the city.
    - Action 5-9.22: Maintain existing levels of wastewater service by preserving and improving infrastructure, including replacing sewer mains, as necessary.
    - Action 5-9.23: Decline requests for extension of sewer services beyond the Urban Growth Boundary.
    - Action 5-9.24: Implement the Sewer Master Plan via projects identified in the Capital Improvement Program.
    - Action 5-9.25: Regularly review wastewater treatment and biosolids management strategies to accommodate growth over the life of the General Plan.

[39] California Water Environment Association, 2023, Dealing with Declining Wastewater Flows, https://www.cwea.org/news/dealing-with-declining-flows/, accessed on August 31, 2023.

- Action 5-9.26: Work with regional partners (notably the Cities of Rohnert Park, Cotati, and Sebastopol, and Sonoma Water) to build consensus on maintenance, rehabilitation, modernization, and resilience improvements for facilities that provide service to them, such as the Laguna Treatment Plant.

Implementation of the proposed project would not require the construction or expansion of the Laguna Treatment Plant or sewer collection system beyond what is already planned or under construction. Adherence to the City's municipal code requirements as well as the proposed General Plan 2050 goals, policies, and action would reduce wastewater generation rates over time, and therefore impacts associated with the sewer collection and treatment systems would be *less than significant.*

Significance without Mitigation: Less than significant.

**USS-5 Implementation of the proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.**

As described under impact discussion USS-4, the City's Laguna Treatment Plant is currently permitted to treat up to 21.34 MGD. The City's contribution to an increase in wastewater demand in 2050 is estimated to be 4.27 MGD, as shown in Table 4.17-10. Including increases by other wastewater contributors, the total wastewater flow rate to the treatment plant is estimated to be about 18 MGD. This is well below the permitted capacity of the Laguna Treatment Plant of 21.34 MGD. Capacity up to 25.9 MGD is permitted if the City can show the improvements necessary to achieve that flow.

The estimated increase in wastewater flows is conservative because there likely will be declining rates of wastewater generation over time because new projects would be required to comply with the California Plumbing Code and CALGreen and implement active and passive water conservation measures. This would also reduce the amount of wastewater produced per dwelling unit or building. Future development would also be required to undergo City review. Furthermore, as described under impact discussion USS-4, the proposed General Plan 2050, Chapter 5, *Safety, Climate Resilience, Noise, and Public Services and Facilities,* contains goals, policy, and actions that require local planning and development decisions to consider impacts to wastewater collections systems and treatment facilities. The same proposed General Plan 2050 goals, policies, and actions identified under impact discussion USS-4 would ensure that potential future development would minimize impacts to wastewater collection and treatment capacity.

With continued compliance with applicable regulations wastewater generated by the proposed project would not exceed the capacity of the Laguna Treatment Plant. In addition, implementation of the proposed General Plan 2050 goals, policies, and actions would further reduce demand. Therefore, the proposed project would not result in a determination by the wastewater treatment provider that there is not adequate capacity to serve the EIR Study Area's projected demand in addition to the demands of other wastewater dischargers. Impacts would be *less than significant*.

Significance without Mitigation: Less than significant.

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| **USS-6** | **Implementation of the proposed project would not, in combination with past, present, and reasonably foreseeable projects, result in a cumulative impact to wastewater facilities.** |

The context used for the cumulative assessment is the service area of Santa Rosa's Laguna Treatment Plant. In addition to wastewater discharged to the treatment plant by the City, there are other dischargers, including the cities of Cotati, Rohnert Park, and Sebastopol, and the South Park Community Sanitation District.

As described under impact discussion USS-4, the existing and future wastewater flows to the City's Laguna Treatment Plant were calculated for all dischargers, as shown in Table 4.17-10. The facility currently has the capacity to treat 25.9 MGD and would still have a residual average annual dry weather capacity of 7.9 MGD.

Also, the City has committed to implementing improvements to the Laguna Treatment Plant and sewer collection system, as described in the CIP. The other dischargers to the treatment plant also have sewer collection system improvement programs. Future development within the city would require compliance with all applicable regulations and ordinances. Project applicants would have to pay wastewater demand (connection) fees and property owners are required to pay monthly sewer service charges, which funds continued improvements to the wastewater collection and treatment systems.

Therefore, with continued compliance with applicable regulations and future reductions in wastewater demands with water conservative efforts, cumulative development would not exceed wastewater collection or treatment capacities. Accordingly, the proposed project would not result in a cumulatively considerable impact related to wastewater, and cumulative impacts would be *less than significant.*

Significance without Mitigation: Less than significant.

# 4.17.3 STORMWATER

## 4.17.3.1 ENVIRONMENTAL SETTING

## Regulatory Framework

The regulatory framework for stormwater is described in detail in Chapter 4.10, *Hydrology and Water Quality*, of this Draft EIR. The regulatory requirements that pertain solely to storm drain systems are repeated below.

### *Federal Regulations*

#### National Pollutant Discharge Elimination System

Under the NPDES program, all facilities that discharge pollutants into waters of the U.S. are required to obtain an NPDES permit. Requirements for stormwater discharges are also regulated under this program. In California, the NPDES permit program is administered by the SWRCB through the nine RWQCBs. The

City of Santa Rosa lies within the jurisdiction of North Coast RWQCB (Region 1) and is subject to the waste discharge requirements of the Phase I MS4 Permit (Order No. R1-2014-0030; NPDES No. CA0025054) that regulates stormwater discharges from the City of Santa Rosa, portions of unincorporated Sonoma County, Sonoma Water, the cities of Cotati, Cloverdale, Healdsburg, Rohnert Park, Sebastopol, Ukiah and the Town of Windsor.

### *State Regulations*

#### SWRCB General Construction Permit

Construction activities that disturb one or more acres of land that could impact hydrologic resources must comply with the requirements of the SWRCB Construction General Permit (Order WQ 2022-0057-DWQ; NPDES No. CAS000002), which was adopted on September 8, 2022, and becomes effective on September 1, 2023. Under the terms of the permit, applicants must file Permit Registration Documents (PRD) with the SWRCB prior to the start of construction. The PRDs include a Notice of Intent, risk assessment, site map, Stormwater Pollution Prevention Plan (SWPPP), annual fee, and a signed certification statement. The PRDs are submitted electronically to the SWRCB via the Stormwater Multiple Application and Report Tracking System (SMARTS) website.

Applicants must also demonstrate conformance with applicable best management practices (BMP) and prepare a SWPPP containing a site map that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project site. The SWPPP must list BMPs that would be implemented to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources. Additionally, the SWPPP must contain a weekly visual monitoring program and BMP inspections prior to, during, and after qualifying precipitation events. Water quality monitoring is also required with a schedule based on the risk level of the site.

#### SWRCB Industrial General Permit

The Statewide General Permit for Stormwater Discharges Associated with Industrial Activities, Order No. 2014-0057-DWQ and amended by 2015-0122-DWQ (2018), implements the federally required stormwater regulations in California for stormwater associated with industrial activities that discharge to waters of the United States. This regulation covers facilities that are required by federal regulations or by the RWQCBs to obtain an NPDES permit. Dischargers are required to eliminate non-stormwater discharges, develop SWPPPs that include BMPs, conduct monitoring of stormwater runoff, and submit all compliance documents via the SWRCB's SMARTS program.

#### SWRCB Trash Amendment

On April 7, 2015, the SWQCB adopted an amendment to *The Water Quality Control Plan for Ocean Waters of California* to control trash. In addition, the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California* added Part 1, *Trash Provisions*. Together, they are collectively referred to as "the Trash Amendments." The Trash Amendments apply to all surface waters of California and include a land-use-based compliance approach to focus trash controls on areas with high trash-

generation rates. Areas such as high density residential, industrial, commercial, mixed urban, and public transportation stations are considered priority land uses.

The Trash Amendments apply to all Phase I and II permittees under the NPDES MS4 permits. The Trash Amendments require municipalities to install certified trash control systems, such as filters, on all catch basins no later than December 2, 2030.[40]

### Sonoma Water

Sonoma Water has recently revised its Flood Management Design Manual, which is to be used by public agencies and private entities in Sonoma County that are designing, constructing, or maintaining waterways, channels, closed conduits, or culverts. It is applicable for drainage designs, plans, or improvements that are subject to review by Sonoma Water. It provides the methodology and criteria for analyzing storm drain systems and facilities that are necessary to convey stormwater runoff from large storm events. It replaces the previous Sonoma Water Flood Control Design Criteria.[41] The Santa Rosa Storm Drain Design Standards uses this methodology for the hydrologic and hydraulic design of storm drains within the city.

## *Local Regulations*

### Santa Rosa City Code

The SRCC includes various directives that pertain to stormwater in Santa Rosa. The SRCC is organized by title, chapter, and section, and in some cases, articles. Most provisions are in Title 16, *Storm Water Enterprise;* Title 17, *Environmental Protection;* and Title 20, *Zoning*:

- Section 14-30.055, *Grading Design Plan*. This chapter states that when slopes are greater than 10 percent, a grading plan is needed that clearly identifies drainage patterns and storm water retention improvements.
- Chapter 16-12, *Establishment of Storm Water Enterprise*. This chapter creates the Storm Drainage and Flood Control Management Enterprise which operates the City's surface water, storm water, storm drainage, and flood control management efforts.
- Chapter 17-12, *Storm Water*. This chapter is broken up into two articles that give an overview of drainage areas and storm water quality.
    - Article I. *Drainage*. This article establishes requirements for driveway culverts, permits, and violations associated with stormwater.

[40] State Water Resources Quality Control Board, September 2022, Storm Water Program: Trash Implementation Program, https://www.waterboards.ca.gov/water_issues/programs/stormwater/trash_implementation.html, accessed April 4, 2023.

[41] Sonoma Water, 2020, *Flood Management Design Manual*, https://www.sonomawater.org/media/PDF/Water%20Resources/Flood%20Protection/Flood%20Management%20Design%20Manual/FMDM_Main_Body_Mar2020_ADA%20v2.pdf, accessed August 4, 2023.

- Article II. *Storm Water Quality.* This article's purpose is to limit the amount of spills and dumping or disposal of materials other than storm water in the City's storm water system and to reduce pollutants in storm water discharge to the highest degree possible.

- Chapter 20-30.040, *Creekside Development*. This section provides minimum setbacks from waterways to provide protection for owners of riparian property and the public from the hazards of stream bank failures and flooding. In general, the setback area on either side of a natural or modified waterway shall be 50 feet from the top of the highest bank for new structures.

### Storm Water Low Impact Development Technical Design Manual

Recently revised in 2020 and applicable for all new development in Santa Rosa, the Storm Water Low Impact Development (LID) Technical Design Manual provides technical guidance for project designs that require the implementation of permanent stormwater BMPs intended to satisfy NPDES permit requirements.[42] The intention of the Stormwater LID Technical Design Manual is to promote LID goals of minimizing adverse impacts from storm water runoff; minimizing the percentage of impervious surfaces on land development projects and implementing mitigation measures to mimic the pre-development water balance; minimizing pollutant loadings from impervious surfaces such as roof tops, parking lots, and roadways; and properly selecting, designing and maintaining treatment control BMPs and Hydromodification Control BMPs.

### Storm Drain Standards

The City of Santa Rosa has established Storm Drain Design Standards to assist developers and their engineers in the design of storm drain facilities within the City.[43] The Storm Drain Design Standards provides the methodology for determining stormwater runoff rates and the hydraulic design criteria to be used in sizing storm drains. In general, drainage systems must be designed to accommodate flows from storms with recurrence intervals ranging from 10 to 100 years, depending on the waterway classification to which it discharges. Open channels that will be maintained by Sonoma Water must be designed as specified in the 2020 Sonoma Water *Flood Management Design Manual*.

### Storm Water Assessment Funding

The City of Santa Rosa has established a funding program dedicated to mitigating storm water impacts to the storm drain system, as well as downstream creeks and waterways. The Storm Water Assessment is a charge placed on each city parcel and is used to fund such projects as mapping and evaluating the storm drain system, flood control improvements, responses to flooding issues and creek restoration.[44]

[42] Cities of Cloverdale, Cotati, Healdsburg, Rohnert Park, Santa Rosa, Sebastopol, and Ukiah, County of Sonoma, Sonoma Water, and Town of Windsor, revised December 2020, *Storm Water Low Impact Development Technical Design Manual*, https://www.srcity.org/DocumentCenter/View/14974/2017-Storm-Water-Technical-Design-Manual-Narrative-revised-1621, accessed April 5, 2023.

[43] City of Santa Rosa, April 26, 2005, *Public Storm Drain Standards,* https://www.srcity.org/DocumentCenter/View/17627/Storm-Drain-Standards, accessed September 7, 2023.

[44] City of Santa Rosa, 2023, *Storm Water Assessment*, https://www.srcity.org/2909/Storm-Water-Assessment, accessed September 5, 2023.

## Existing Conditions

### *Stormwater Collection System*

The City's storm drain system consists of 320 miles of storm drain lines and 75 miles of open channels and ditches. These facilities are part of an integrated system of roadside gutters, drainage ditches, pipelines, and creeks that are used to collect and convey the stormwater runoff to creeks within the City and ultimately into Laguna de Santa Rosa. The existing stormwater system is shown on Figure 4.17-3, *City of Santa Rosa Stormwater System.* The City's storm drain system also makes use of stormwater detention facilities used to attenuate peak flows and allow for the settlement of sediment from the stormwater flows before continuing downstream. The Public Works Department works year-round cleaning silt, trash, and other pollutants out of the City's catch basins and storm drains, using a large vacuum truck. Sonoma Water's Stream Maintenance crews are responsible for removing sediment and vegetation in the creeks that flow through the City of Santa Rosa. The City is in the process of developing a Storm Drain Master Plan to evaluate the capacity of the existing storm drain facilities, identify areas of deficiencies, and recommend upgrades to the system.

The City is continually upgrading its stormwater infrastructure through the CIP, which is a five-year financial plan for maintenance and expansion of public infrastructure. The prioritized capital improvement projects involving stormwater infrastructure focus on pumping improvements at wet weather storage basins, new bio-retention facilities, creek restoration, and various citywide improvements to storm drainage pipes, catch basins, ditches and bank stabilization.[45]

Some of the CIP programs that have currently been approved and are in the planning or construction phase include the following stormwater infrastructure projects:

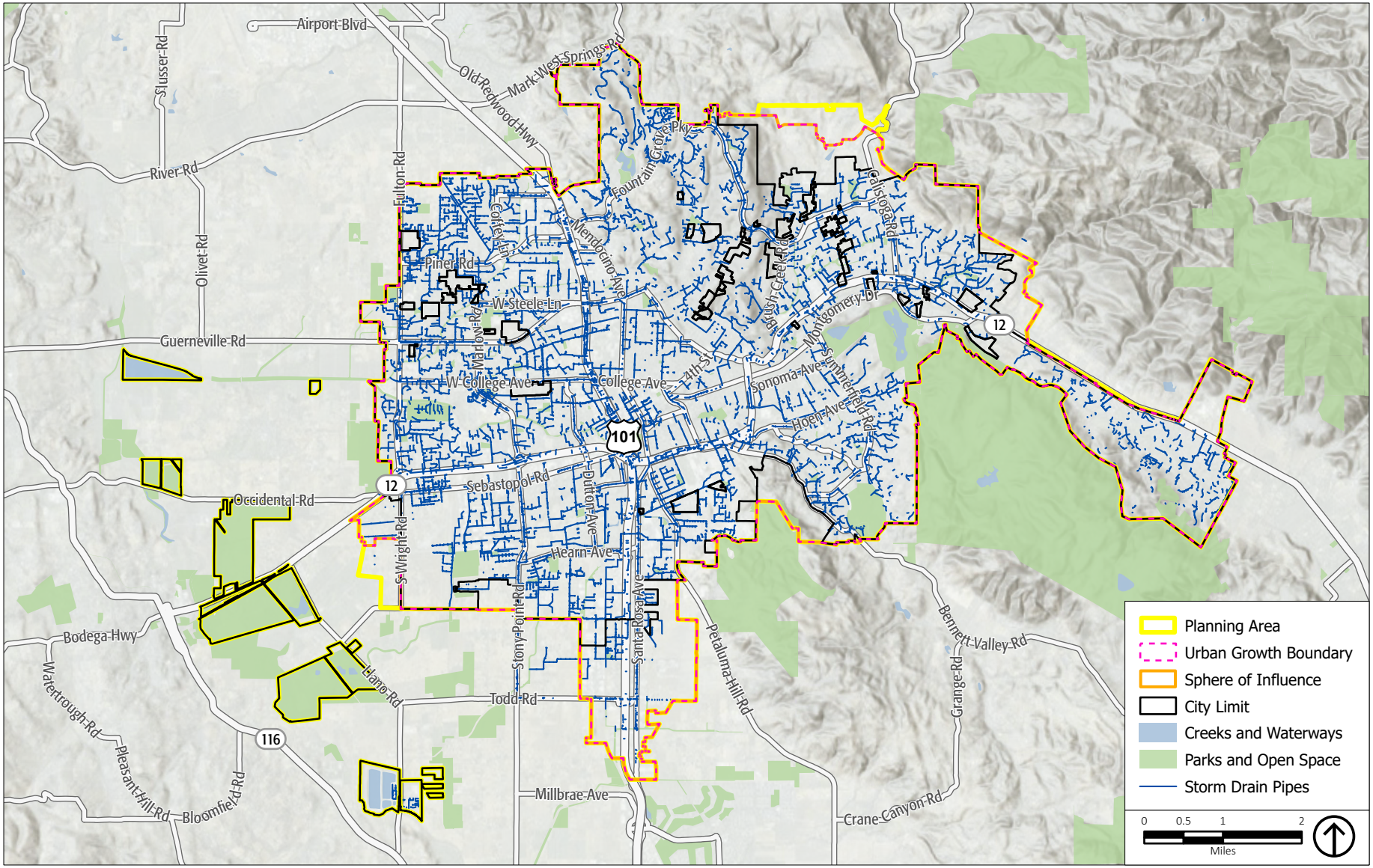
- Lower Colgan Creek Restoration: Restore channel into a natural creek and improve retention.
- Parker Hill Rd and Paulin Creek Erosion Repair: Improvements to drainage area to prevent erosion.
- 3rd Street Storm Drain Pump Coupling Replacement.
- Storm Water Creek Restoration Projects: Improvement to habitat and water quality in creeks and waterways.
- Preparation of the Storm Drain Master Plan.

### *Stormwater Discharge*

Runoff generated in Santa Rosa drains through nine subwatershed areas that ultimately discharge into Laguna de Santa Rosa. Numerous major creeks and various tributaries convey the stormwater between the city's runoff-generating sources and the Laguna de Santa Rosa.

Santa Rosa Creek is a part of the city's largest drainage basin and flows westward through the City, collecting runoff from the east-central portion of the city as well as the downtown area. The northeastern section of the City is drained by Brush Creek and its tributaries, which connect to Santa Rosa Creek.

[45] City of Santa Rosa, 2023, Capital Improvement Program, https://www.srcity.org/690/Capital-Improvement-Program, accessed August 29, 2023.




Source: ESRI, 2022; City of Santa Rosa, 2023; PlaceWorks, 2024.

Figure 4.17-3
City of Santa Rosa Stormwater System

Portions of the Oakmont Creek subwatershed drain into Oakmont Creek, which connects to Santa Rosa Creek, while other creeks in the area drain east toward Sonoma Creek and eventually into San Pablo Bay. Matanzas Creek and Spring Creek are within the Matanzas Creek watershed and collect runoff from the southcentral portion of the city, eventually connecting to Santa Rosa Creek. Piner Creek and Paulin Creek collect runoff from the northern portion of the city and are also tributaries to Santa Rosa Creek. The Southern Santa Rosa Creeks subwatershed, which includes Roseland Creek, Kawana Springs Creek, and Colgan Creek, conveys runoff directly to Laguna de Santa Rosa. The Western Creeks watershed includes Gravenstein and Naval Creeks and also discharges directly into Laguna de Santa Rosa. Todd Creek also provides drainage for the far southern portion of the City and connects to Laguna de Santa Rosa via the Bellevue-Wilfred Channel.

## 4.17.3.2 STANDARDS OF SIGNIFICANCE

Implementation of the proposed project would result in a significant stormwater impact if it would:

7. Require or result in the relocation or construction of new or expanded stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects.
8. In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact with respect to stormwater facilities.

## 4.17.3.3 IMPACT DISCUSSION

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| **USS-7** | **Implementation of the proposed project would not require or result in the relocation or construction of new or expanded stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects.** |

Potential future new development and/or redevelopment in the EIR Study Area would result in an increase in impervious surfaces, which in turn could result in an increase in stormwater runoff, higher peak discharges to drainage channels, and the potential to cause nuisance flooding in areas without adequate drainage facilities. However, much of the city is already built out and future development and redevelopment sites may replace existing land uses that already contain impervious surfaces and pavement. Therefore, new development on these sites should not create a significant increase in impervious surfaces.

Also, regulated projects that create or replace 10,000 square feet or more of impervious surfaces would trigger the implementation of stormwater treatment and trash collection measures to reduce stormwater runoff, pursuant to the MS4 Permit and the City's Stormwater LID Technical Design Manual. Implementation of these stormwater measures will reduce the amount of stormwater runoff that is ultimately discharged to the City's storm drain system and the creeks that run through Santa Rosa. Prior to the issuance of grading permits, the City will require completion and submittal of a Storm Water LID Determination Worksheet and an Initial and Final Storm Water Low Impact Development Submittal (SWLIDS) report for review and approval to ensure that these requirements are met.

The MS4 permit and City also require that all projects that generate runoff from the 1.0-inch, 24-hour storm event must treat stormwater onsite for the pollutants of concern and install trash capture devices. For all projects that create and/or replace 10,000 square feet of impervious surface or more but less than one acre of impervious surface, any increase in stormwater volume from the 1.0-inch, 24-hour storm event must be captured onsite and trash capture requirements must be implemented. Projects that create and/or replace one acre or more of impervious surfaces must also adhere to the hydromodification requirements of the MS4 permit and demonstrate that 100 percent of the post-project runoff generated by a 1.0-inch, 24-hour storm event is infiltrated and/or retained on-site. This would minimize the amount of stormwater runoff from new development and redevelopment sites within the EIR Study Area.

Also, as part of the permitting process, future development would be required to pay a storm water assessment, pursuant to SRCC Title 16, which is designed to mitigate the impacts of stormwater that is discharged into the creeks and waterways in Santa Rosa. The assessments are used to evaluate and maintain the storm drain system, implement flood control improvements, respond to flooding issues, and restore creeks and habitat.

Additionally, all potential future development in the EIR Study Area would be required to comply with the requirements of the SRCC Section 17-12.010, which requires drainage permits for discharge into the storm drain system and prohibits discharges in violation of the NPDES permit (Section 17-12.150). All development that discharges storm water associated with industrial activity shall also comply with the requirements of the General Industrial Permit (Order No. 2014-0057-DWQ) and amended in 2018 by Order No. 2015-0122-DWQ.

Lastly, the City's CIP describes planned improvements to the existing storm drains and new stormwater infrastructure (i.e., bio-retention facilities) needed for future development. The construction of new stormwater facilities through the CIP, implementation of best management practices and on-site stormwater control measures, and preparation of the required documents and review by the City would serve to minimize any potential impacts associated with stormwater.

Chapter 3, *Circulation, Conservation, and Greenhouse Gas Reduction Element*, and Chapter 5, *Safety, Climate Resilience, Noise, and Public Services and Facilities Element*, of the proposed General Plan 2050 contain goals, policies, and actions that require local planning and development decisions to consider impacts related to storm drain infrastructure. In addition to the goals, policies, and actions listed under impact discussion USS-1, the following goals, policies, and actions would serve to minimize potential adverse impacts related to stormwater discharge:

- Goal 3-5: Protect, expand, maintain, and restore natural resources, open space, and the limited remaining agricultural land.
  - Policy 3-5.5: Maintain, restore, and protect the city's waterways.
    - Action 3-5.14: Implement the Citywide Creek Master Plan and promote a "one water" approach that teaches preservation and stewardship of local creeks and water resources.
    - Action 3-5.15: Periodically review the status of local creeks and plan for ongoing restoration, planning, and stewardship, as identified in the Citywide Creek Master Plan.

- Action 3-5.16: Seek funding to maintain and restore citywide creeks, including for recreational opportunities linked to creeks as well as for flood control.
- Action 3-5.17: Implement stormwater pollution prevention outreach to increase community awareness of pollution impacts to creeks and preserve waterways.

- Policy 3-5.6: Restore channelized waterways and avoid creating additional channelized waterways unless no other alternative is available to protect human health, safety, and welfare.
  - Action 3-5.18: Restore and enhance the ecological function of channelized waterways, consistent with the Citywide Creek Master Plan, and avoid channelizing additional segments of the waterways system.

- Goal 5-2: Effectively manage the potential effects of flooding and dam failure.
  - Policy 5-2.6: Manage, maintain, and improve stormwater drainage and capacity.
    - Action 5-2.12: Require dedication, improvement, and ongoing maintenance of stormwater management and retention areas as a condition of development approval.
    - Action 5-2.13: Identify and collect development impact fees needed to pay for mitigation of stormwater management impacts for new development.
    - Action 5-2.14: Require improvements that maintain and improve the storm drainage system citywide and prioritize areas needing significant investment, consistent with the Santa Rosa Citywide Creek Master Plan goals of preserving natural conditions of waterways and minimizing channelization of creeks.
    - Action 5-2.15: Ensure creek-side paths and trails are consistent with the Citywide Creek Master Plan and Active Transportation Plan and are incorporated into stormwater improvement projects along creek corridors.
  - Policy 5-2.7: Provide storm drainage facilities that accommodate increased development and enhanced water quality.
    - Action 5-2.16: Cooperate with Sonoma Water and the Northern California Regional Water Quality Control Board on assessments of stormwater drainage facilities to ensure adequate capacity to accommodate increases in residential and commercial development.
    - Action 5-2.17: Require implementation of best management practices for all new development to reduce discharges of nonpoint-source pollutants to the storm drain system.

Compliance with the MS4 permit and the City's stormwater design standards and requirements would ensure that potential future development would not result in significant increases in runoff and would not contribute to the construction of new storm drain facilities or expansion of existing facilities that would cause significant environmental impacts. In addition, implementation of the proposed General Plan 2050 goals, policies, and actions would further reduce stormwater demand on the system, and the City would continue to repair, rehabilitate, and upgrade the storm drain system through implementation of the CIP. Therefore, impacts with respect to stormwater infrastructure would be *less than significant.*

Significance without Mitigation: Less than significant.

### USS-8 Implementation of the proposed project would not, in combination with past, present, and reasonably foreseeable projects, result in a cumulative impact with respect to stormwater facilities.

The analysis of cumulative storm drainage impacts considers potential future development within the nine subwatersheds that encompass the EIR Study Area. Cumulative projects could result in an incremental increase in impervious surfaces that could increase stormwater runoff and impact existing storm drain facilities. However, all cumulative projects would be required to comply with the Sonoma County Municipal Code and SRCC as well as the MS4 permit, the City's Stormwater LID Technical Design Manual, and Sonoma Water's Water Smart Development Guidebook, which would minimize stormwater runoff.

As discussed previously, future development within the EIR Study Area would require conformance with State and City policies that would reduce hydrology and infrastructure construction impacts to less than significant levels. Any new development within the EIR Study Area would be subject to the proposed General Plan 2050 goals, policies, and actions listed under impact discussion USS-7, SRCC, LID Design Manual, and other applicable City requirements that reduce impacts related to hydrology and stormwater drainage facilities. Therefore, potential changes related to stormwater flows, drainage, impervious surfaces, and flooding would be minimized by the implementation of stormwater control measures, retention, infiltration, and low-impact-development measures and review by Santa Rosa Water to integrate measures to reduce potential stormwater drainage and flooding impacts.

All cumulative projects in unincorporated Sonoma County within the watershed areas would be subject to similar permit requirements and compliance with the MS4 permit. All new development would be required to prepare drainage reports in accordance with the County's Flood Management Design Manual for review and approval by Permit Sonoma. Sonoma County has also prepared the Water Smart Development Guidebook that serves as a supplementary resource to the City's Stormwater LID Technical Design Manual to assist developers in incorporating LID storm water features on their project sites.[46]

In combination with past, present, and reasonably foreseeable projects, development and redevelopment within the EIR Study Area would not result in a cumulatively considerable impact to stormwater infrastructure within the watersheds, and cumulative impacts would be *less than significant.*

Significance without Mitigation: Less than significant.

[46] Sonoma County Water Agency, December 2013, *Water Smart Development Guidebook*, accessed September 7, 2023, https://evogov.s3.amazonaws.com/media/185/media/165407.pdf.

# 4.17.4 SOLID WASTE

## 4.17.4.1 ENVIRONMENTAL SETTING

### Regulatory Framework

*Federal Regulations*

#### Resource Conservation and Recovery Act of 1976

The Resource Conservation and Recovery Act of 1976 (Title 40 of the Code of Federal Regulations), Part 258, contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design (liners, leachate collection, run-off control, etc.), groundwater monitoring, and closure of landfills.

*State Regulations*

#### Sanitary District Act of 1923

The Sanitary District Act of 1923 (Health and Safety Code Section 6400 *et seq.*) authorizes the formation of sanitation districts and enforces the sanitation districts to construct, operate, and maintain facilities for the collection, treatment, and disposal of wastewater. This Act was amended in 1949 to allow the sanitation districts to also provide solid waste management and disposal services, including refuse transfer and resource recovery.

#### Integrated Waste Management Act

The Integrated Solid Waste Management Act of 1989 (AB 939), codified in Public Resources Code 40050 et seq., established an integrated waste-management system that focused on source reduction, recycling, composting, and land disposal of waste. AB 939 required every California city and county to divert 50 percent of its waste from landfills by the year 2000. This act also requires that each city and county prepare a Source Reduction and Recycling Element to be submitted to the Department of Resource Recycling and Recovery (CalRecycle), a department within the California Natural Resources Agency. AB 939 also establishes a goal for all California counties to provide at least 15 years of ongoing landfill capacity.

In 2007, SB 1016 amended AB 939 to establish a per capita disposal measurement system. The per capita disposal measurement system is calculated as a jurisdiction's reported total disposal of solid waste divided by a jurisdiction's population. CalRecycle sets a target per capita disposal rate for each jurisdiction. Each jurisdiction must submit an annual report to CalRecycle with an update of its progress in implementing diversion programs and its current per capita disposal rate.

### Mandatory Commercial Recycling Act (AB 341)

AB 341 (Chapter 476, Statutes of 2011) increased the statewide solid waste diversion goal to 75 percent by 2020 and mandates commercial businesses and public entities that generate four cubic years or more of waste per week to have a recycling program in place. In addition, multifamily residential properties with five or more units are also required to develop a recycling program. AB 341 is designed to reduce greenhouse gas (GHG) emissions in the state by 5 million metric tons of carbon dioxide equivalents. In Santa Rosa, businesses and property owners can subscribe to composting and recycling services provided by Recology Sonoma Marin (Recology).

### Mandatory Organics Recycling Act (AB 1826)

AB 1826, which was enacted in 2014 and took effect in 2016, mandated organic waste recycling for all businesses and multifamily dwellings that consist of five or more units. Starting in January 2020, all generators of two cubic yards or more of garbage, recycling, and compost combined per week must recycle organic waste. Organic waste includes food scraps, food-soiled paper and cardboard waste, green waste and yard trimmings, landscaping materials, and nonhazardous, untreated wood waste.

### California Short-Lived Climate Pollutants Act (SB 1383)

SB 1383 focuses on the elimination of methane gas created by organic materials in landfills and establishes goals to reduce the landfill disposal of organics by achieving a 50 percent reduction in the statewide disposal of organic waste by 2020 and a 75 percent reduction by 2025. Organic waste makes up half of what Californians send to landfills. SB 1383 requires all businesses and residents to divert organic materials from landfills. The regulation took effect on January 1, 2022, and requires that organic collection services be provided to all residents and businesses. The collected organic waste must be recycled into new products, such as compost, mulch, biofuel, and electricity. Each city and county has an annual procurement target based on its population. Also, an edible food recovery program must be established by 2025 with the goal of recovering 20 percent of currently disposed edible food that would otherwise be sent to landfills to feed people in need. Mandated food donors and food recovery organizations and services must keep records of the amount and dates of food donations and acceptances.

### California Solid Waste Reuse and Recycling Access Act

The California Solid Waste Reuse and Recycling Access Act requires new commercial and multi-family development projects to set aside areas for collecting and loading recyclable materials. This act required CalRecycle to develop a model ordinance for adoption by any local agency that provides adequate areas for the collection and loading of recyclable materials for development projects. Local agencies are required to adopt the model, or an ordinance of their own, that establishes standards including space allocation for the collection and loading of recyclable materials.

### CALGreen

The 2022 CALGreen became effective on January 1, 2023. Sections 4.408 and 5.408, C*onstruction Waste Reduction Disposal and Recycling*, mandate that, in the absence of a more stringent local ordinance, a minimum of 65 percent of non-hazardous construction and demolition debris must be recycled or

salvaged. CALGreen requires developers to prepare and submit a Construction Waste Management Plan, which must:

- Identify the materials to be diverted from disposal by recycling, reuse on the project, or salvage for future use or sale.
- Specify if materials would be sorted on-site or mixed for transportation to a diversion facility.
- Identify the diversion facility where the material collected can be taken.
- Identify construction methods employed to reduce the amount of waste generated.
- Specify that the amount of materials diverted shall be calculated by weight or by volume but not both.

### *Regional Regulations*

#### Sonoma County Countywide Integrated Waste Management Plan

Prepared in 2003, the Sonoma County Countywide Integrated Waste Management Plan (CoIWMP) complies with the California Integrated Waste Management Act of 1989 and includes the Source Reduction and Recycling Element, Household Hazardous Waste Element, Siting Element, and Non-Disposal Facility Element.[47] The purpose of the CoIWMP is to demonstrate methods and goals for the reduction of solid waste that is disposed of at landfills while demonstrating the long-term ability for Sonoma County to implement waste diversion programs and adequate disposal facilities for local jurisdictions.

#### Sonoma County Environmental Health Section, Solid Waste Management Program

The Sonoma County Environmental Health Section, Solid Waste Management Program enforces state laws and regulations at solid waste sites within the County. Certified by CalRecycle, the agency is the Local Enforcement Agency for the landfills, transfer stations, and composting facilities within Sonoma County and conducts inspections and monitoring of these facilities as well as the franchised waste haulers. The agency also addresses illegal accumulation and investigates storage complaints.[48]

#### Zero Waste Sonoma

Zero Waste Sonoma (previously known as Sonoma County Waste Management Agency) is a joint powers authority for nine cities and towns within Sonoma County, including Santa Rosa, and the unincorporated areas of the county.[49] Zero Waste Sonoma provides recycling, composting and household hazardous waste programs and exists to serve and help county residents to reduce, reuse, and recycle materials safely and effectively. Jurisdictions within the county have adopted ordinances to reduce solid waste generation, with a goal of substantially reducing material going to landfills by 2030. Zero Waste Sonoma assists local

[47] Sonoma County, October 15, 2003, *Sonoma County Countywide Integrated Waste Management Plan*, https://zerowastesonoma.gov/uploads/reports/CoIWMP_Combined.pdf, accessed September 1, 2023.

[48] County of Sonoma, 2022, Solid Waste, https://sonomacounty.ca.gov/public-notice-solid-waste-management-program-local-enforcement-agency-(lea) , accessed September 6, 2023.

[49] Zero Waste Sonoma, 2023, About Us, https://zerowastesonoma.gov/about, accessed September 6, 2023.

jurisdictions in meeting statewide waste diversion goals and performs state reporting functions for the jurisdictions within the county.

### *Local Regulations*

#### Santa Rosa City Code

The SRCC includes various directives to ensure the proper handling of and adequate facilities for solid waste. The SRCC is organized by title, chapter, and section, and in some cases, articles. The SRCC is organized by title, chapter, and section, and in some cases, articles. Most provisions related to solid waste services are in Title 9, *Health and Safety*; Title 18, *Building and Construction;* and Title 20, *Zoning,* as follows:

- Chapter 9-10, *Waste Reduction Program for Carryout Bags*. This chapter states that no retail establishment shall provide single-use carryout bags and may make available for sale to a customer a recycled paper bag at a minimum charge
- Chapter 9-12, *Refuse and Sanitation*. This chapter establishes provision of waste, recycling, and yard trimmings collection services governed by the collection services contract. This chapter also outlines the rates for collection services and the rules associated with them.
- Chapter 9-14, *Construction and Demolition Debris*. This chapter requires that any person or entity that provides construction and demolition debris collection service within the city shall be required to enter into a nonexclusive Franchise Agreement with the City and pay a franchise fee to provide such service.
- Chapter 9-30, *Zero Waste Food Ware*. This chapter states that food facilities and retail establishments in Santa Rosa must not sell, procure, distribute, or otherwise give way food ware or food accessories that contain either Per- and Polyfluoroalkyl or Polystyrene, and requires all Dine-In food facilities to only use reusable food ware and reusable food ware accessories. This chapter also describes other restrictions regarding food ware or food accessories and how three-bin waste stream containers are required.
- Chapter 18-42, *California Green Building Standards Code*. This chapter adopts the State Green Building Standards Code by reference. With adoption of the California Green Building Standards Code, 2022 edition, the City requires that all construction projects submit a Construction Waste Management Plan that documents the diversion of construction waste and debris in compliance with the CALGreen requirements.
- Section 20-30.120, *Solid Waste and Recycling Storage Facilities*. The purpose of this section is to provide recycling and waste collection areas within all developments city-wide. Design review approval is required for all waste collection and recycling facilities.

### Santa Rosa Zero Waste Master Plan

Adopted in January 2020, the City of Santa Rosa's Zero Waste Master Plan guides the community in diverting its waste from landfill disposal and reducing waste at the source.[50] The City's zero waste goal is to reduce landfill disposal to less than one pound per person per day and achieve at least 75 percent diversion of waste from landfill disposal by 2030. The strategy of the Zero Waste Plan is to reduce waste generation at the source, increase the rates of recovery for divertible materials, increase community participation in recycling programs, increase the diversion of construction and demolition materials, and establish the City as a community leader in Zero Waste culture through outreach and education. The City also adopted the Zero Waste Sonoma resolution in 2020 that sets a goal of zero waste by 2030 and reducing the total pounds per person per day by at least 10 percent every year.

## Existing Conditions

### *Solid Waste Collection and Recycling*

Recology is the franchise waste hauler for the City of Santa Rosa and provides residential and commercial solid waste collection, composting, and recycling services. Recology provides the following services to residents and businesses in the City:

- Weekly curbside collection of waste in three containers: landfill waste in a gray container, recyclables in a blue container, and organics (including yard and food waste) in a green container.
- Kitchen countertop compost pails to collect food scraps for placement in the compost cart.
- Curbside pickup of household batteries and motor oil and filters.
- Two free pickups per year of bulky items, such as old furniture, appliances, or mattresses.
- Outreach, education, and technical support to help customers divert more materials from landfill disposal and audits for businesses to identify opportunities to increase diversion
- 15 percent discount on Recology bill offered through the Recology Cares program for eligible households.
- Debris boxes for construction and demolition (C&D) waste and transport and recycling of C&D materials, are provided as a separate, non-exclusive service.

All garbage collected in the gray bins from residents and businesses is transported to the Central Landfill in Petaluma, which is operated by Republic Services. The single-stream recycled material collected in the blue bins is transported to Recology's Materials Recovery Facility in Santa Rosa, where it is sorted and baled for shipment. The organic waste collected in the green bins is transported to various composting facilities outside the County, including Cold Creek Compost, West Contra Costa Sanitary Landfill Organics Processing Facility, and Waste Management's Earth Care Compost Facility in Novato. Each jurisdiction within Sonoma County receives an allotment of compost as part of the organics processing contracts, and Zero Waste Sonoma also manages a compost rebate program. Santa Rosa received about 1,683 yards of compost in 2022, which is given to residents, schools, nonprofits, gardens, parks, and ranchland. Santa

[50] City of Santa Rosa, November 1, 2019*, Zero Waste Master Plan*, https://www.srcity.org/DocumentCenter/View/26668/Final-Santa-Rosa-Zero-Waste-Plan, accessed September 1, 2023.

Rosa recovered approximately 1.4 million pounds of edible food in 2022, which is donated to food recovery organizations and services in Santa Rosa. The majority of the food was delivered to Redwood Empire Food Bank, which serves pantries throughout Sonoma County.[51]

### *Landfills*

The City of Santa Rosa is a member of the Sonoma County Waste Management Agency (now known as Zero Waste Sonoma), which is a county-wide Joint Powers Authority organized to provide regional compliance with State solid waste regulations and to act on behalf of its members in reporting disposal and diversion rates to CalRecycle. Therefore, there are no individual landfill disposal rates provided for cities within Sonoma County; they are incorporated in the County statistics.

In 2019, the solid waste that was generated by Sonoma County Waste Management Agency was transported to 26 facilities and landfills for a total disposal rate of 472,841 tons. However, 73 percent of the solid waste from Sonoma County and the majority of the waste from Santa Rosa was delivered to the Central Landfill in Petaluma.[52]

The Central Landfill (officially known as the Central Disposal Site) is operated by Republic Services of Sonoma County Inc. and is located at 500 Meacham Road in Petaluma. The landfill has a maximum permitted throughput of 2,500 tons per day, a remaining capacity of 9.2 million cubic yards, and is estimated to close in 2043. Therefore, the landfill has a remaining capacity of more than 15 years as required by AB 939.[53] The Central Landfill information is summarized in Table 4.17-11, *Central Landfill Data.*

TABLE 4.17-11 CENTRAL LANDFILL DATA

| Landfill Name and Location | Maximum Permitted Throughput, tons/day | Average Disposal, tons/day | Residual Disposal Capacity, tons/day | Remaining Capacity, cubic yards | Estimated Closing Year |
|---|---|---|---|---|---|
| Central Landfill (Central Disposal Site), Petaluma, CA | 2,500 | 960 | 1,540 | 9,181,519 | 2043 |

Source: CalRecycle, 2023, SWIS Facility Details and Landfill Tonnage Reports.

### *Solid Waste Diversion and Recycling*

Compliance with AB 939 is measured by comparing the CalRecycle target disposal rates for residents and employees to actual disposal rates. The CalRecycle target disposal rates for Sonoma County Waste Management Agency, of which the City of Santa Rosa is a member, for 2021 are 7.1 pounds per day (ppd) for residents and 18.3 ppd for employees. The actual disposal rates in 2021 were 4.6 ppd for residents and

[51] Sonoma County Waste Management Agency, 2022, Electronic Annual Report to CalRecycle.

[52] CalRecycle, 2023, *Landfill Tonnage Reports*, https://www2.calrecycle.ca.gov/LandfillTipFees/, accessed September 1, 2023.

[53] CalRecycle, 2023, *SWIS Facility/Site Detail,* https://www2.calrecycle.ca.gov/SolidWaste/Site/Details/3621 *s*, accessed September 2, 2024.

11.5 ppd for employees.[54] Therefore, the solid waste diversion goals for Sonoma County and the City of Santa Rosa have been met.

## 4.17.4.2 STANDARDS OF SIGNIFICANCE

Implementation of the proposed project would result in significant impacts related to solid waste if it would:

9. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
10. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste.
11. In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact with respect to solid waste facilities.

## 4.17.4.3 IMPACT DISCUSSION

**USS-9 Implementation of the proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.**

With implementation of the proposed project, the population is anticipated to increase by 65,760 residents and 14,090 jobs. As shown in Table 4.17-12, *Increase in Solid Waste Generation at 2050 Buildout,* this level of growth would result in an increase in solid waste of approximately 232 tons per day, or 84,777 tons per year. These numbers are conservative because, with continued recycling and waste reduction programs implemented by the City and Zero Waste Sonoma, the waste generation rates would be reduced over time. The City's goal is to reduce landfill disposal to less than one pound per person per day and achieve at least a 75 percent diversion rate from landfill disposal by 2030.[55]

TABLE 4.17-12 INCREASE IN SOLID WASTE GENERATION RATES AT 2050 BUILDOUT

| Category | Increase in Residents or Jobs | Solid Waste Generation Rate (pounds/day) | Increase in Solid Waste (tons/day) | Increase in Solid Waste (tons/year) |
|---|---|---|---|---|
| Residents | 65,760 | 4.6 | 151 | 55,206 |
| Jobs | 14,090 | 11.5 | 81 | 29,571 |
| | | **Total** | **232** | **84,777** |

Sources: CalRecycle, 2023; PlaceWorks, 2023.

[54] CalRecycle, 2023, *Countywide, Regionwide, and Statewide Jurisdiction Diversion/Disposal Progress Report,* accessed July 27, 2023.

[55] City of Santa Rosa, November 1, 2019*, Zero Waste Master Plan*, https://www.srcity.org/DocumentCenter/View/26668/Final-Santa-Rosa-Zero-Waste-Plan, accessed September 1, 2023.

As shown in Table 4.17-12, an increase of 232 tons per day with buildout of the project would be about 15 percent of the current residual capacity of 1,540 tons per day at Central Landfill. In addition, some of the solid waste from the City of Santa Rosa is transported to other landfills in the Bay Area, and Zero Waste Sonoma and the City are working together to divert more waste from landfill disposal through recycling, composting, and edible food redistribution. This estimate conservatively assumes that all of the generated waste is landfilled. The results in Table 4.17-12 show that the proposed project would not generate solid waste in excess of the capacity of the landfills that serve the City and Sonoma County.

Furthermore, all new potential future development in the EIR Study Area would require compliance with CALGreen Sections 4.408 and 5.408, which require that at least 65 percent of nonhazardous construction and demolition waste from residential and nonresidential construction operations be recycled and/or salvaged for reuse. New development and redevelopment would also need to comply with the requirements of AB 341 and SB 1383 that mandates recycling and organics collection for commercial and multifamily residential land uses. In addition, Recology provides recycling and green waste collection for all residents in Santa Rosa. Therefore, solid waste facilities would be able to accommodate project-generated solid waste, and impacts would be less than significant.

Chapter 5, *Safety, Climate Resilience, Noise, and Public Services and Facilities,* of the proposed General Plan 2050 contains goals, policies, and actions that require local planning and development decisions to minimize impacts related to solid waste generation. In addition to the goals, policies, and actions listed under impact discussion USS-1, the following proposed goal, policies, and actions would serve to minimize potential adverse impacts on solid waste generation:

- Goal 5-9: Provide adequate and high-quality city services for water, wastewater, recycled water, stormwater, and solid waste.
  - Policy 5-9.5: Meet the city's solid waste disposal needs while maximizing opportunities for waste reduction and recycling.
    - Action 5-9.33: Continue to implement and update the City's Zero Waste Master Plan and Program.
    - Action 5-9.34: Continue public education programs about waste reduction, including recycling, composting, yard waste, wood waste, and household hazardous waste.
    - Action 5-9.35: Continue to enforce the City's Zero-Waste Food Ware Ordinance and share information and resources with food facilities to help facilitate compliance.
    - Action 5-9.36: Continue to implement and update the City's Environmentally Preferable Purchasing policies and identify opportunities to reduce use of single-use plastics in municipal operations and at City events.
    - Action 5-9.37: Promote non-plastic packaging alternatives to local businesses.
    - Action 5-9.38: Provide and maintain public drinking fountains and bottle fillers in high traffic and outdoor recreation areas to reduce demand for bottled water.
  - Policy 5-9.6: Identify and work with partners to address impacts from groundwater threats and solid waste.

- Action 5-9.40: Monitor the Solid Waste Information System (SWIS) and Closed, Illegal, and Abandoned (CIA) Disposal Sites Program to identify solid waste sites and facilities that are illegal, abandoned, or have not met the standards for closure, and work with State agencies to investigate and enforce standards for sites, prioritizing sites in and near Equity Priority Areas.

- Policy 5-9.7: Facilitate residential, commercial, and industrial compliance with the Sonoma County Countywide Integrated Waste Management Plan.
  - Action 5-9.42: Provide educational materials regarding waste management, control, and recycling, including the Sonoma County Household Hazardous Waste Management Plan.

With continued compliance of the applicable regulations, leading to increased recycling and waste diversion, and adherence to the General Plan 2050 goals, policies, and actions listed above, anticipated rates of solid waste disposal from the project would be less than significant with respect to permitted landfill capacity. In addition, Sonoma County is well below the CalRecycle target disposal rates and meets the regulatory requirements of AB 939. Therefore, implementation of the proposed project would not generate solid waste in excess of State and local standards, or in excess of the capacity of the landfills, or otherwise impair the attainment of solid waste reduction goals and the impact is *less than significant*.

Significance without Mitigation: Less than significant.

| USS-10 | **Implementation of the proposed project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste.** |
|---|---|

As discussed under impact discussion USS-8, Recology, which serves the EIR Study Area, complies with all State requirements to reduce the volume of solid waste through recycling and organic waste diversion. The Zero Waste Sonoma per capita disposal rates of 4.6 ppd per resident and 11.5 ppd per employee are well below the CalRecycle targets of 7.1 ppd for residents and 18.3 ppd for employees. In addition, all potential future development over the buildout horizon of the proposed project would comply with CALGreen Sections 4.408 and 5.408, which require that at least 65 percent of nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

Potential future development would also comply with AB 341, which mandates recycling for commercial and multifamily residential land uses as well as schools and school districts. All jurisdictions in California are required to provide organic waste collection services to all residents and businesses, beginning in 2022 and in accordance with SB 1383. Recology and the City currently comply with all applicable federal, State, and local solid waste regulations, and solid waste, recycling, and green waste collection services are available for all residents and commercial businesses. Therefore, the proposed project would comply with all current and future regulatory requirements and solid waste impacts would be *less than significant*.

Significance without Mitigation: Less than significant.

| | |
|---|---|
| **USS-11** | **Implementation of the proposed project would not, in combination with past, present, and reasonably foreseeable projects, result in a cumulative impact with respect to solid waste facilities.** |

The area considered for cumulative impacts to solid waste disposal facilities is Sonoma County, which is serviced by Recology. As reported by the California Department of Finance, the total population of Sonoma County is expected to decrease from 488,022 in 2020 to 434,406 by 2050.[56] While the proposed project solid waste generation would be 232 tons per day for the City of Santa Rosa, a projected decrease in countywide population would result in an overall reduction in solid waste generation for Sonoma County. As discussed under impact discussion USS-8, conservatively assuming that all of this waste is landfilled, although the current diversion rate by Recology is about 34 percent, the additional waste generated by Santa Rosa with the proposed project at the horizon year of 2050 would only about 15 percent of the daily residual capacity of Central Landfill of 1,540 tons per day.

In addition, new development within the county would comply with CALGreen Sections 4.408 and 5.408, which require that at least 65 percent of nonhazardous construction and demolition waste from residential and nonresidential construction operations be recycled and/or salvaged for reuse. This would also reduce the volume of solid waste transported to the landfills. Continued compliance with the applicable regulations and an increase in recycling and landfill diversion rates would ensure that solid waste cumulative impacts would be *less than significant.*

Significance without Mitigation: Less than significant.

# 4.17.5 ENERGY INFRASTRUCTURE

## 4.17.5.1 ENVIRONMENTAL SETTING

## Regulatory Framework

The regulatory framework for energy is described in detail in Chapter 4.6, *Energy*, of this Draft EIR. The regulatory requirements that pertain solely to energy infrastructure are repeated below.

### *Federal Regulations*

#### National Energy Policy

Established in 2001 by the National Energy Policy Development Group, the National Energy Policy is designed to help the private sector, and state and local governments promote dependable, affordable, and environmentally sound production and distribution of energy for the future. Key issues addressed by the energy policy are energy conservation, repair and expansion of energy infrastructure, and ways of increasing energy supplies while protecting the environment.

[56] California Department of Finance, 2023, *Population Projections,* https://dof.ca.gov/forecasting/demographics/projections/, accessed September 6, 2023.

### Energy Policy Act of 2005

Passed by Congress in July 2005, the Energy Policy Act includes a comprehensive set of provisions to address energy issues. This Act includes tax incentives for energy conservation improvements in commercial and residential buildings, fossil fuel production and clean coal facilities, and construction and operation of nuclear power plants, among other things. Subsidies are also included for geothermal, wind energy, and other alternative energy producers.

### Energy Independence and Security Act of 2007

Signed into law in December 2007, the Energy Independence and Security Act contains provisions designed to increase energy efficiency and the availability of renewable energy. The Act contains provisions for increasing fuel economy standards for cars and light trucks, while establishing new minimum efficiency standards for lighting as well as residential and commercial appliance equipment.

### National Gas Pipeline Safety Act of 1968

The Natural Gas Pipeline Safety Act of 1968 authorizes the United States Department of Transportation to regulate pipeline transportation of flammable, toxic, or corrosive natural gas and other gases as well as the transportation and storage of liquefied natural gas. The Pipeline and Hazardous Materials Safety Administration within the Department of Transportation develops and enforces regulations for the safe, reliable, and environmentally sound operation of the nation's 2.6-million-mile pipeline transportation system. The regulations enacted under this act have been updated several times. The latest revision is dated May 2023 and includes additional safety regulations for gas transmission pipelines, including repair criteria, integrity management improvements, cathodic protection, and other inspection and maintenance procedures. The regulations are encoded in 49 Code of Federal Regulations, Part 192.

## *State Regulations*

### Warren-Alquist Act

Established in 1974, the Warren-Alquist Act created the California Energy Commission (CEC) in response to the energy crisis of the early 1970s and the state's unsustainable growing demand for energy resources. The CEC's core responsibilities include advancing State energy policy, encouraging energy efficiency, certifying thermal power plants, investing in energy innovation, developing renewable energy, transforming transportation, and preparing for energy emergencies. The Warren-Alquist Act is updated annually to address current energy needs and issues, and its latest revision is dated January 2023.

### California Public Utilities Commission Long Term Energy Efficiency Strategic Plan

Adopted in September 2008 and updated in January 2011, the California Public Utilities Commission (CPUC) Long Term Energy Efficiency Strategic Plan provides a framework for energy efficiency in California through the year 2020 and beyond. It articulates a long-term vision, as well as goals for each economic sector, identifying specific near-, mid-, and long-term strategies to assist in achieving these goals. The plan sets forth the following four goals, known as "Big Bold Energy Efficiency Strategies," to achieve significant reductions in energy demand:

- All new residential construction in California will be zero net energy by 2020.
- All new commercial construction in California will be zero net energy by 2030.
- Heating, ventilation, and air conditioning will be transformed to ensure that its energy performance is optimal for California's climate.
- All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020.

The CPUC and CEC have adopted the following goals to achieve zero net energy levels by 2030 in the commercial sector:

- Goal 1: New construction will increasingly embrace zero net energy performance (including clean, distributed generation), reaching 100 percent penetration of new starts in 2030.
- Goal 2: 50 percent of existing buildings will be retrofit to zero net energy by 2030 through achievement of deep levels of energy efficiency and with the addition of clean distributed generation.
- Goal 3: Transform the commercial lighting market through technological advancement and innovative utility initiatives.

### California Building Energy Code: Title 24, Part 6, Energy Efficiency Standards

The State of California provides a minimum standard for energy conservation through Title 24, Part 6 California Code of Regulations, commonly referred to as the California Energy Code. The California Energy Code was first adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977. The standards are updated on a three-year cycle to allow for consideration and possible incorporation of new energy efficiency technologies and methods. In August 2021, the CEC adopted the 2022 California Energy Code, which went into effect on January 1, 2023. The 2022 standards require mixed-fuel single-family homes to be electric ready to accommodate replacement of gas appliances with electric appliances. In addition, the new standards also include prescriptive photovoltaic systems and battery requirements for high-rise, multifamily buildings (i.e., more than three stories) and noncommercial buildings such as hotels, offices, medical offices, restaurants, retail stores, schools, warehouses, theaters, and convention centers.[57]

### California Building Code: Title 24, Part 11, Green Building Standards

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. CALGreen (24 California Code of Regulations, Part 11) was adopted as part of the California Building Standards Code. It includes mandatory requirements for new residential and nonresidential buildings throughout California. CALGreen is intended to (1) reduce greenhouse gas (GHG) emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the governor. The latest 2022 CALGreen code became effective on January 1, 2023.

[57] California Energy Commission, 2021, Amendments to the Building Energy Efficiency Standards (2022 Energy Code) Draft Environmental Report, CEC-400-2021-077-D.

CALGreen includes provisions to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction. CALGreen contains requirements for construction site selection, stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, etc. The code provides for design options, allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency.[58]

### Appliance Efficiency Regulations

The Appliance Efficiency Regulations (Title 20, California Code of Regulations Sections 1601 through 1608), combined with federal standards, set minimum efficiency levels for energy and water consumption in products, such as consumer electronics, household appliances, and plumbing equipment. The regulations are continually updated with the latest revisions dated 2023. Eighteen categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state, and those designed and sold exclusively for use in recreational vehicles or other mobile equipment. These regulations exceed the standards imposed by all other states and they reduce GHG emissions by reducing energy demand.

### California Energy Benchmarking and Disclosure

The Building Energy Benchmarking Program is mandated under AB 802 and requires owners of large commercial and multifamily buildings to report energy use to the CEC by June 1 annually. This program applies to all buildings with more than 50,000 square feet of gross floor area and owners of multifamily residential buildings with more than 50,000 square feet and 17 or more utility accounts. The bill requires each utility, upon the request and authorization of the owner, owner's agent, or operator of a building covered under the regulation, to deliver or provide aggregated energy usage data for a covered building. The required energy usage shall be reported to the CEC through the Energy Star Portfolio Manager.

### California Renewable Portfolio Standards

A major component of California's Renewable Energy Program is the renewables portfolio standard established under SB 1078 (Sher) and SB 107 (Simitian). The standard requires that a specified percentage of the electricity that utilities provide comes from renewable resources. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. SB 1020, signed into law on September 16, 2022, requires renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent by 2040. Additionally, SB 1020 requires all State agencies to procure 100 percent of electricity from renewable energy and zero-carbon resources by 2035.

[58] California Building Standards Commission, 2022, 2022 California Code of Regulations Title 24, Part 11, https://codes.iccsafe.org/content/CAGBC2022P1, accessed June 1, 2023.

### CPUC Natural Gas Regulations

The CPUC regulates natural gas utility rates and services as well as the transportation of natural gas over the extensive transmission and distribution pipeline systems. The CPUC also regulates gas storage facilities. The Gas Safety and Reliability Branch of the CPUC ensures that natural gas pipeline systems are designed, constructed, operated, and maintained according to the safety standards set by the CPUC and the federal government. The regulations are provided in the CPUC General Order No. 112-E and the Natural Gas Pipeline Safety Act of 2011.

## *Local Regulations*

### Santa Rosa City Code

The SRCC includes various directives pertaining to energy-related infrastructure. The SRCC is organized by title, chapter, and section, and in some cases, articles. Most provisions related to energy infrastructure are in Title 3, *Revenue and Finance*; Chapter 13, *Underground Utilities;* Title 18, *Buildings and Construction*; and Chapter 19, *Subdivisions*, as follows:

- Chapter 3-32, ***Utility Users Tax***. This chapter is also known as the utility users tax ordinance. Section 3-32.060, *Electricity Users Tax*, outlines the tax that electric energy users in the city must pay. This code also defines what a charge and what using electric energy use means in this context. Section 3-32.070, *Gas Users Tax*, outlines the tax imposed on every person in the city that uses gas through main or pipes. Some exclusions from the tax are applicable and described in this code as well.
- Chapter 13-12, ***Underground Utilities***. This chapter regulates and controls the wires, poles, and other wire-carrying structures within certain areas of the city. Section 13-12.30, *Poles and wires prohibited aboveground on Montgomery Drive*, prohibits aboveground wires, poles, or any other structure designed to carry telephone, telegraph, electric conduit at any place within 100 feet of the centerline of Montgomery Drive. Article II, *Procedure for Undergrounding*, outlines public hearing procedure, designation of underground utility districts, exceptions, notices, and the responsibilities of utility companies, property owners, and the City. Article III, *Electric Underground District*, describes the area designated as electric underground district. Article IV, *Undergrounding in Other Areas*, describes the requirements for undergrounding in other areas of the City that are part of the electric underground district.
- Title 18, ***Buildings and Construction***. This title adopts by reference, with the additions, insertions, deletions and changes listed throughout, the California Energy Code in Chapter 18-33, *California Energy Code*, and the California Green Building Standards Code in Chapter 18-42, *California Green Building Standards Code*. This title also includes Chapter 18-68, *Expedited Permit Process for Small Residential Rooftop Solar Energy Systems,* which provides for an expedited, streamlined solar permitting process that complies with the Solar Rights Act and AB 2188 in order to achieve timely and cost-effective installations of small residential rooftop solar energy systems. It also includes Chapter 18-69, *Expedited Process for Electric Vehicle Charging Stations*.

- Chapter 19-04.090, *Energy Conservation*. This chapter provides for subdivisions to be designed to include passive or natural heating or cooling opportunities. Some examples of these opportunities include having the alignment of the subdivision be in the east-west direction and taking advantage of the available shade and prevailing breezes on the site.
- Chapter 20-44, *Telecommunication Facilities*. This chapter provides uniform and comprehensive standards for development of telecommunication facilities, including antenna installation, to protect environmental resources and ensure facilities comply with exposure standards from the Federal Communication Commission.

### Santa Rosa City-Wide Energy Efficiency, Renewables, and Microgrid Feasibility Study

The City prepared a feasibility study to identify opportunities to reduce greenhouse gas emissions and improve the energy resiliency in light of the increased frequency of natural disasters and catastrophic climate change events.[59] A total of 47 City facilities and 63 parks were evaluated to identify locations for solar voltaic installations, electrification of building heating, air conditioning and ventilation systems, and other building efficiency measures. Seven buildings within the city were recommended for microgrids (i.e., a mix of distributed energy resources to improve energy delivery and resiliency).

## Existing Conditions

### *Electricity*

Two energy providers, Sonoma Clean Power (SCP) and Pacific Gas & Electric (PG&E), serve the EIR Study Area. SCP is the public electricity provider for Sonoma and Mendocino counties.[60] As a not-for-profit public agency, SCP is independently run by Sonoma County and the participating cities of Coverdale, Cotati, Petaluma, Rohnert Park, Santa Rosa, Sebastopol, and Sonoma and the Town of Windsor. SCP provides electricity generated from renewable sources such as solar, wind, geothermal, and hydropower. Individuals residing or working within the SCP service area are automatically enrolled in SCP. SCP offers three program options; the CleanStart program provides 42 percent renewable power service; the EverGreen program provides 100 percent local renewable power service; or the OptOut program allows individuals to continue to receive PG&E's basic service.[61] The electric energy provided by SCP is conveyed to customers through PG&E's existing infrastructure. PG&E continues to maintain the grid, repair lines, and customer billing within the SCP service area.

PG&E is a publicly traded utility company that generates, purchases, and transmits energy and natural gas under contract with the CPUC. PG&E's service territory is 70,000 square miles, roughly extending north to south from Eureka to Bakersfield, and east to west from the Sierra Nevada to the Pacific Ocean. PG&E's electricity distribution system consists of 106,681 circuit miles of electric distribution lines and 18,466

[59] City of Santa Rosa, July 2021, *City-Wide Energy Efficiency, Renewables, and Microgrid Feasibility Study*.

[60] Sonoma Clean Power, 2023, *Who We Are,* https://sonomacleanpower.org/whoweare, accessed July 25, 2023.

[61] Sonoma Clean Power, 2023, *You have the Power,* https://sonomacleanpower.org/cleanstart-evergreen, accessed July 25, 2023.

circuit miles of interconnected transmission lines with approximately 5.5 million electric customer accounts.[62]

PG&E electricity is generated by a combination of sources such as natural gas-fired power plants, nuclear power plants, and hydro-electric dams as well as newer sources of energy such as wind turbines and photovoltaic plants, also known as solar farms. The electric grid is a network of high-voltage transmission lines that link power plants with the PG&E system. The distribution system, comprised of lower voltage secondary lines, is at the street and neighborhood level and consists of overhead or underground distribution lines, transformers, and individual service "drops" that connect to the individual customer.

The power mix PG&E provided to customers in 2021 consisted of renewable resources (50 percent), nuclear (39 percent), natural gas plants (7 percent), and large hydroelectric facilities (4 percent). The renewable resources include wind, geothermal, biomass, solar, and small hydro.[63] PG&E also has 600 megawatts of battery storage capacity already connected to the electric grid and has contracts for an additional 3,300 megawatts of capacity by 2024.

PG&E's projected average annual electricity demand growth (mid-demand forecast) between 2019 and 2035 is approximately 1.5 percent. Total mid-electricity consumption in PG&E's service area was 106,617 gigawatt-hours per year in 2019 and is forecast to increase to 133,893 gigawatt-hours in 2035.[64] PG&E is expected to meet its electricity demands in 2035 and is ahead of schedule on meeting California's GHG-free requirements.

### *Natural Gas*

PG&E is also the natural gas service provider for the city of Santa Rosa. The natural gas system includes approximately 50,000 miles of natural gas pipelines, including 6,700 miles of transmission pipelines and 42,000 miles of distribution pipelines.[65] The transmission pipelines move natural gas from compressor stations and storage facilities to regulator stations. At the regulator station, the pressure in the pipeline is reduced before gas enters the distribution system, which consists of smaller diameter pipelines that deliver gas to residences and businesses. PG&E has approximately 4.5 million natural gas customer accounts. Natural gas demand statewide is projected to decline an average of 1.1 percent per year through 2035.[66] This is primarily due to the goal of reducing greenhouse gas emissions and the ordinances of some cities for new construction to be all electric. Gas demand is expected to decrease from 5,298 million cubic feet of gas per day in 2022 to 4,857 million cubic feet per day by 2035. California's gas

[62] Pacific Gas and Electric Company, 2023, Company Profile, https://www.pge.com/en_US/about-pge/company-information/profile/profile.page, accessed on June 1, 2023.

[63] Pacific Gas and Electric Company, 2023, PG&E's 2021 Power Mix, https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page, accessed June 1, 2023.

[64] California Energy Commission, 2023, California Energy Demand Forecast, 2021-2035, https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2021-integrated-energy-policy-report/2021-1, accessed June 1, 2023.

[65] Pacific Gas and Electric Company, 2023, PG&E Natural Gas System, https://www.pge.com/en_US/safety/how-the-system-works/natural-gas-system-overview/natural-gas-system-overview.page, accessed February 18, 2023.

[66] California Public Utilities Commission, 2022, *2022 California Gas Report*, https://www.socalgas.com/sites/default/files/Joint_Utility_Biennial_Comprehensive_California_Gas_Report_2022.pdf, accessed June 1, 2023.

storage facilities supplement pipeline gas supply during high demand periods and also provide supply reliability. The supplies of natural gas would meet the demand through year 2035.[67]

### *Telecommunications and Internet Providers*

Telecommunications services include wireless internet, cell phone and land line telephone, cable television, and satellite television. There are numerous telecommunication and internet providers that serve the EIR Study Area. Telecommunication providers include AT&T, Verizon, CDS Wireless, and others. Internet providers include Comcast, Sonic, AT&T, T-Mobile, Vista Broadband Networks, and others. Multiple choices give Santa Rosa residents and businesses a variety of options when choosing telecommunication providers. The wireless networks consist of fiber-optic cables that connect major internet hubs over long distances. The networks can be expanded by using small cell facilities, which are small antennae placed on existing utility poles or streetlights along with small pole-mounted radios and other accessory equipment. In this manner, the fiber-optic network can be easily expanded to meet the demand for wireless services. The current infrastructure in place is sufficient to serve existing and future customers in the EIR Study Area.

## 4.17.5.2 STANDARDS OF SIGNIFICANCE

Implementation of the proposed project would result in significant impacts related to energy infrastructure if it would:

12. Require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
13. In combination with past, present, and reasonably foreseeable projects, result in a cumulative impact with respect to electric power, natural gas, or telecommunications facilities.

## 4.17.5.3 IMPACT DISCUSSION

| | |
|---|---|
| **USS-12** | **Implementation of the proposed project would not require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.** |

Electrical service to the EIR Study Area would be provided by SCP and PG&E through connections to existing off-site electrical lines and new on-site infrastructure. As shown in Table 4.17-13, *Year 2050 Forecast Electricity Consumption,* electricity use in the EIR Study Area would increase by 63,691,182 kilowatt-hours per year. However, the per-person electricity use would decrease by 548 kWh per year,

[67] California Public Utilities Commission, 2022, *2022 California Gas Report*, https://www.socalgas.com/sites/default/files/Joint_Utility_Biennial_Comprehensive_California_Gas_Report_2022.pdf, accessed June 1, 2023.

which reflects the replacement of existing building stock with new development that meets the California Building Energy Efficiency Standards and CALGreen standards.

TABLE 4.17-13 YEAR 2050 FORECAST ELECTRICITY CONSUMPTION

| | Electricity Usage (kWh/year) | | |
|---|---|---|---|
| Land Use | Existing Conditions | Proposed General Plan 2050 [a] | Net Change |
| **EIR Study Area** | | | |
| Residential | 367,395,591 | 415,787,730 | 48,392,139 |
| Nonresidential | 525,542,438 | 540,841,480 | 15,299,042 |
| **Total** | **892,938,028** | **956,629,210** | **63,691,182** |
| **Service Population** | 275,569 | 355,425 | 79,856 |
| **Per Service Population Annual Consumption** | **3,240** | **2,692** | **-548** |

Notes: kWh = kilowatt hour.
a. Modified with State Actions to reduce greenhouse gas emissions (see Chapter 4.6, *Energy*, of this Draft EIR).
Source: See Appendix B, *Air Quality and Greenhouse Gas Emissions Data*, of this Draft EIR.

As shown in Table 4.17-14, *Year 2050 Forecast Natural Gas Consumption*, natural gas use under the proposed project is estimated to total 48,851,700 therms annually. While the City currently has a reach code requiring all new residential construction of three stories and below to be all electric (SRCC Section 18-42.4.106.5), it cannot be guaranteed that every individual development project facilitated by the proposed project would be subject to this requirement. To provide a conservative assessment of what energy consumption may be in 2050 resulting from implementation of the proposed project, the new growth in building space anticipated through 2050 was assumed to include natural gas for space and water heating. With this assumption, by 2050, natural gas use in the EIR Study Area would be 4,525,626 therms annually, or approximately a 10 percent increase, from existing conditions. However, the per-service population natural gas consumption is estimated to slightly decrease from 161 therms per person per year in 2019 to 137 therms per person per year in 2050 for natural gas. As described above, this number can be considered to represent a conservative (i.e., "worst case") scenario as many residential projects in the city would be subject to the reach code's all-electric requirements.

TABLE 4.17-14 YEAR 2050 FORECAST NATURAL GAS CONSUMPTION

| | Natural Gas Usage (Therms per year) | | |
|---|---|---|---|
| Land Use | Existing Conditions | Proposed General Plan 2050 [a] | Net Change |
| **EIR Study Area** | | | |
| Residential | 28,371,401 | 31,665,210 | 3,293,809 |
| Nonresidential | 15,954,672 | 17,186,490 | 1,231,818 |
| **Total** | **44,326,074** | **48,851,700** | **4,525,626** |
| **Service Population** | 275,569 | 355,425 | 79,856 |
| **Per Service Population Annual Consumption** | **161** | **137** | **-24** |

Note:
a. Modified with State Actions to reduce greenhouse gas emissions (see Chapter 4.6, *Energy*, of this Draft EIR).
Source: See Appendix B, *Air Quality and Greenhouse Gas Emissions Data,* of this Draft EIR.

These energy consumption rates are modest increases when considered in the context of SCP's and PG&E's service territories. The increase in electricity usage for the EIR Study Area is approximately 0.1 percent of PG&E's projected energy supply in 2035, and the increase in natural gas consumption for the EIR Study Area is less than 0.03 percent of PG&E's natural gas supply.[68] PG&E also states that there would be sufficient electrical and natural gas supplies to cover its service area in 2035.

In addition, potential future development would be required to comply with the current and future updates to the California Energy Code and CALGreen, which would contribute to reducing energy demands. New buildings would also use new energy-efficient appliances and equipment pursuant to the Appliance Efficiency Regulations, which would ensure the use of efficient electricity and natural gas consumption. New and replacement buildings in compliance with these standards would generally have greater energy efficiency than existing buildings. Additionally, new construction within the City would underground utilities per SRCC Chapter 13-20*, Underground Utilities,* which would improve electricity efficiency and safety.

Chapter 3, *Circulation, Conservation, and Greenhouse Gas Reduction Element*, of the proposed General Plan contains goals, policies, and actions that require local planning and development decisions to consider electricity and natural gas impacts. The following goal, policies, and actions would serve to improve energy efficiency and reduce energy impacts:

- Goal 3-7: Strive to achieve net carbon neutrality no later than 2045.
  - Policy 3-5.3: Increase the use of renewable, carbon free, and distributed energy resources throughout the city.
    - Action 3-7.5: Require regular energy audits of existing City-owned and operated structures, identifying levels of existing energy use and potential conservation and efficiency measures.
    - Action 3-7.6: Develop a capital project list and funding strategy to complete energy-efficiency projects for City-owned and operated structures and adjust the list annually to add new projects as needed.
    - Action 3-7.7: Provide information on the cost-savings potential and other benefits of energy audits and energy-efficient retrofits to encourage their preparation for buildings throughout the city.
    - Action 3-7.9: Identify incentives to encourage new buildings to exceed State energy efficiency requirements and/or meet or exceed the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) Program or equivalent standards.
    - Action 3-7.11: Use education and incentives to promote and sustain energy-conserving design and practices.
  - Policy 3-7.3: Increase the use of renewable, carbon-free, and distributed energy resources throughout the city.

[68] PG&E's projected energy supplies for electricity and natural gas do not extend beyond 2035.

- Action 3-7.12: Revise any existing codes and policies that constrain or prohibit the installation of environmentally acceptable forms of distributed energy generation.
- Action 3-7.13: Identify incentives and other means to encourage new and existing buildings to include battery energy storage systems, especially buildings with solar energy installations and municipal buildings that provide essential community services.
- Action 3-7.14: Participate in State and local efforts to develop appropriate policies and review procedures for the installation of photovoltaic solar and other forms of distributed energy generation.
- Action 3-7.15: Continue to participate in utility-sponsored renewable energy programs that allow the city to receive a significant portion of energy from renewable sources.
- Action 3-7.16: Seek and identify resources to assist low-income homeowners and small business owners with identifying financing options for installation of rooftop solar energy systems, energy storage, and electrification of existing buildings.
- Action 3-7.17: Support the development of local-serving renewable energy projects that expand the availability of local renewable energy, provide sustainable local jobs, and support local and regional housing, economic development, and sustainability goals and initiatives.
- Action 3-7.18: Encourage the establishment of neighborhood renewable energy microgrids to support resilience.
- Action 3-7.19: Support State and utility efforts to improve grid resilience and capacity.

Compliance with federal, State, and local regulations (e.g., Building Energy Efficiency Standards, CALGreen, and Renewables Portfolio Standards) would increase building energy efficiency and reduce building energy demands. Additionally, the proposed General Plan 2050 goal, policies, and actions listed above will contribute to minimizing building-related energy demands and demands on nonrenewable sources of energy. Implementation of the proposed General Plan 2050 goals, policies, and actions in conjunction with and complementary to regulatory requirements would ensure that energy demand associated with growth under the proposed project would be efficient, therefore avoiding the need for new or expanded electric power and natural gas facilities. In addition, the energy providers and telecommunications providers that serve the EIR Study Area indicate that they have the capability to serve future increases in population within their service areas without significant changes to the existing infrastructure. Therefore, implementation of the proposed project would not require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities and impacts would be *less than significant*.

Significance without Mitigation: Less than significant.

**USS-13 The proposed project would not, in combination with past, present, and reasonably foreseeable projects, result in a cumulatively considerable impact to electric power, natural gas, or telecommunications facilities.**

The area considered for cumulative impacts are the service areas of SCP and PG&E for electricity and PG&E for natural gas. Other projects within the service areas would increase electricity and natural gas demands. The CPUC has identified the Integrated Energy Policy Report as "the appropriate venue for considering issues of load forecasting, resource assessment, and scenario analyses, to determine the appropriate level and ranges of resource needs for load serving entities in California." The latest report shows that California's electricity sector is leading efforts to reduce GHG emissions and electricity consumption is projected to increase compared to previous energy demand projections, mostly attributable to increased levels of transportation electrification.[69] Natural gas consumption is expected to level out between 2020 and 2026 before decreasing from 2026 to 2035 from new building standards and the implementation of city and county ordinances that require new construction to have all-electric appliances and heating.

In addition, all future projects developed within the SCP and PG&E service areas would implement the requirements of the California Energy Code and CALGreen. New buildings would also use new energy-efficient appliances and equipment, pursuant to the Appliance Efficiency Regulations. Counties and cities review project design plans against these codes and ensure compliance before issuing construction permits. These measures would reduce the overall consumption of electricity and natural gas. The energy providers and telecommunications providers that serve the EIR Study Area and Sonoma County indicate that they have the capability to serve future increases in population within their service areas without significant changes to the existing infrastructure. In addition, the proposed General Plan 2050 includes goals, policies, and actions that would contribute to minimizing inefficient, wasteful, or unnecessary energy consumption and ensure compliance with State, regional, or local plans for renewable energy, therefore avoiding the need for new or expanded electric power and natural gas facilities. Therefore, the proposed project would not result in a significant impact to electric power, natural gas, or telecommunication facilities, and cumulative impacts would be *less than significant*.

Significance without Mitigation: Less than significant.

[69] California Energy Commission, February 2023, *Final 2022 Integrated Energy Policy Report Update*, https://www.energy.ca.gov/sites/default/files/2023-02/Adopted_2022_IEPR_Update_with_errata_ada.pdf, accessed September 7, 2023.

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