

11

UTILITIES AND SERVICE SYSTEMS

11.1 INTRODUCTION

The Utilities and Service Systems chapter of the EIR summarizes the setting information and identifies potential new water supply, wastewater, and solid waste disposal demands that could occur at existing wineries and farm breweries in Placer County with implementation of the proposed project. Information for the Utilities and Service Systems chapter was primarily drawn from the Placer County General Plan¹ and associated EIR,² as well as the San Juan Water District *2015 Urban Water Management Plan*.³

This chapter focuses on the ten existing medium (10- to 20-acre) and large (>20-acre) parcel-sized wineries and farm breweries that would be subject to the proposed Zoning Text Amendment, which are shown in Figure 3-1 of the Project Description chapter. Such facilities are referred to as *existing study facilities* throughout this EIR. Potential effects on utilities and service systems associated with future wineries and farm breweries that would be subject to the proposed Zoning Text Amendment are addressed in Chapter 12, Cumulative Impacts and Other CEQA Sections, of this EIR.

11.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the utilities serving existing study facilities within the areas of western Placer County, where wineries and farm breweries are currently concentrated. The section describes wastewater conveyance and treatment, water supply and delivery infrastructure, and solid waste.

Wastewater Conveyance and Treatment

The existing study facilities currently produce two types of wastewater: 1) process wastewater produced from wine/beer-making operations, which is tied to production levels at each facility; and 2) wastewater from bathrooms, sinks, and dishwashers at the study facilities. The latter of the two types is influenced by events and, thus, is the focus of this EIR. It should be noted that for the process wastewater, the existing study facilities currently have waivers for waste discharge requirements under Regional Water Quality Control Board (RWQCB) Resolution No. R5-2003-0106, Waiver of Waste Discharge Requirements for Small Food Processors, Including Wineries, Within the Central Valley Region.

¹ Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).

² Placer County. *Countywide General Plan EIR*. July 1994.

³ San Juan Water District. *2015 Urban Water Management Plan* [pg. 6-3]. June 2016.

Many existing study facilities in Placer County are located in rural parts of the County where access to public sewer is not available. With the exception of Casque at Flower Farm, which is connected to the County's public sewer system, the existing study facilities are connected to private septic systems, or in the case of one facility, currently rely on portable toilets. The septic systems generally consist of an underground septic tank and associated leach field. Such septic systems are subject to Placer County permitting requirements, and maintenance of each septic system is the sole responsibility of the property owner. Ongoing use of the septic systems, as well as any alterations to the septic systems, is subject to the rules and regulations of the Placer County Environmental Health Department.

Sewer services at Casque at Flower Farm are provided by the Placer County Facilities Services Department, Environmental Engineering and Utilities, Sewer Maintenance District (SMD) 3. Within SMD 3, Placer County operates three sewer pump stations and approximately 16 miles of sewer piping, and approximately 46 septic tank effluent pump systems. The existing sewer pipeline system within unincorporated areas of the County in the facility vicinity are owned and maintained by Placer County. Sewer treatment is provided at the Dry Creek Wastewater Treatment Plant (Dry Creek WWTP), which is located within the southern edge of the City of Roseville. Under the Dry Creek WWTP's National Pollutant Discharge Elimination System (NPDES) Permit, Number CA0079502, the WWTP has a permitted average dry weather capacity (ADWF) of 18 million gallons per day (mgd) and a peak wet-weather flow (PWWF) of 45 mgd.⁴ As of 2016, the Dry Creek WWTP was operating at approximately 50 percent of the WWTP's permitted flow, with an ADWF of 9 mgd, and a PWWF under 25 mgd.⁵ Of the 18 mgd of ADWF currently being treated at the Dry Creek WWTP, approximately 40 percent, or 7.2 mgd originate from unincorporated portions of Placer County.⁶

Water Supply and Delivery Infrastructure

Of the ten existing study facilities within unincorporated Placer County, only Casque at Flower Farm receives domestic water supplies from a public water supply system. The remaining nine facilities rely on water supply wells for winery/farm brewery production operations, as well as wine/beer tasting events. Typical water uses associated with the wine/beer-making process include water for cleaning/sterilizing wine/beer manufacturing equipment and storage vessels, water added directly to grapes or milled grain, and water used for general facility maintenance and cleaning. It should be noted that most of the facilities rely on untreated water supplies from the Nevada Irrigation District (NID) and the Placer County Water Agency (PCWA) for irrigation of on-site crops. However, such water supplies are not used for events.

Both Goathouse Brewery and Wise Villa Winery and Bistro currently operate under Transient-Noncommunity (TNC) public water systems. A TNC public water system is a system that provides water in a place, such as a small market or campground, where people do not remain for

⁴ City of Roseville. *City of Roseville General Plan 2035*. August 17, 2016.

⁵ *Ibid.*

⁶ *Ibid.*

long periods of time.⁷ Such public water systems require a permit from the State Water Resources Control Board, Division of Drinking Water. Per U.S. Environmental Protection Agency (USEPA) regulations, a public water system is required if a facility serves more than 24 people daily, 60 days or more per year.⁸

Groundwater

The westernmost portion of Placer County is located within the 548-square-mile North American Sub-basin (NASb). The boundaries of the NASb are the Bear River to the north, the Feather and Sacramento rivers to the west, the American River to the south, and the foothill of the Sierra Nevada to the east. At the eastern boundary of the NASb, at the Sierra Nevada foothills, groundwater becomes available within fractured rock, rather than a continuous aquifer, thus delineating the extent of the NASb. The NASb is designated by the Sustainable Groundwater Management Act (SGMA) as a High Priority Basin.⁹ The NASb includes four exclusive Groundwater Sustainability Agencies (GSAs): RD1001 GSA; Sacramento Groundwater Authority (SGA) GSA; South Sutter Water District GSA; and Sutter County GSA. In addition, the NASb includes the proposed, but not yet formed, West Placer GSA. The four existing GSAs and the proposed West Placer GSA are currently coordinating to prepare a single Groundwater Sustainability Plan (GSP) for the NASb.¹⁰ SGA has been authorized by the NASb GSAs to submit the GSP Initial Notification to DWR. The process for developing the GSP will begin with completion of a communication and outreach plan by each GSA. Additionally, a webpage (nasbgroundwater.org) is currently under development that will be used for continued interested party engagement. When complete, interested parties will be able to sign up to receive notifications related to GSP development activities of any of the NASb GSAs. The next phase of GSP development will involve filling of critical data gaps to improve the understanding of conditions relative to groundwater in the Sub-basin and the development of a computer model of the NASb to assess current and future sustainability of the NASb groundwater resources. With such information, a draft GSP will be developed with a planned public draft release in early 2021 and a final GSP in mid-2021.

With the exception of Goathouse Brewery, which is located within the NASb, the existing study facilities are located within the Sierra Nevada Regional Study Unit.¹¹ Most of the Sierra Nevada consists of granitic and metamorphic rocks. Fractures in such rocks contain groundwater. The fracture systems may be interconnected or isolated, resulting in variability in water levels, well yields, and water quality on local and regional scales.¹²

⁷ U.S. EPA. *Information about Public Water Systems*. Available at: <https://www.epa.gov/dwreginfo/information-about-public-water-systems>. Accessed October 2018.

⁸ U.S. EPA. *Information about Public Water Systems*. Available at: <https://www.epa.gov/dwreginfo/information-about-public-water-systems>. Accessed October 2018.

⁹ Department of Water Resources. *SGMA Basin Prioritization Dashboard*. Available at: <https://gis.water.ca.gov/app/bp2018-dashboard/>. Accessed October 17, 2018.

¹⁰ West Placer Groundwater Sustainability Agency. *Notice of Intent to Begin Preparation of a Groundwater Sustainability Plan for the North American Subbasin of the Sacramento Valley Groundwater Basin*. 2018.

¹¹ Department of Water Resources. *Groundwater Basin Boundary Assessment Tool*. Available at <https://gis.water.ca.gov/app/bbat/>. Accessed October 17, 2018.

¹² U.S. Geological Service. *Groundwater Quality in the Sierra Nevada, California*. December 2014.

The primary aquifer is defined as those parts of the aquifer system tapped by wells and springs listed in the State of California database of public drinking-water supply sources. In the Sierra Nevada Regional Study Unit, approximately 25 percent of such sources are springs. Most wells are drilled to depths of 150 to 600 feet, consist of solid casing or a seal from the land surface to a depth of about 50 to 200 feet, and are open or have perforated casing below that depth. Water quality in the primary aquifer system may differ from that in the shallower and deeper parts of the aquifer system.

Recharge to fractured-bedrock aquifers is mainly from stream-channel infiltration and direct infiltration of precipitation and snow melt. Sedimentary basin aquifers also are recharged by mountain-front recharge at the margins of the basins. Groundwater exits the aquifer system when water is pumped for water supply, flows into streams and lakes, discharges from springs, or leaves areas with a shallow depth to groundwater by evapotranspiration.

It should be noted that per the San Juan Water District *2015 Urban Water Management Plan*, the North American Subbasin, within which Goathouse Brewery is located, is not identified by the Department of Water Resources (DWR) as being in a state of overdraft.¹³ Groundwater overdraft is a condition within a developed groundwater basin in which the amount of water pumped from the basin exceeds the sustainable yield of the basin over the long term. According to the Northern California Water Association, the eastern portion of the subbasin is interconnected with permeable soils near the ground surface within the mountainfront area, which allows small streams in the Sierra Nevada foothills to contribute large amounts of recharge to groundwater aquifers. Along the foothills of the Sierra, many wells never declined at all due to the recent 2016 drought and the 2017 rains, along with reduced pumping, filled aquifers above where they were prior, if not higher.¹⁴

Solid Waste

Solid waste collection services in Western Placer County are provided by private companies under contract with the Western Placer Waste Management Authority (WPWMA). The WPWMA is a regional agency established in 1978 through a Joint Exercise of Powers Agreement between the County of Placer and the cities of Roseville, Rocklin, and Lincoln to acquire, own, operate, and maintain a sanitary landfill site and all related improvements. All of the existing medium and large winery/farm brewery facilities are located within Franchise Area 1 of the WPWMA service area, which receives solid waste collection services from Recology Auburn Placer.¹⁵

The WPWMA designed and built a Material Recovery Facility (MRF) to divert solid waste from being disposed at the landfill. A majority of the solid waste collected in western Placer County is first processed at the WPWMA MRF. The MRF recovers, processes, and markets recyclable materials from the waste stream. The MRF also processes source-separated wood waste and

¹³ San Juan Water District. *2015 Urban Water Management Plan* [pg. 6-3]. June 2016.

¹⁴ Northern California Water Association. *Drought resilience and conjunctive use in West Placer County: what more can (should?) be done?* 2017.

¹⁵ Placer County. *Solid Waste Franchise Areas*. September 24, 2013.

green waste and accepts separated recyclables, including electronics and other universal wastes (e.g. batteries and fluorescent lamps), at the recycling drop-off and buy-back center. The compost portion of the MRF has an annual processing capacity of 82,000 tons (averaged over the year and does not account for seasonal peaks). The MRF is permitted to have up to 75,000 cubic yards (approximately 37,500 tons) of compost material at the facility at any one time.

Residual waste from the MRF is transported to the Western Regional Sanitary Landfill (WRSL). The landfill is specified as a Class II/Class III non-hazardous site. Hazardous waste from households and Conditionally Exempt Small Quantity Generators is accepted at the Permanent Household Hazardous Waste Collection Facility (PHHWCF), located next to the MRF. Recovered materials are sold throughout the world, helping to conserve natural resources. Non-recyclable materials are sent to the landfill for disposal. The current space available, together with recovery efforts by the MRF, will delay the WRSL from reaching capacity.¹⁶ The WPWMA owns and oversees the operations of the WRSL, MRF, compost facility, and PHHWCF, which are located near SR 65, between Roseville and Lincoln, at the corner of Athens Avenue and Fiddymont Road. A private firm, under contract to WPWMA, manages the day-to-day operation of the facilities.

Permit Limits and Site Constraints

The 320-acre WRSL is permitted to accept 1,900 tons per day and 624 vehicles per day. Given that the WRSL currently receives an average of 1,077 tons per weekday, the remaining daily capacity of the facility is approximately 823 tons.¹⁷ The WRSL has a permitted design capacity of 36,350,000 cubic yards and, as of December 2017, has a remaining capacity of 24,468,271 cubic yards. According to the most recent Joint Technical Document available for the landfill, which was revised August 2017, the WRSL has a permitted lifespan extending to 2058 under current land use and development conditions.¹⁸

The MRF has a permitted processing limit of 1,750 tons per day.¹⁹ According to Placer County, for the fiscal year 2016-2017, the average weekday tonnage received at the MRF was 1,191 tons.²⁰ The MRF expanded in 2007, increasing its processing capacity of municipal solid waste and construction and demolition debris to 2,200 tons per day.²¹

¹⁶ Western Placer Waste Management Authority. *About WPWMA*. Available at: <http://www.wpwma.com/about-wpwma/>. Accessed March 2017.

¹⁷ Western Placer Waste Management Authority. *Comment Letter: Lincoln Meadows Draft Environmental Impact Report*. December 11, 2017.

¹⁸ Placer County Department of Facility Services, Environmental Engineering Division (Solid Waste). *EIR Guidance Document*. July 2014.

¹⁹ California Department of Resources Recycling and Recovery (CalRecycle). *Western Placer Waste Mgmt Authority MRF (31-AA-0001)*. Available at <http://www.calrecycle.ca.gov/SWFacilities/Directory/31-AA-0001/>. Accessed December 2017.

²⁰ Western Placer Waste Management Authority. *Comment Letter: Lincoln Meadows Draft Environmental Impact Report*. December 11, 2017.

²¹ Western Place Waste Management Authority. *Joint Technical Document* [pg. 2-5]. Revised August 2017.

11.3 REGULATORY CONTEXT

Many agencies regulate utilities and services systems. The following discussion contains a summary review of regulatory controls pertaining to utilities and service systems, including State and local laws and ordinances.

State Regulations

The following are the State environmental laws and policies relevant to utilities and service systems.

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (Water Code Sections 10610 – 10656). The Act requires that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet of water annually shall prepare and adopt an UWMP within a year of becoming an urban water supplier and update the plan at least once every five years. The Act specifies the content that is to be included in an UWMP, and states that urban water suppliers should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry-years. The Act also states that the management of urban water demands and the efficient use of water shall be actively pursued to protect both the people of the State and their water resources.

Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package, composed of AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley), collectively known as the SGMA. For the first time in its history, California was provided with a framework for sustainable, groundwater management - “management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.”

The SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, such basins should reach sustainability within 20 years of implementing sustainability plans. For critically over-drafted basins, the deadline year is set at 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through the Sustainable Groundwater Management Program, DWR provides ongoing support to local agencies through guidance and financial and technical assistance. SGMA empowers local agencies to form GSAs to manage basins sustainably and requires such GSAs to adopt GSPs for crucial groundwater basins in California.

California Integrated Waste Management Act - Assembly Bill 939

To minimize the amount of solid waste that must be disposed of by transformation (i.e., recycling) and land disposal, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties are required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Solid waste plans are required to explain how each city's AB 939 plan will be integrated within the respective county plan. The plans must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation and land disposal. Cities and counties that do not meet this mandate are subject to \$10,000-per-day fines.

Senate Bill 1016

In 2007, SB 1016 amended portions of AB 939, which allows the California Integrated Waste Management Board (CIWMB) to use per capita disposal as an indicator in evaluating compliance with the requirements of AB 939. Jurisdictions track and report their per capita disposal rates to CalRecycle.

Assembly Bill 341

In 2011, AB 341 modified the California Integrated Waste Management Act and directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. The resulting Mandatory Commercial Recycling Regulation (2012) requires that on and after July 1, 2012, certain businesses that generate 4 cubic yards or more of commercial solid waste per week shall arrange for recycling services. To comply with this requirement, businesses may either separate recyclables and self-haul them or subscribe to a recycling service that includes mixed waste processing. WPWMA's facility includes a Materials Recovery Facility (MRF), which is a mixed waste processing facility. This facility receives and sorts waste to recover recyclable materials, assisting Placer County in meeting the state's waste reduction goal (WPWMA 2017).

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

Assembly Bill 1826

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

green waste and wood waste, and accepts separated green waste and wood waste. Recology, under contract with the County, offers food waste recycling collection.

Senate Bill 605

SB 605 (2014) directed the California Air Resources Board (CARB) to develop a comprehensive Short-Lived Climate Pollutant (SLCP) strategy in coordination with CalRecycle and other state and local agencies to reduce statewide emissions of SLCPs. SB 1383 (2016) directed the CARB to approve and start implementing the SLCP strategy by 2018. Since methane is a SLCP produced from the decomposition of organic waste in landfills, the bill established targets to achieve a statewide 50-percent reduction in the level of the disposal of organic waste from the 2014 level by 2020, a 75-percent reduction in the level of the disposal of organic waste from the 2014 level by 2025, and no less than 20 percent recovery of edible food currently disposed by 2025. The bill required CalRecycle, in coordination with the CARB, to adopt regulations to achieve the organic waste reduction targets. The CARB approved a Short-Lived Climate Pollutant Strategy in 2017. CalRecycle is currently developing regulations.

California Building Standards Code

California Building Standards Code (Title 24) require that where a local jurisdiction has not adopted a more stringent construction and demolition (C&D) ordinance, certain construction activities are required to implement Section 5.408 of the CALGreen Code. Under Section 5.408, construction activities are required to recycle and/or salvage for reuse a minimum of 65 percent of their nonhazardous C&D waste as of January 1, 2017. Applicable projects are required to prepare and implement a Construction Waste Management Plan, which is submitted to the local jurisdiction prior to issuance of building permits. The WPWMA MRF accepts mixed and separated construction debris for recycling. Contractors may also separate and self-haul debris to a recycler of their choice. Recology, under contract with the County, provides debris box collection services to aid in the separation of recyclable debris.

Local Regulations

The following local goals and policies are applicable to the proposed project.

Placer County General Plan

The following applicable goals and policies related to utilities and service systems are from the Placer County General Plan.

- Goal 4.A To ensure the timely development of public facilities and the maintenance of specified service levels for these facilities.
 - Policy 4.A.2 The County shall ensure through the development review process that adequate public facilities and services are available to serve new development. The County shall not

approve new development where existing facilities are inadequate unless the following conditions are met:

- a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means);
- b. The facilities improvements are consistent with applicable facility plans approved by the County or with agency plans where the County is a participant; and,
- c. The facilities improvements are designed and built to the current standards of the agency providing service.

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

Policy 4.C.1 The County shall require proponents of new development to demonstrate the availability of a long-term, reliable water supply. The County shall require written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy. Where the County will approve groundwater as the domestic water source, test wells, appropriate testing, and/or report(s) from qualified professionals will be required substantiating the long-term availability of suitable groundwater.

Policy 4.C.2 The County shall approve new development based on the following guidelines for water supply:

- a. Urban and suburban development should rely on public water systems using surface supply.
- b. Rural communities should rely on public water systems. In cases where parcels are larger than those defined as suburban and no public water system exists or can be extended to the property, individual wells may be permitted.
- c. Agricultural areas should rely on public water systems where available, otherwise individual water wells are acceptable.

Policy 4.C.6 The County shall promote efficient water use and reduced water demand by:

- a. Requiring water-conserving design and equipment in new construction;

- b. Encouraging water-conserving landscaping and other conservation measures;
- c. Encouraging retrofitting existing development with water-conserving devices; and,
- d. Encouraging water-conserving agricultural irrigation practices.

Goal 4.D

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

Policy 4.D.4 The County shall require developments needing new connections to construct wastewater conveyance facilities which are sized and located to provide sewer service based on permitted densities and applicable sewer shed area. Wastewater conveyance systems shall be designed for gravity flow. Where gravity conveyance systems are not feasible, the agency providing service may approve pumping service where a site specific engineering analysis demonstrates the long-term cost effectiveness of pumped facilities.

Policy 4.D.5 The County shall require developments needing new connections to pay their fair share of the cost for future public wastewater facilities which support development based on the Placer County General Plan. The fair share will be based on the demand for these facilities attributable to the new development.

Policy 4.D.6 The County shall promote efficient water use and reduced wastewater system demand by:

- a. Requiring water-conserving design and equipment in new construction as required in California law (AB 1881);
- b. Encouraging retrofitting with water-conserving devices; and
- c. Designing wastewater systems to minimize inflow and infiltration.

Policy 4.D.9 The County shall promote functional consolidation of wastewater facilities.

Policy 4.D.10 The County shall require all public wastewater facilities to be designed and built to the current standards of the agency providing service.

- Goal 4.G To ensure the safe and efficient disposal or recycling of solid waste generated in Placer County.
- Policy 4.G.1 The County shall require all new urban/suburban development, excluding rural development, to include provisions for solid waste collection.
- Policy 4.G.7 The County shall require that all new development complies with applicable provisions of the Placer County Integrated Waste Management Plan.

Placer County Winery Ordinance

Section 17.56.330 of the Placer County Code contains the County’s Winery Ordinance, as approved in 2008. The Winery Ordinance contains specific standards related to water use and waste discharge at wineries. Per Section 17.56.330(D)(4), if a winery is served by well water and there are more than 25 people on-site in a 60-day period, employees and guests must be provided with bottled water for consumption, unless otherwise approved by the County Environmental Health Division. Well water must meet potable water standards for the purposes of dishwashing and hand washing. Per Section 17.56.330(D)(5)(c), if public sanitary sewer is not available, on-site sewage disposal systems at wineries must be designed in compliance with Chapter 8.24 of the Placer County Code and sized to accommodate employee, tasting room, and commercial sewage flows. Portable toilets may be approved by the County Environmental Health Division for temporary and promotional events.

Regional Water Quality Control Board Resolution No. R5-2015-0005 Waiver of Waste Discharge Requirements for Small Food Processors, Wineries and Related Agricultural Processors Within the Central Valley Region

Central Valley Regional Water Quality Control Board (CVRWQCB) Resolution No. R5-2015-0005 waives the requirement to obtain WDRs for small food processor dischargers who comply with specific terms and conditions and who receive a waiver notification signed by the Executive Officer. Discharges authorized under the waiver are grouped into three regulatory tiers based on the wastewater management practices employed and the amount of waste discharged to land. Wastewater and residual solids storage and land application methods must comply with the established Specific and General Conditions listed in Resolution No. R5-2015-0005.

11.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project’s potential impacts related to utilities and service systems. In addition, a discussion of the project’s impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines and the County’s Initial Study Checklist, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this EIR, an impact is considered significant if the proposed project would:

- Require or result in the relocation or construction of new or expanded water or wastewater delivery, collection or treatment facilities, the construction or relocation of which could cause significant environmental effects;
- Require or result in the construction of new on-site sewage systems;
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project and reasonably foreseeable development during normal, dry and multiple dry years;
- Require sewer service that may not be available by the area’s waste water treatment provider;
- Result in significant adverse impacts related to project energy requirements;
- Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs in compliance with all applicable laws; or
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Issues Not Discussed Further

The proposed Zoning Text Amendment would allow for an increased number of events at existing wineries/farm breweries within the County; however, such events would not include the creation of impervious surfaces or otherwise increase stormwater runoff associated with existing facilities. As such, the project would not be expected to result in the construction of new storm water drainage facilities. For the aforementioned reasons, the Initial Study (see Appendix D) prepared for the proposed project determined that implementation of the Zoning Text Amendment would result in a less-than-significant impact related to the following, and, accordingly, such topics are not discussed further:

- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Method of Analysis

Determinations of the significance of the proposed project’s impacts were made based on the ability of the existing utilities to accommodate Agricultural Promotional Events and Special

Events allowed by right, using the above significance criteria. The specific methodology used to calculate water and wastewater demand is described below.

Water Demand

The water demand calculations for the existing study facilities focused on the potential water demand increase associated with events allowable under the proposed Zoning Text Amendment. The methodology used to calculate water demand is as follows (from Chapter 3, Project Description, of this EIR):

- Duration of Winery/Farm Brewery Peak Season of Activity is seven months, or 35 total weeks.
- Up to two events per day occur three days per week (Friday, Saturday, and Sunday), for a total of 210 events.

For additional parameters, medium- and large-parcel size facilities need to be considered separately, as follows:

Medium Winery/Farm Brewery (Annual)

- Six 100-person Special Events;
- 196 50-person Agricultural Promotional Events; and
- Eight Rolling Agricultural Promotional Events (no more than 50 people at one time, but assumes the event turns over three times for total attendance of 150 people).

Large Winery/Farm Brewery (Annual)

- 12 200-person Special Events;
- 190 50-person Agricultural Promotional Events; and
- Eight Rolling Agricultural Promotional Events (no more than 50 people at one time, but assumes the event turns over three times for total attendance of 150 people).

Rates for water demand per event guest were based on Napa County standard rates provided in their guidance document for Water Availability Analysis.²²

Wastewater

Wastewater generation estimates were based on consultation with Lindbloom Septic Design, Inc. and a review of wastewater generation associated with existing wineries in the project region.

²² Napa County. *Water Availability Analysis (WAA)*. Adopted May 12, 2015.

Project Impacts and Mitigation Measures

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

11-1 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. Based on the analysis below, the impact is *less than significant*.

As discussed above, with the exception of Casque at Flower Farm, which receives sewer service from the Placer County Facilities Services Department, Environmental Engineering and Utilities, the existing study facilities within the County are connected to private septic systems. The following sections provide an analysis of potential increases in demand occurring on such septic systems as a result of the proposed project, as well as the wastewater infrastructure which serves Casque at Flower Farm. It should be noted that wastewater generation directly associated with the wine/beer-making process would not increase as a result of the Zoning Text Amendment, as wine and beer production would not be expected to increase as a result of allowance to hold a greater number of events. Rather, any increase in wastewater generation would be limited to wastewater from tasting room and event facilities.

Septic Systems

Agricultural Promotional Events and Special Events enabled by the proposed project would increase demand on septic systems at existing study facilities. Based on consultation with Lindbloom Septic Design, Inc.,²³ as well as a review of studies prepared for septic systems for existing wineries in the region,²⁴ each event would generate wastewater at a rate of approximately five gallons per attendee. Per Lindbloom Septic Design, Inc., septic systems are designed to accommodate peak flows that would be handled by the system, rather than the total daily or monthly flows. Such design requirements reflect the fact that sewage discharged into a septic system is able to infiltrate the associated leachfield between event occurrences.

The maximum event size allowable under the proposed Zoning Text Amendment would be 200 attendees for large parcel-sized facilities (during Special Events) and 150 attendees for medium parcel-sized facilities (during Rolling Agricultural Promotional Events). As discussed in Chapter 10, Transportation and Circulation, of this EIR, this analysis assumes that under a worst-case scenario, medium parcel-sized study facilities could host one regular Agricultural Promotional Event and one Rolling Agricultural Promotional Event during the same day, resulting in a total of 200 daily attendees. Large

²³ Lindbloom, Marc, R.E.H.S., Lindbloom Septic Design, Inc. Personal communication [phone] with Nick Pappani, Vice President, Raney Planning & Management, Inc. September 27, 2018.

²⁴ For example, Applied Civil Engineering, Inc. *Onsite Wastewater Disposal Feasibility Study for the Titus Winery*. October 2, 2013.

parcel-sized facilities could host one regular Agricultural Promotional Event and one Special Event during the same day, resulting in a total of 250 daily attendees.

Therefore, in order to accommodate peak wastewater flows associated with events at the existing study facilities, a minimum septic tank size of 1,250 gallons is required for large parcel-sized facilities, and a minimum tank size of 1,000 gallons is required for medium parcel-sized facilities. Of the nine existing study facilities which are not connected to a public sewer system, five include septic tanks greater than or equal to 1,250 gallons, and thus, could accommodate the peak wastewater flows generated by a maximum attendance event that could occur under the Zoning Text Amendment. The remaining four facilities do not have septic systems capable of accommodating the maximum attendance event allowable under the proposed Zoning Text Amendment.

It is in the best interest of the owners of such facilities to manage events proportional to the limitations of their wastewater systems. Specifically, the operators would either limit attendance based on the capacity of the existing septic system, or provide portable toilets on-site during events. If a commercial septic system fails, the facility is considered non-operational per the Placer County Environmental Health Department and the owner must repair/replace the system to ensure public safety. The public may not enter the site until adequate repairs are made and safety of the site is restored.

Dry Creek WWTP

Only Casque at Flower Farm is connected to a public sewer system. Thus, this discussion is appropriately focused on the potential wastewater treatment needs associated with events at Casque at Flower Farm. Based on consultation with Lindbloom Septic Design, Inc., average wastewater generation associated with the type of events allowable under the proposed Zoning Text Amendment is approximately five gallons per attendee per event.²⁵ As discussed in greater detail below, the total estimated annual attendance for Casque at Flower Farm would be approximately 11,600 patrons. Thus, Agricultural Promotional Events and Special Events at the facility would result in approximately 0.058 million gallons per year (mgd) of wastewater (11,600 attendees/year X 5 gallons/attendee), or 0.00016 mgd.

Sewer treatment within the SMD 3 service area is provided at the Dry Creek Wastewater Treatment Plant (Dry Creek WWTP), which is located within the southern edge of the City of Roseville. The WWTP has a permitted ADWF of 18 mgd and a PWWF of 45 mgd.²⁶ As of 2016, the Dry Creek WWTP was operating at approximately 50 percent of the WWTP's permitted flow, with an ADWF of 9 mgd, and a PWWF under 25 mgd.²⁷ Therefore, the Dry Creek WWTP would have adequate capacity to accommodate the

²⁵ Lindbloom, Marc, R.E.H.S., Lindbloom Septic Design, Inc. Personal communication [phone] with Nick Pappani, Vice President, Raney Planning & Management, Inc. September 27, 2018.

²⁶ City of Roseville. *City of Roseville General Plan 2035*. August 17, 2016.

²⁷ *Ibid.*

0.00016 mgd of additional wastewater that could be generated at Casque at Flower Farm as a result of the proposed project in addition to the WWTP's existing commitments.

The Dry Creek WWTP discharges tertiary treated effluent to Dry Creek under an existing NPDES permit. The NPDES permit includes Waste Discharge Requirements, which include stringent effluent limitations for ammonia, aluminum, cadmium, carbon tetrachloride, cyanide, dibromochloromethane, dichlorobromomethane, iron, manganese, mercury, total chlorine residual, and zinc. Dry Creek WWTP is currently in compliance with all existing permitting, and, thus, effluent meets the RWQCB requirements within the NPDES permit. By permitting the Dry Creek WWTP for a maximum ADWF of 18 mgd and a PWWF of 45 mgd, the RWQCB has determined that the Dry Creek WWTP can treat the foregoing volume of wastewater without exceeding the NPDES discharge requirements. Considering that the Dry Creek WWTP has adequate capacity to serve the additional wastewater generation at Casque at Flower Farm, in addition to the provider's existing commitments, the proposed Zoning Text Amendment would not result in the Dry Creek WWTP exceeding permitted capacity or the RWQCB's treatment requirements.

Conclusion

Based on the above, the additional wastewater generation that could occur at the existing study facilities as a result of the proposed Zoning Text Amendment would either be accommodated by existing wastewater treatment systems or, for facilities which do not include sufficiently-sized septic systems, be managed in accordance with the facilities' existing limitations. As noted previously, it is in the best interest of the owners of such facilities to manage events proportional to the limitations of their wastewater systems; if a commercial septic system fails, the public is prohibited from entering the site until adequate repairs are made and safety of the site is restored. Therefore, the proposed project would 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, and a *less-than-significant* impact would result.

Mitigation Measure(s)

None required.

- 11-2 Require or result in the relocation or construction of new or expanded water or wastewater delivery, collection or treatment facilities, the construction or relocation of which could cause significant environmental effects, or require or result in the construction of new on-site sewage systems. Based on the analysis below, the impact is less than significant.**

The following sections provide a discussion of additional demands on water and wastewater conveyance infrastructure that could occur as a result of the proposed project at existing study facilities.

Water Conveyance Infrastructure

The currently adopted Winery Ordinance requires the facility owner to provide bottled water for consumption if more than 25 people in a 60-day period are served, unless otherwise approved by the County Environmental Health Division. The proposed project would clarify potable water standards in accordance with State regulations. For example, if a facility serves more than 24 people daily, 60 days or more per year, then a public water system shall be required, pursuant to Section E.7 of the proposed Zoning Text Amendment and the California Safe Drinking Water Act (Section 116275 of the California Health and Safety Code).

The type of public water system required would be a Transient-Noncommunity water system, which includes restaurants, campgrounds, small wineries, motels and other non-residential facilities. Such a public water system requires a permit from the SWRCB, Division of Drinking Water. Consequently, existing study facilities seeking to host more than 24 people daily, 60 days or more per year, as result of the proposed Zoning Text Amendment, would be required to install a public water system and obtain a permit from the SWRCB. Any new public water wells would need to be constructed in accordance with the California Department of Water Resources Bulletin 74-81, “Water Well Standards, State of California.” If a new public water system is required, the existing study facility owner would select a location and design a system with oversight from the County Environmental Health Department in compliance with Article 13.08, Water Wells, of the Placer County Code and applicable State water well requirements. New public wells are not generally drilled near existing wells in order to avoid hydraulic conductivity between the two wells. Rather, for existing study facilities that would require installation of a new public well, the well would be drilled at a separate location on the subject property, subject to approval by the County Environmental Health Department. County review of future public well plans and required compliance with applicable local and State regulations related to well installation would ensure that adverse environmental effects associated with such would be avoided. Therefore, Agricultural Promotional Events and Special Events occurring at existing study facilities as a result of the proposed project would not require or result in the construction of new water delivery, collection or treatment facilities or expansion of existing facilities such that significant environmental effects would occur.

Wastewater Conveyance

As noted under Impact 11-1 above, with the exception of Casque at Flower Farm, which receives sewer service from the Placer County Facilities Services Department, Environmental Engineering and Utilities, the existing study facilities within the County are connected to private septic systems. The proposed Zoning Text Amendment would not result in the construction of new wastewater conveyance infrastructure; rather, increased wastewater generation occurring at such facilities during Agricultural Promotional Events and Special Events would be accommodated by existing septic systems or, in the case of Casque at Flower Farm, existing SMD 3 wastewater conveyance infrastructure. As discussed previously, only four of the existing study

facilities do not include on-site septic systems capable of managing wastewater from larger events allowable under the proposed Zoning Text Amendment; such facilities would be required to either provide on-site portable toilets during events or restrict attendance based on septic system capacity.

Conclusion

Based on the above, the proposed project would not require or result in the relocation or construction of new or expanded water or wastewater delivery, collection or treatment facilities, the construction or relocation of which could cause significant environmental effects, or require or result in the construction of new on-site sewage systems. Therefore, a *less-than-significant* impact would occur.

Mitigation Measure(s)

None required.

- 11-3 Have sufficient water supplies available to serve the project and reasonably foreseeable development during normal, dry and multiple dry years; or substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Based on the analysis below, the impact is *less than significant*.**

The proposed Zoning Text Amendment would allow the existing study facilities to hold an unlimited number of Agricultural Promotional Events, and for the two existing facilities on parcels greater than 20 acres, a total of 12 Special Events per year. A total of six Special Events would be permitted at medium parcel-sized study facilities. Chapter 10, Transportation and Circulation, includes a detailed discussion of the total number of visitors anticipated to attend each event and the number of events anticipated to occur every year. As noted therein, a portion of the Agricultural Promotional Events would be Rolling Agricultural Promotional Events, wherein attendees come and go over the course of the event (rolling events). The 50-person occupancy associated with a Rolling Agricultural Promotional Event has been assumed to turn over three times at a rolling event. The total number of Agricultural Promotional Events, Rolling Agricultural Promotional Events, and Special Events that have been assumed to occur at existing study facilities are discussed in the Method of Analysis section of this Chapter.

Agricultural Promotional Events (including Rolling Agricultural Promotional Events) and Special Events would result in an increase in demand for water supplies beyond what currently occurs under the adopted Winery Ordinance. Existing water use associated directly with the wine/beer production process would not be affected by the proposed Zoning Text Amendment. The relatively small quantity of wine/beer purchased and consumed during Agricultural Promotional Events and Special Events would not necessitate an associated increase in production levels at the existing study facilities, as mass quantities are not typically consumed at such events.

Typical water usage for winery events and marketing with on-site catering is approximately 15 gallons per event per visitor.²⁸ Table 11-1 below provides a summary of the estimated net increase in yearly water demand that could occur with implementation of the proposed project. As shown in the table, the project could result in an increase in water demand of up to 1.786 mgd. It is important to note that actual water demands would likely be considerably less, as the existing study facilities would likely host fewer than 202 Agricultural Promotional Events and Rolling Agricultural Promotional Events per year. In addition, this analysis does not account for events that can already be held at existing study facilities under the adopted Winery Ordinance, as it is difficult to accurately estimate water demand from such events in the absence of defined attendance limits. Typically, under CEQA, an EIR is only required to analyze the change from existing conditions. However, this analysis assumes a worst-case scenario, which provides a worst-case estimate.

As noted previously, Goathouse Brewery is located within the NASb of the Sacramento Valley Groundwater Basin, which is characterized as a High Priority Basin under the SGMA. However, the NASb is not identified by the DWR as being in a state of overdraft.²⁹ As of 2004, the groundwater body water balance for the basin was positive, indicating that inflows to the subbasin exceeded outflows.³⁰ According to the Northern California Water Association, the eastern portion of the subbasin is interconnected with permeable soils near the ground surface within the mountainfront area, which allows small streams in the Sierra Nevada foothills to contribute large amounts of recharge to groundwater aquifers. Along the foothills of the Sierra, many wells never declined at all due to the recent 2016 drought and the 2017 rains, along with reduced pumping, filled aquifers above where they were prior, if not higher.³¹

As shown in Table 11-1, the estimated annual water demand associated with events at Goathouse Brewery would be approximately 0.174 mgd, which is relatively modest relative to the overall capacity of the NASb and the existing water demands of the region. Therefore, adequate groundwater supplies would be available to meet the increase in demand created by the additional Agricultural Promotional Events allowed at Goathouse Brewery under the proposed Zoning Text Amendment.

²⁸ Napa County. *Water Availability Analysis (WAA)* [pg. 19]. Adopted May 12, 2015.

²⁹ San Juan Water District. *2015 Urban Water Management Plan* [pg. 6-3]. June 2016.

³⁰ West Placer County Groundwater Management Plan Partners. *Western Placer County Sustainable Yield, Appendix A, Western Placer County Groundwater Balances and Storage Estimates* [pg. 46]. July 2013.

³¹ Northern California Water Association. *Drought resilience and conjunctive use in West Placer County: what more can (should?) be done?* 2017.

**Table 11-1
Net Increase in Water Demand (Annual)**

Winery/Farm Brewery Facility	Rolling Agricultural Promotional Events		Agricultural Promotional Events		Special Events		Total Attendees	Water Demand/Attendee (gal)	Addnl. Water Demand (mg)
	Events/yr	Max. Attendees	Events/yr	Max. Attendees	Events/yr	Max. Attendees			
Dono dal Cielo Vineyard and Winery	8	150	190	50	12	200	13,100	15	0.197
Lone Buffalo Vineyards	8	150	196	50	6	100	11,600	15	0.174
Rancho Roble Vineyards	8	150	196	50	6	100	11,600	15	0.174
Vina Castellano Winery	8	150	196	50	6	100	11,600	15	0.174
Wise Villa Winery & Bistro	8	150	196	50	6	100	11,600	15	0.174
Ciotti Cellars	8	150	196	50	6	100	11,600	15	0.174
Mt. Vernon Winery	8	150	190	50	12	200	13,100	15	0.197
Casque at Flower Farm	8	150	196	50	6	100	11,600	15	0.174
Goathouse Brewery	8	150	196	50	6	100	11,600	15	0.174
Hillenbrand Farmhaus Brewery	8	150	196	50	6	100	11,600	15	0.174
Total:							119,000		1.786

The remaining nine existing study facilities are located within the Sierra Nevada Regional Study Unit. Most of the Sierra Nevada, including the Study Unit, consists of granitic and metamorphic rocks. Fractures in such rocks can contain groundwater. The fracture systems may be interconnected or isolated, resulting in variability in water levels, well yields, and water quality on local and regional scales.³² Because groundwater systems in the Sierra Nevada Regional Study Unit may be discontinuous, drawdown of groundwater levels in one well is less likely to affect groundwater levels in neighboring wells in the area. Furthermore, the maximum net increase in water demand occurring as a result of the events enabled by the proposed Zoning Text Amendment would be 0.174 mgd for each medium parcel-sized facility and 0.197 for each large parcel-sized facility. Such increases in water use would be relatively modest. Therefore, adequate groundwater supplies would be available to meet the increase in demand created by the Agricultural Promotional Events and Special Events allowed at the nine existing study facilities under the proposed Zoning Text Amendment using wells within fractured-rock aquifers.

Based on the above, with implementation of the proposed Zoning Text Amendment, sufficient water supplies would be available to serve the existing study facilities. In addition, the implementation of the proposed Zoning Text Amendment would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management. Thus, a *less-than-significant* impact would occur. It is noted that water supplies needed to serve reasonably foreseeable development, in conjunction with the proposed project, is evaluated in Impact 12-11 of Chapter 12, Cumulative Impacts and Other CEQA Sections, of this EIR.

11-4 Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Based on the analysis below, the impact is *less than significant*.

Most solid waste collected in unincorporated Placer County is delivered to the WPWMA MRF where waste is processed, recyclables are recovered, and residuals are disposed. As a result of the proposed project, Agricultural Promotional Events and Special Events occurring at existing wineries and farm breweries within the County could increase the operational solid waste generation associated with such facilities. Solid waste collection services would be provided by Recology Auburn Placer and the WRSL and MRF.

As described above, the 320-acre WRSL has a remaining capacity of 24,468,271 cubic yards,³³ a maximum daily throughput of 1,900 tons, and a permitted lifespan extending to

³² U.S. Geological Service. *Groundwater Quality in the Sierra Nevada, California*. December 2014.

³³ Western Placer Waste Management Authority. *Comment Letter: Lincoln Meadows Draft Environmental Impact Report*. December 11, 2017.

2058.³⁴ The remaining daily capacity of the facility is approximately 823 tons. The MRF has a permitted processing limit of 2,200 tons per day and 1,014 vehicles per day. The average weekday tonnage received at the MRF for 2016/2017 was 1,191 tons, which is 1,009 tons per day less than the permitted amount.³⁵ Considering the remaining daily capacity at the MRF is 1,009 tons, the MRF has a remaining annual capacity of at least 368,285 tons.

According to a targeted waste characterization study prepared by the California Environmental Protection Agency (CalEPA) Integrated Waste Management Board, public venues and events typically result in a waste disposal rate of approximately 172 pounds per 100 visitors. Based on a conservative estimate of 119,000 additional event attendees per year (see Table 11-1), the Agricultural Promotional Events and Special Events occurring as a result of the proposed project would be expected to produce approximately 102.23 tons of solid waste annually, or approximately 0.28 tons per day. The project's anticipated daily production would represent approximately 0.034 percent of the WRSL's remaining daily capacity and approximately 0.028 percent of the MRF's remaining daily capacity. Therefore, the project would not be considered to contribute significant amounts of waste to the WRSL or the MRF, and both facilities have sufficient capacity to handle the estimated increase in waste generation resulting from the project.

Based on the above, solid waste generated as a result of the proposed Zoning Text Amendment would not exceed the permitted capacity of the WRSL and MRF; as a result, the proposed project would be served by a landfill with adequate capacity and a *less-than-significant* impact would result.

Mitigation Measure(s)

None required.

³⁴ Western Placer Waste Management Authority. *About WPWMA*. Available at <http://www.wpwma.com/about-wpwma/>. Accessed March 2017.

³⁵ Western Placer Waste Management Authority. *Joint Technical Document* [pg. 2-5]. Revised August 2017.