4.3 UTILITIES AND SERVICE SYSTEMS

This section of the Draft Subsequent Environmental Impact Report (Draft SEIR) evaluates the potential impacts to utilities and service systems as a result of the proposed Project, as compared to the General Plan EIR.

4.3.1 Environmental Setting

4.3.1.1 REGULATORY BACKGROUND

Federal

Clean Water Act and National Pollution Elimination Discharge System

Wastewater treatment, before effluent is discharged to Waters of the United States, is required by the federal Clean Water Act (United States Code, Title 33, Sections 1251 et seq.) Requirements for waste discharges from publicly owned treatment works to navigable waters are addressed in National Pollution Elimination Discharge System (NPDES) regulations under the Clean Water Act. NPDES permits for such discharges in the project region are issued by the Santa Ana Regional Water Quality Control Board.

Federal Safe Drinking Water Act

The o Act, which is administered by the United States Environmental Protection Agency (EPA), ensures the quality of drinking water. Under this Act, the EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. The Department of Public Health administers the Federal Safe Drinking Water Act's regulations in California.

United States Environmental Protection Agency (EPA)

The 1986 amendments to the Safe Drinking Water Act and the 1987 amendments to the Clean Water Act established the Environmental Protection Agency (EPA) as the primary authority for water programs. The EPA is the federal agency responsible for providing clean and safe surface water, groundwater, and drinking water, and protecting and restoring aquatic ecosystems. The City of Redlands is in EPA Region 9 (Pacific Southwest).

State

California Urban Water Conservation Council

The San Bernardino Valley Municipal Water District (SBVMWD) is a signatory to the California Urban Water Conservation Council (CUWQCC) Memorandum of Understanding (MOU) Regarding Urban Water Conservation in California; the City of Redlands is a retail agency within the SBVMWD service area (SBVMWD 2017). The CUWCC was established to increase efficient water use statewide through partnerships among urban water agencies, public interest organizations, and private entities. The CUWCC's goal is to integrate urban water conservation best management practices (BMPs) into planning and managing

California's water resources. Those signing the MOU pledge to develop and implement 14 comprehensive BMPs.

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

The State's updated Model Landscape Ordinance requires cities and counties to adopt landscape water conservation ordinances by January 31, 2010. In 2009, the City of Redlands passed Ordinance No. 2724 adopting a Drought Response Plan and Water Conservation Program that has been implemented in the City's Municipal Code Chapter 15.54, *Water Efficient Landscape Requirements*, in response to Assembly 1881.

California State Water Resources Control Board

The State Water Resources Control Board (SWRCB) and nine regional water quality control boards address water quality and rights regulation. Created in 1967, the five-member SWRCB protects water quality by setting statewide policy, coordinating and supporting the Regional Water Quality Control Board (RWQCB) efforts, and reviewing petitions that contest the actions of the RWQCB. The SWRCB is also solely responsible for allocating surface water rights. On May 2, 2006, the SWRCB adopted a General Waste Discharge Requirement (WDR) (Order No, 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than one mile of sewer pipe. The Order provides a consistent statewide approach to reducing sanitary sewer overflows (SSOs) by requiring public sewer system operators to take all feasible measures to control the volume of waste discharged into the system, to prevent sanitary sewer waste from entering the storm sewer system, and to develop a sewer system management plan. In 2009, the Redlands City Council approved the City's Sewer System Management Plan (SSMP) and includes an overflow emergency response plan; operation and maintenance program; fats, oils, and grease plan; design and performance standards; system capacity plan; and communications program.

20x2020 Water Conservation Plan

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed "SBX7-7." SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 requires urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

Senate Bills 610 and 221

To assist water suppliers, cities, and counties in integrating water and land use planning, the state passed Senate Bill (SB) 610 (Chapter 643, Statutes of 2001) and SB 221 (Chapter 642, Statutes of 2001), effective January 1, 2002. SB 610 and SB 221 improve the link between information of water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 are companion measures that promote more collaborative planning between local water suppliers, cities, and counties. Both require detailed

information regarding water availability to be provided to city and county decision makers prior to approval of specified large development projects. This detailed information must be included in the administrative record as the evidentiary basis for an approval action by the city or county on such projects. The statutes recognized local control and decision making regarding the availability of water for projects and the approval of projects. SB 610 and SB 221 are not applicable to general plans, however, future projects subject to SB 610 and SB 221 are required to provide a water supply assessment. Under SB 610, water supply assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects subject to CEQA, as defined in Water Code Section 10912[a]. Under SB 221, approval by a city or county of certain types of residential subdivision requires an affirmative verification of sufficient water supply. SB 221 is intended as a fail-safe to ensure collaboration on finding the needed water supplies to serve a new large subdivision before construction begins. General plans serve as an important planning tool for the local water supply when they prepare the 20-year vision for the Urban Water Management Plan (UWMP).

Urban Water Management Planning Act

The Urban Water Management Planning Act of 1983, California Water Code Sections 10610 et seq., requires preparation of a plan that:

- Plans for water supply and assesses reliability of each source of water, over a 20-year period, in 5-year increments.
- Identifies and quantifies adequate water supplies, including recycled water, for existing and future demands in normal, single-dry, and multiple-dry years.
- Implements conservation and the efficient use of urban water supplies. Significant new requirements for quantified demand reductions have been added by the Water Conservation Act of 2009 (SBX7-7), which amends the act and adds new water conservation provisions to the Water Code.

The Urban Water Management Planning Act states that every urban water supplier that provides water to 3,000 or more customers or provides over 3,000 acre-feet of water per year (afy) should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of customers during normal, dry, and multiple-dry years. The UWMP is identified as a planning document that can be used by a water supplier to meet the standards in both SB 210 and SB 221.

Principles Governing CEQA Analysis of Water Supply

In *Vineyard Area Citizens for Responsible Growth, Inc., v. City of Rancho Cordova* (February 1, 2007), the California Supreme Court articulated the following principles for analysis of future water supplies for projects subject to CEQA:

- To meet CEQA's informational purposes, the EIR must present sufficient facts to decision makers to evaluate the pros and cons of supplying the necessary amount of water to the project.
- CEQA analysis for large, multiphase projects must assume that all phases of the project will eventually be built, and the EIR must analyze, to the extent reasonably possible, the impacts of providing water to the

entire project. Tiering cannot be used to defer water supply analysis until future phases of the project are built.

- CEQA analysis cannot rely on "paper water." The EIR must discuss why the identified water should reasonably be expected to be available. Future water supplies must be likely rather than speculative.

- When there is some uncertainty regarding future availability of water, an EIR should acknowledge the degree of uncertainty, include a discussion of possible alternative sources, and identify the environmental impacts of such alternative sources. Where a full discussion still leaves some uncertainty about long-term water supply, mitigation measures for curtailing future development in the event that intended sources become unavailable may become a part of the EIR's approach.

- The EIR does not need to show that water supplies are definitely ensured, because such a degree of certainty would be "unworkable, as it would require water planning to far outpace land use planning." The requisite degree of certainty of a project's water supply varies with the stage of project approval. CEQA does not require large projects, at the early planning phase, to provide a high degree of certainty regarding long-term future water supplies.

- The EIR analysis may rely on existing urban water management plans, as long as the project's demand was included in the water management plan's future demand accounting.

- The ultimate question under CEQA is not whether an EIR establishes a likely source of water, but whether it adequately addresses the reasonably foreseeable impacts of supplying water to the project.

California Emergency Graywater Regulations

In 2009, as part of the Governor's declared State of Emergency, Chapter 16A, *Nonpotable Water Reuse System,* was incorporated into the 2007 California Plumbing Code. Chapter 16A establishes minimum requirements for installing graywater systems in residential occupancies regulated by the California Department of Housing and Community Development, and provides guidance and flexibility designed to encourage the use of graywater. The purpose of the regulations is to conserve water by facilitating greater reuse of discharge from laundry, shower, sink, and similar sources for irrigation and/or indoor use; to reduce the number of noncompliant graywater systems by making legal compliance easily achievable; to provide guidance for avoiding potentially unhealthful conditions; and to provide an alternative way to relieve stress on private sewage disposal systems.

California Integrated Waste Management Act (AB 939)

California's Integrated Waste Management Act of 1989 (AB 939, Public Resources Code 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

Solid Waste Diversion (AB 341)

AB 341, which came into effect on July 1, 2012, requires that commercial enterprises that generate four cubic yards or more of solid waste on a weekly basis participate in recycling programs. This requirement also includes multifamily housing complexes of five units or more, regardless of the amount of solid waste generated each week. AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses.

California Department of Resources Recycling and Recovery

California Department of Resources Recycling and Recovery (CalRecycle) is the state's leading authority on recycling, waste reduction, and product reuse. Mandated responsibilities of CalRecycle include reducing waste, promoting the management of all materials to their highest and best use, and protecting public health and safety and the environment.

California Solid Waste Reuse and Recycling Act of 1991

The California Solid Waste Reuse and Recycling Access Act (AB 1327, California Public Resources Code Sections 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The Act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

Disposal Measurement System Act of 2008 (SB 1016)

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

California Green Building Standards Code

Section 5.408 of the 2013 California Green Building Standards Code (Title 24, California Code of Regulations, Part 11) requires that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

Regional

Upper Santa Ana River Watershed Integrated Regional Water Management Plan (IRWMP)

The most current Integrated Regional Water Management Plan (IRWMP) was developed in 2015; the City was involved in developing and updating the IRWMP. The IRWMP's goals include improving water supply reliability, balancing flood management and increasing stormwater recharge, improving water quality, and improving habitat and open space.

San Bernardino Valley Regional Urban Water Management Plan (RUWMP)

The 2015 Regional Urban Water Management Plan (RUWMP) provides a summary of supplies and demand anticipated for the years 2015 to 2040; the City of Redlands is one of the 10 agencies included in the RUWMP. The RUWMP was prepared consistent with SBX7-7, the California Management Planning Act, and the 2015 DWR Guidebook for Urban Water Suppliers.

Local

City of Redlands Water Conservation Plan

The City of Redlands Municipal Code, Chapter 13.06, *Water Conservation Plan*, establishes ways to reduce the nonessential use of water in order to minimize the effects of a water supply shortage due to emergency conditions or droughts. The Plan provides for mandatory cutbacks in water use so as to not endanger the welfare, health, and safety of citizens and property owners within the City. The Water Conservation Plan includes four stages based on the water shortage severity – Stage I, Voluntary Conservation; Stage II, Mandatory Compliance (Water Alert); Stage III, Mandatory Compliance (Water Warning); and Stage IV, Mandatory Compliance (Water Emergency). The Plan may be enacted by the City Council following a public hearing or, if the City Council cannot meet in time, by the City Manager.

City of Redlands Recycling Ordinance

Chapter 13.66, *Recycling Requirements for Specified Development Activity*, of the City's Municipal Code sets forth requirements for recycling for specific development activities to facilitate the City's compliance with state recycling mandates, remove architectural barriers to recycling, and ensure construction and demolition debris is recycled. Chapter 13.66 is applicable to applicants for the demolition of any structure; construction, additions, or improvements to any building other than a single-family residential building; and re-roofing activities. As a condition of approval, applicants are required to submit for review and approval a completed Site and Building Recycling Plan to the Facilities and Community Services Department (formerly the Quality of Life Department), which should include the location and design of all existing and proposed recycling and trash enclosures, design of site access points for solid waste and recycling collection vehicles, site grading design, operational criteria for the proposed use of the property, and capacity requirements for the waste generation of the building. Additionally, Chapter 13.66 specifies requirements for Construction and Demolition Recycling Plans.

City of Redlands Water Efficient Landscape Requirements

The City's Municipal Code, Chapter 15.54, *Water Efficient Landscape Requirements*, establishes requirements to promote the benefits provided by landscapes while recognizing the need to use water as efficiently as possible. Chapter 15.54 requires applicable landscaping projects to submit a landscape documentation package that contains project information; hydrozone information table; water budget calculations; soil management report; and landscape, irrigation, and grading design plans. The Chapter establishes requirements that include provisions for recycled water irrigation systems, and encourages BMPs to increase on-site retention and infiltration.

2016 California Plumbing Code

The City has adopted the 2016 California Building Standards Code, which includes the California Plumbing Code (California Code of Regulations, Title 24, Part 5). The Code includes provisions for the design, materials, and installation of water supply and distribution fixtures, sanitary drainage, indirect waste, storm drainage, and non-potable water sources for projects.

4.3.1.2 EXISTING CONDITIONS

Water and Wastewater Systems

Water Supply

The City provides water to the Project area. The City's water system is maintained by its Municipal Utilities and Engineering Department (MUED) and covers most of the City, a small portion of Loma Linda, the unincorporated "Donut Hole," Mentone, and most of Crafton. The City receives its water from the Mill Creek Watershed, Santa Ana River Watershed, local ground water, and the California State Water Project (Redlands 2019a).

Domestic water sources for the City consist of surface water and groundwater production. The City is entitled to surface water from Mill Creek and the Santa Ana River. Water from Mill Creek is available on the basis of rights owned directly by the City, and by virtue of the City's direct and indirect stock ownership in the Crafton Water Company, which has established rights on the remainder of Mill Creek flows. The City's entitlement to Santa Ana River flows has a basis in direct and indirect stock ownership in Bear Valley Mutual Water Company (BVMWC) and other mutual water companies. Water from the Santa Ana River is treated at the Horace Hinckley Surface Water Treatment Plant and water from Mill Creek is treated at the Henry Tate Water Treatment Plant (Redlands 2019a). The City receives its water supply from four sources: imported water, groundwater, surface water, and recycled water (SBVMWD 2017).

Imported Water

Imported State Water Project (SWP) water is available to the City. The San Bernardino Valley Municipal Water District (SBVMWD) has an entitlement of approximately 102,600-acre feet per year (afy) of SWP water (SBVMWD 2015). This water is transported from the Feather River in northern California, along the California Aqueduct, and to the Aqueduct's East Branch, where it is conveyed to the City via the 17-mile Foothill Pipeline.

SBVMWD is the agency responsible for delivering water to its customers and for groundwater recharge in an area extending from Fontana to Yucaipa. The City of Redlands may purchase SWP water from SBVMWD. The City has no entitlement to a set amount of water, but may request it in competition with other cities served by SBVMWD. From the various private and mutual water companies that supply water to the City, the City has the highest shares in the BVMWC (Redlands 2019b). When required, SWP water is treated at the Hinkley and Tate WTPs (Redlands 2019a). Based on a 10-year average, purchased imported water, used by the City at its treatment plants, totals 3 percent of the City's annual water production (SBVMWD 2017).

Groundwater

The City owns 15 wells that pump directly into the system or into reservoirs, which are adequately separated from sewage facilities (Redlands 2019a). These wells are free from serious flooding hazard. The City also receives water from two wells that are owned by the South Mountain Water Company (Redlands 2019a). The City draws from the Bunker Hill and Yucaipa subbasins of the Upper Santa Ana Valley Groundwater Basin. The Bunker Hill and Yucaipa subbasins have a surface area of approximately 89,600 acres and 25,300 acres, respectively (SBVMWD 2015). The Bunker Hill and Yucaipa subbasins have a groundwater storage capacity of 5,976,000 acre feet (af) and 808,000 af, respectively (SBVMWD 2015).

On July 21, 2004, SBVMWD, Western Municipal Water District of Riverside County, EVWD, Dear Valley Mutual Water Company, Lugonia Water Company, North Fork Water Company, the City of Redlands, and the Redlands Water Company, signed a settlement known as the Seven Oaks Accord; the Accord calls for SBVMWD and Western Municipal Water District of Riverside County to recognize the prior rights of the water users for a portion of the natural flow of the Santa Ana River. The Accord requires SBVMWD and Western Municipal Water District of Riverside County to develop a groundwater spreading program in cooperation with other parties that is intended to maintain groundwater levels (SBVMWD 2017).

Moreover, due to the significance of groundwater management in the IRWM Region, the following three groundwater management needs were established for the Region:

1. Maximize Conjunctive Use: The BTAC has developed Conjunctive Use Guidelines for the SBBA that are intended to optimize the storage potential in this basin. Conjunctive use potential should also be evaluated for the other basins in the Region.

2. Reduce the Risk of Liquefaction: A significant portion of the SBBA—generally, the downtown and southern portions of the City of San Bernardino—is an area of historically high groundwater. Groundwater levels in this area have been artesian in the past. When high groundwater is combined with the thick layer of sand in the aquifer it can cause liquefaction in an earthquake.

3. Protect Groundwater Quality: Groundwater management is currently influenced by the presence of contamination plumes. Most of these plumes resulted from historic military and industrial operations in the Region.

Because groundwater is such an important supply for the Region, these needs were incorporated into the overall IRWM Objectives (SBVMWD 2015).

Surface Water

The City receives its surface water from the Mill Creek Watershed, Santa Ana River Watershed, and SWP water, which totals 45.9 percent of the City's annual water production, based on a 10-year average (SBVMWD 2017).

Wastewater and Recycled Water

The City owns and operates a wastewater collection system subject to a California Regional Water Quality Control Board: Santa Ana Region (RWQCB), waste discharge requirements established by Order No. R8-2006-0008. The Redlands Wastewater Treatment Facility can treat 9.5 million gallons per day of wastewater and is currently processing approximately 6 million gallons per day (Redlands 2019c). Additionally, recycled water from the Redlands Wastewater Treatment Plant is used for basin recharge, and irrigation and industrial purposes, including supplying water to the Southern California Edison Mountainview Power Plant (SBVMWD 2015). The Redlands Wastewater Treatment Facility has a 7.2-million-gallon tertiary treatment capacity (SBVMWD 2017). All wastewater collected and treated is from the City's service area and discharged within the City's service area; the City utilizes all wastewater collected and treated at the Redlands Wastewater Treatment Facility in its service area for distribution to customers and percolation into Bunker Hill (SBVMWD 2017). Treated wastewater distributed to customers is tertiary treated, which is deemed recycled water (SBVMWD 2017). Based on 2015 volumes, approximately 45 percent of treated wastewater was used as recycled water supply for customers, and 55 percent was used for recharge (SBVMWD 2017).

Water Infrastructure

Potable and Raw Water

The City operates two water treatment plants and uses 15 wells, 37 booster pumps, and 18 reservoirs (SBVMWD 2017; Redlands 2019a). The City serves approximately 24,000 customers with a 5-year average potable water demand of 26,165 acre feet per year (SBVMWD 2017). The City also owns other facilities that are currently not in use due to age, contamination, or other factors (SBVMWD 2017).

The Tate Water Treatment Plant (WTP)'s primary raw water source is Mill Creek (Redlands 2019a). The Tate WTP treats water with two contact clarification type clarifiers, which provide flocculation and sedimentation treatment, and four dual media gravity filters. The design capacity is 20 million gallons per day (Redlands 2019a). The City has added enhancements to the Tate WTP that provide more water supply reliability by allowing SWP water to be mixed with Mill Creek water for treatment (Redlands 2019a).

Distribution System

Existing water transmission and distribution pipelines in the system range in size from 1 to 36 inches in diameter (Redlands 2019a). There are approximately 400 miles of pipeline and 21,500 metered connections that serve domestic water. The system has a 54.5 million gallon maximum storage capacity (Redlands 2019a). The City's service area varies in elevation from approximately 1,100 to 2,600 feet above sea level. This large range of elevation requires a total of seven major pressure zones and two sub-zones to adequately serve all consumers with reasonable water pressures (Redlands 2019a).

Water Consumption

The City's average daily water consumption is 27 million gallons per day with a maximum daily of 50 million gallons per day in the summer (Redlands 2019a). The average consumption per capita is approximately 320 gallons per day (Redlands 2019a).

Stormwater System

The City has a long history of flooding during moderate to severe storm events; one of the main causes for flooding is the lack of conveyance capacity in the historical channel of Mission Zanja (Redlands 2014). The Mission Zanja is a surface channel that flows from the Crafton Hills area, west to 9th Street, near Downtown Redlands, where it transitions into a box culvert (Redlands 2014). The City's stormwater drainage system serves an approximately 37 square miles. The Downtown drainage system is composed of reinforced concrete pipe and corrugated metal pipe which range in diameter from 8 inches to 96 inches, box culverts, covered rubble rock and concrete channels, and concrete and natural drains. The City's 2014 Master Plan of Drainage identifies infrastructure necessary to help protect the City from a major storm, provides long-range planning for implementation and development of citywide drainage facilities, and determines the cost of implementing the facilities to add capacity to the existing stormwater drainage infrastructure.

Solid Waste

Solid waste collection services are provided by the City for areas within the City limits, including the Project area. The City's Facilities and Community Services Department provides solid waste collection, green waste collection, and curbside recycling. Hazardous waste is managed by the Redlands Fire Department which operates a household hazardous disposal site on a weekly basis.

4.3.2 Methodology

The proposed Project does not increase the number of potential housing units within the TVPA beyond the number evaluated in the General Plan EIR. The proposed Project eliminates the requirements of a 4/5ths vote to approve a project with 27 units to the acre, or a structure in excess of two stories or greater than 35 feet height. For purposes of the Draft SEIR, the difference between the current 18 units per acre permitted with a majority vote, and the 27 units to the acre equals 171 dwelling units within the High Density Residential Zone. These are not considered additional units as the maximum of 27 units to the acre was evaluated in the General Plan EIR but are considered likely if the proposed Project is approved. According to Table 4.1-2 in Chapter 4.1, *Land Use and Housing*, of this SEIR, the change in the number of multi-family dwelling units, if all the available land zoned High Density Residential in the TVPA was able to accommodate the maximum density (27 units/acre) allowable under the 2035 General Plan, is a total of 171 units, or 453 people. The assumptions for utility demand made in the General Plan EIR have been applied to these figures and compared to the conclusions in the General Plan EIR.

4.3.3 Thresholds of Significance

According to Appendix G of the State CEQA Guidelines, would the Project:

U-1 Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

U-2 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

U-3 Result in a determination by the waste water 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?

U-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?

U-5 Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

4.3.4 Summary of Impacts Associated with the General Plan EIR

The General Plan EIR concluded that the 2035 General Plan would result in less than significant impacts to utilities and service systems, including the need for the relocation or construction of water, wastewater treatment, storm drainage, and other facilities; sufficient water supplies; and adequate wastewater treatment facility and landfill capacities. The General Plan EIR indicated that future development would generate additional demand for water, wastewater, stormwater, and solid waste services; however, compliance with federal, state, and local regulations, as well as the 2035 General Plan policies and actions would ensure that the impacts of the 2035 General Plan would be less than significant. The General Plan EIR also indicated that compliance with federal, state, and local water and wastewater regulations and the 2035 General Plan policies and actions would reduce potential impacts on water and wastewater infrastructure needs to less than significant levels. According to the General Plan EIR, compliance with City's grading, drainage, and stormwater regulations would ensure any new facilities required to manage stormwater would have a less than significant impact on the environment. The General Plan EIR stated that potential impacts on solid waste would be reduced through compliance with solid waste regulations such as AB 341 which has been set by CalRecycle to provide 75 percent recycling, composting, or source reduction of solid waste by 2020. Additionally, the General Plan EIR indicated that the implementation of the 2035 General Plan policies and actions would assist the City in complying with this new waste reduction goal; therefore, impacts of the 2035 General Plan Update on solid waste would be less than significant.

4.3.5 Environmental Impacts of the Proposed Project

Impact 4.3-1: Existing and/or proposed facilities would be able to accommodate project-generated utility demands. [Threshold U-1]

The General Plan EIR projected future water supply and demand for the 2015 San Bernardino Valley Regional Urban Water Management Plan (RUWMP) based on existing water system infrastructure. For the General Plan buildout year of 2035, the City assumed a service population of 95,000 which is greater than the 2035 Planning Area population of 93,624 projected for the 2035 General Plan. As stated in the General

Plan EIR, the 2035 demand for potable and raw water is projected to be 30,313 acre feet (af[1]), or an average of 27 million gallons per day (mgd); this amount can sufficiently be accommodated by the City's existing water treatment plants and delivery infrastructure which have a capacity of 35 mgd. The City's 2015 water use was 234 gallons per capita per day (GPCD) (SBVMWD 2017). The 171 housing units would result in approximately 453 residents in the TVPA by buildout of the 2035 General Plan, which was analyzed in the General Plan EIR, the water use would 106,002 GPCD[2], or roughly 0.11 MGD. This water use is within the 35 MGD capacity of the City's existing water treatment plants and distribution infrastructure.

Additionally, according to the General Plan EIR, the City has a projected average wastewater flow of 6.75 mgd at buildout of the 2035 General Plan; as the projected flow is within the 9.5 mgd secondary capacity and 7.2 mgd tertiary capacity, no new or expanded treatment facilities are required to serve the 2035 General Plan population at buildout. Monthly effluent reports to the RWQCB show that the discharge permit levels for sodium and chloride are exceeded. The City has determined that the exceedances are as a result of wear on filtration media at the plant. The filtration media is a wear-item at the facility and needs to be replaced periodically to remain within discharge requirements. Replacement of the media is considered an on-going operation and maintenance issue for the facility. The physical permitted capacity of the wastewater treatment plant does not need to be expanded to accommodate the projected population in the 2035 General Plan.

Moreover, as stated in the General Plan EIR, development proposed under the 2035 General Plan would allow for the redevelopment of existing developed areas that would generate increased stormwater volumes, which in turn could create a need for new infrastructure. The General Plan EIR indicates that land use designations in the 2035 General Plan would focus new development within the developed footprint of the City, allowing infill projects to take advantage of existing stormwater infrastructure; where most sites that may be developed or redeveloped in the future are already built with impervious surfaces.

The proposed Project would be consistent with the overall growth forecast assumed in the General Plan EIR, as land uses are limited to those in the 2035 General Plan. Therefore, the proposed Project would not require or result in the relocation or construction of existing or proposed facilities beyond what was considered in the General Plan EIR, and no new or substantially greater impacts would occur when compared to those identified in the General Plan EIR. Similar to the General Plan EIR, the proposed Project would comply with state and local regulations, as well as implement the policies and actions of the General Plan EIR: 4-P.56, 4-A.145, 4-A.146, 4-A.148, 6-A.39, 7-A.149, 8-P.4, 8-P.5, 8-P.6, 8-A.22, 8-A.23, 8-A.24, 8-A.25, 8-A.26, 8-A.28, 8-A.29, 6-P.19, 6-P.20, 6-P.21, 6-A.34, 6-A.35, 6-A.36, 6-A.37, 6-A.38, 6-A.39, 6-A.40, 6-A.41, 6-A.42, 6-A.43, and 6-A.44. For example, Action 6-A.39 requires that new development provides landscaping and revegetation of graded or disturbed areas with drought-tolerant native or non-invasive plants. Overall, the proposed Project would be consistent with the less than significant impacts identified in the General Plan EIR, as indicated on pages 3.14-19 through 3.14-21 and page 3.14-25 of the General Plan EIR, and the proposed project would have no new or more significant impacts in this regard.

1 Acre Foot = 325,851 gallons
2 234 GPCD x 453 people = 106,002 GPCD

Impact 4.3-2: Available water supplies are sufficient to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. [Threshold U-2]

The General Plan EIR stated that the demand for potable and raw water at buildout for a population of 95,000 in 2035 is projected to be 30,313 af, and demand for recycled water is projected to be 5,402 af; the total demand would be 35,715 af in 2035. The additional 106,002 GPCD represents a total demand of 0.33 af. According to the 2015 RUWMP, the City's projected water supply for 2035 is 64,098 af from existing sources and entitlements (SBVMWD 2017).

According to the General Plan EIR, the City has identified adequate supplies from existing water sources and entitlements to meet demand through 2035. The General Plan EIR indicated that the projected surface water diversions and groundwater extractions from the San Bernardino Basin Area (Bunker Hill Subbasin) in 2035 would be 34,549 af for a population of 101,644. The General Plan EIR stated that the 2015 IRWMP found that this volume, in addition to the requirements of other agencies relying on the Basin Area, could be accommodated as long as extractions over safe yield are recharged to the Basin. The IRWMP showed that projected extractions from the Yucaipa Subbasin by the City of 1,816 af in 2035, would be within the safe yield amount for Yucaipa Subbasin, even when combined with the demands from other agencies, as indicated in the General Plan EIR. Moreover, the City would have adequate supply for multiple dry years; in the event of a water shortage, the City would rely on its Water Conservation Plan. While a series of dry years would reduce supply, the City has the potential to utilize multiple sources and offset normal supplies with additional groundwater and conservation efforts without seeking additional entitlements or water sources, as stated in the General Plan EIR.

The proposed Project does not propose any specific development projects and would not result in an increase or change in the overall buildout land use assumptions analyzed in the General Plan EIR. The proposed Project would not result in any new impacts or increase the severity of impacts, with respect to water supplies. As with the General Plan EIR, the proposed Project would implement the applicable policies and actions of the 2035 General Plan, and would be in compliance with local and regional water management plans, as well as with SBx7-7. Therefore, no new or substantially greater impacts to water supplies would occur under the proposed Project when compared to those identified in the General Plan EIR. The General Plan EIR policies and actions, 8-P.4, 8-P.5, 8-P.6, 8-A.22, 8-A.23, 8-A.24, 8-A.25, 8-A.26, 8-A.28, 8-A.29, 6-P.20, 6-P.21, 6-A.36, 6-A.38, 6-A.39, 7-P.27, and 8-A.16, would continue to be implemented. For example, Action 6-A.39 calls for the maximization of the amount of pervious surfaces in public spaces to permit the percolation of urban runoff. The proposed Project would not result in any new or more significant impacts in this regard, beyond the less than significant impacts identified in the General Plan EIR, on page 3.14-29 of the General Plan EIR.

Impact 4.3-3: Project-generated wastewater could be adequately treated by the wastewater service provider for the project. [Threshold U-3]

According to the General Plan EIR, future residential uses in the City could generate additional wastewater, which would result in an increase in wastewater conveyance, collection, and treatment needs over current levels. As discussed in Impact 4.3-1, the existing wastewater treatment capacity would be adequate to serve

the 6.75 mgd flows projected for 2035; therefore, new or expanded facilities would not be required. The General Plan EIR indicated that the goals and policies of the 2035 General Plan that aim to conserve water, by curbing demand for domestic and commercial purposes, ensure coordinated planning for the provision of public facilities including water infrastructure, and ensure that utilities be designed and constructed to preserve the natural character of an area; these policies would assist in reducing the demand on existing treatment infrastructure and allow for meaningful consideration of potential impacts of any future decisions regarding the provision of new infrastructure. In addition to the policies and goals of the 2035 General Plan, current regulations require compliance with water quality standards and would not allow for the development of proposed projects without adequate utility capacity, including wastewater treatment capacity.

Monthly effluent reports to the RWQCB show that the discharge permit levels for sodium and chloride are exceeded. The City has determined that the exceedances are as a result of wear on filtration media at the plant. The filtration media is a wear-item at the facility and needs to be replaced periodically to remain within discharge requirements. Replacement of the media is considered an on-going operation and maintenance issue for the facility. The physical permitted capacity of the wastewater treatment plant does not need to be expanded to accommodate the projected population in the 2035 General Plan. The proposed Ballot Initiative would allow the City Council to consider future development projects within the TVPA without the burden of the annual residential dwelling unit limitation. The proposed Project does not propose specific development projects and would not result in an increase or change in the overall buildout of land use assumptions analyzed in the General Plan EIR. The proposed Project would not result in any new impacts or increase the severity of impacts, with respect to wastewater capacity. Future development allowed under the 2035 General Plan would be reviewed by the City and the applicable wastewater providers to determine that sufficient capacity exists to serve the development. As with the General Plan EIR, the proposed Project would implement the applicable General Plan policies and actions, A-P.56, 4-A.145, 4-A.146, 4-A.148, 8-P.4, 8-P.5, 8-P.6, 8-A.22, 8-A.23, 8-A.24, 8-A.25, 8-A.26, 8-A.27, 8-A.28, 8-A.29, and would comply with federal, state, and local regulations. Therefore, the proposed Project would not result in new or more significant impacts in this regard, beyond the less than significant impacts of the General Plan EIR, as identified on page 3.14-30 of the General Plan EIR.

Impact 4.3-4: Existing and/or proposed facilities would be able to accommodate project-generated solid waste and comply with related solid waste regulations. [Thresholds U-4 and U-5]

The City provides solid waste collection services for the Project area. Solid waste is primarily disposed of at the California Street Landfill and the San Timoteo Sanitary Landfill operated by the City of Redlands and the County of San Bernardino, respectively, both within the City limits. The daily maximum throughput of the California Street Landfill is 829 tons/day, and 2,000 tons/day for the San Timoteo Sanitary Landfill (CalRecycle 2019a; CalRecycle 2019b). The California Street Landfill has a maximum permitted capacity of 10,000,000 cubic yards, and a remaining capacity of 6,800,000 cubic yards; the Landfill has an estimated cease operation date of January 1, 2042 (CalRecycle 2019a). The San Timoteo Sanitary Landfill has a maximum permitted capacity of 20,400,000 cubic yards, and a remaining capacity of 11,402,000 cubic yards; the Landfill has an estimated cease operation date of January 1, 2043 (CalRecycle 2019b).

AB 939 mandated California to generate a 25 percent diversion rate by 1995 and a 50 percent diversion rate by 2020; California diverted 52 percent of its waste from landfills in 2005. Therefore, the state, including the City of Redlands, reached this goal and is in compliance with the law, according to the General Plan EIR. Chapter 13.66, *Recycling Requirements for Specified Development Activity,* of the City's Municipal Code establishes requirements for recycling, including access points for solid waste and recycling collection vehicles, design of recycling and trash enclosures, as well as capacity requirements for waste generation of buildings, in order to facilitate compliance with state recycling mandates.

According to the General Plan EIR, if the City produces 60,000 tons of disposal per year for the next 20 years, it would only fill 24 percent of the remaining space in the landfills (5,000,000 tons). The 171 multi-family dwelling units, that could be built if all the available land zoned High Density Residential within the TVPA was able to accommodate the maximum density allowable in the 2035 General Plan, would generate 872 lbs/day[3] of solid waste which would be 5,093,064 lbs or 2,547 tons of disposal, over the next 16 years. As the General Plan EIR included the unit potential from the proposed Project, approval of the Project would not result in adverse impacts on landfill facilities.

As previously indicated, the proposed Project does not propose any specific development projects and would not result in an increase or change in the overall buildout land use assumptions analyzed in the General Plan EIR. The proposed Project would not result in any new impacts or increase the severity of impacts, with respect to solid waste. As with the General Plan EIR, development of future land uses, as designated in the 2035 General Plan, would be required to comply with federal, state, and local statutes and regulations pertaining to solid waste and recycling, as well as the applicable 2035 General Plan policies and actions, 8-P.7, 8-A.30, 8-A.31, 8-A.32, 8-A.33, 8-A.34, 8-A.35, 8-A.36, 8-A.37, 8-A.38, 8-A.42, which would further ensure compliance with applicable regulations. For example, Policy 8-P.7 calls for the reduction of the generation of solid waste, including household hazardous waste, and recycle those materials that are used, to slow the filling of local and regional landfills, which would reduce impacts to landfills.

Therefore, no new or substantially greater impacts to solid waste would occur under the proposed Project when compared to those identified in the General Plan EIR. The proposed Project would not result in new or more significant impacts in this regard, beyond the less than significant impacts identified in the General Plan EIR on page 3.14-33, in regard to landfill capacity, and the no impact level of significance identified on page 3.14-35 of the General Plan EIR, in regard to violating regulations related to solid waste.

4.3.6 Cumulative Impacts

Cumulative impacts are limited to the TVPA, and all other measures of the 2035 General Plan and growth management ordinance would continue to apply for the remainder of the City. Implementation of future projects would require project-specific environmental analyses to evaluate utility facilities, wastewater capacities, water supplies, and landfill capacities that would serve the individual projects. Table ES-2 on page ES-5 of the General Plan EIR shows that cumulative current and future projects in the City would result in

[3] 5.1 lbs/dwelling unit/day (average of multifamily disposal rate, CalRecycle 2019c)
171 units x 5.1 lbs/dwelling unit/day = 872.1 lbs/dwelling unit/day
872 lbs/dwelling unit/day x 365 days = 318,316.5 lbs/dwelling unit/year
318,316.5 lbs/dwelling unit/year x 16 years (year 2035 – year 2019) = 5,093,064 lbs/dwelling unit = 2546.532 tons/dwelling unit

an increase of 4,355 dwelling units. The proposed Project represents approximately 4 percent of the total estimated units from vacant. High Density Residential land within the TVPA.

The 2035 General Plan projected an increase in dwelling units and residents within the City and the General Plan EIR determined that future growth would result in an increased demand for utilities. However, no significant impacts are anticipated, as the increase in the demand for utilities is within the estimates evaluated in the General Plan EIR. Furthermore, as noted on page 3.14-18 of the General Plan EIR, compliance with federal, state, and local regulations, as well as the 2035 General Plan policies and actions would ensure that potential environmental impacts of individual projects would be reduced to less than significant. The proposed Project does not include development projects and would not result in an increase or change in the overall buildout of land use assumptions analyzed in the General Plan EIR. Overall, no significant cumulative impact is anticipated, and the proposed Project's contribution is not considered cumulatively considerable.

4.3.7 References

California Department of Resources Recycling and Recovery (CalRecycle). 2019a, July 12. Facility/Site Summary Details: California Street Landfill (36-AA-0017). https://www2.calrecycle.ca.gov/swfacilities/Directory/36-AA-0017/

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Redlands. City of. 2014, May. City of Redlands Master Plan of Drainage. https://www.cityofredlands.org/sites/main/files/file-attachments/chapters_1-2.pdf

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