CHAPTER 3 – PROJECT DESCRIPTION

All exhibits are located at the end of this chapter, not immediately following their reference in the text.

3.1 INTRODUCTION

This chapter contains a detailed description of the proposed Project, the Beaumont Wastewater Treatment Plant (WWTP) Change of Use Project, with focus on those program characteristics and activities that have the potential to cause a direct physical change in the environment, or a reasonably foreseeable indirect physical change to the environment.

The City of Beaumont desires to utilize a portion of its treated wastewater that is currently being discharged to Cooper's Creek as well as utilizing treated wastewater resulting from future growth in the City's service area. The proposed Project addresses the following actions:

- Diverting a portion of the Beaumont WWTP discharge to Cooper's Creek to other uses thereby reducing the discharge volume to 1.7 million gallons per day (MGD) from an average of 3.5 MGD.
- Implementing the following components (sub-projects) that would utilize the treated wastewater in excess of 1.7 MGD:
    - Utilize Project Partner Beaumont Cherry Valley Water District's (BCVWD) non-potable water distribution system to move recycled water to end users, and
    - Construct and operate a recharge basin or basins to recharge the underlying groundwater basin.

3.1.1 Background

The City owns and operates the Beaumont WWTP. The Beaumont WWTP is the only treatment plant for the City, which serves a population of approximately 53,000 people as of 2020.[1] The Beaumont WWTP receives and treats domestic and commercial/industrial wastewater generated within the City boundaries, a portion of the City of Calimesa, and a portion of the unincorporated area of Cherry Valley within Riverside County. The treated wastewater is discharged to Cooper's Creek, which is a tributary to San Timoteo Creek. According to the City, discharge to Cooper's Creek from the original Beaumont WWTP began sometime in the 1920s. The WWTP and discharge operations have been modified over time with population growth and changing regulations. The discharge volume from the WWTP began to increase significantly around 2004, concurrent with rapid development throughout the City's service area.

In 2018, the City began construction to upgrade treatment at the Beaumont WWTP to add advanced treatment using a combination of membrane bioreactor (MBR), reverse osmosis (RO), and ultraviolet (UV) treatments (termed RO system). Operation of the RO system commenced in November 2020, and further upgrades to the RO system were completed at the end of 2022 with full operation in 2023. All water treated via the RO System not used by the WWTP for operations and maintenance is discharged to Cooper's Creek at an average rate of 3.5 MGD.

The RO system is operated to meet regulatory requirements and orders specifying the removal of salt and other dissolved solids in the wastewater. Brine waste generated from the RO system is pumped through a City-owned brine line approximately 23 miles in length that connects to the

[1] US Census, 2020 (CCHCS WY)

Inland Empire Brine Line (IEBL), which was previously referred to as the Santa Ana Regional Interceptor (SARI) line. The Inland Empire Brine Line is owned and operated by the Santa Ana Watershed Project Authority (SAWPA) and pumps high-saline water to a wastewater treatment plant operated by the Orange County Sanitation District.

Currently, treated wastewater from the Beaumont WWTP is discharged via one outfall to Cooper's Creek: Discharge Point 001 (DP001 or DP-001)(**Figure 3-2**). Cooper's Creek flows into San Timoteo Creek approximately three miles downstream of DP001. San Timoteo Creek flows into the Santa Ana River approximately 16 miles downstream in the City of San Bernardino. Historically, two additional wastewater discharge points were permitted within the City's limits: DP007 to an unnamed tributary of Marshall Creek and DP008 to Noble Creek. The City only operated outfall DP007 from March 2010 to August 2015, and there is no record of discharges to outfall DP008. Yucaipa Valley Water District (YVWD) also discharges treated wastewater to San Timoteo Creek from the Henry N Wochholz Regional Water Reclamation Facility discharge point DP001, downstream of Beaumont's discharge point.

The proposed Project includes a new connection to BCVWD's existing non-potable water distribution system and a non-potable water pump station located on the city-owned parcel adjacent to the City's WWTP. According to the 2025 BCVWD Urban Water Management Plan (UWMP)[2], BCVWD has over 50 miles of non-potable water transmission and distribution pipelines (6-in and larger) in place. A 24-in diameter ductile iron pipeline forms a loop around the City of Beaumont, supported by a 2 million gallon (MG) recycled (non-potable) water reservoir which provides gravity storage and system pressurization. This reservoir is also configured to receive make up water during high demand periods using potable water or untreated water from State Water Project (SWP) through air gap connections. The non-potable water system can have a blend of recycled water, imported water, non-potable groundwater, and potable water. There are over 300 existing landscape connections to the recycled water system receiving approximately 1,600 acre-ft in 2025 based on water meter records. Increased development within the District's service area has further increased demand on the non-potable system.

The historical non-potable demand by BCVWD is presented below in **Table 3-1.** Note that average day and maximum day non-potable water demands for 2020 were 5.6 MGD (approximately 20 acre feet per day) and 6.7 MGD (approximately 23.93 acre feet per day), respectively.

Table 3-1
HISTORICAL NON-POTABLE WATER DEMANDS

	2005	2010	2015	2019	2020	2025
Non-Potable Water Demand (AFY)	1,038	1,822	514*	1,540	1,647[1]	1,258

(1) Includes supplemental potable water
* Lower usage attributed to Stage 2 Water Conservation measures in place[3]

A memorandum of understanding between BCVWD and the City for recycled water purchase and use was approved in June 2019 and the City and BCVWD are in the process of finalizing an

[2] BCVWD, 2026. 2025 BCVWD UWMP. https://bcvwd.gov/documents/2025-urban-water-management-plan/ (Accessed 09/25/26)
[3] BCVWD, 2021. 2015 BCVWD UWMP. https://bcvwd.gov/documents/2015-and-prior-urban-water-management-plan/ (Accessed 01/14/26)

agreement for purchase of recycled water through an ad-hoc committee consisting of City Council members and BCVWD Board Members. Hence, this Project proposes to supply treated wastewater from the Beaumont WWTP to BCVWD's non-potable system.

As stated above, BCVWD's non-potable water system is currently serving over 300 landscape connections, operating with non-potable groundwater supplemented with potable water. This system is designed to transition to the use of recycled water once it becomes available. Future developments within the City of Beaumont will be connecting to BCVWD's existing recycled water system based on the Plan of Service for the specific project. These new connections will be for new landscaped areas providing a 640 AFY increase by 2045, making the total annual demand for recycled water about 2,600 AF by 2050. [4]

3.2 PROJECT LOCATION

The proposed Project occurs within the boundaries of the San Timoteo Watershed shown on **Figure 3-1**. This figure also shows the City boundary, local surface water steams and tributaries, WWTP discharge locations, and other jurisdictional and hydrological boundaries including the adjudicated Beaumont Basin, Beaumont groundwater management zone (GMZ), San Timoteo GMZ, and Yucaipa GMZ. This figure was prepared as part of the *Cooper's Creek and San Timoteo Creek Habitat Characterization and Sustainability Report* prepared by West Yost in collaboration with HDR and Tom Dodson & Associates (TDA) as part of the early coordination efforts in developing this Project. The Project area shown on **Figure 3-1** corresponds to that report.

The Beaumont WWTP, at which the outfall (DP001) to Cooper's Creek is located, is at the following address: 715 West 4th Street, Beaumont, California 92223. The Beaumont WWTP is located within Section 9, Township 3 South, Range 1 West of the United States Geological Survey (USGS) 7.5-Minute Beaumont, CA topographical quadrangle, with a latitude and longitude of 33.923476º, -116.991619º. Refer to **Figure 3-2,** which depicts an aerial image of the Beaumont WWTP site location.

To use the treated wastewater as recycled water distributed by BCVWD, the existing 24" diameter gravity pipeline from existing storage tanks at the Beaumont WWTP at 715 West 4th Street, Beaumont, California 92223 will be extended by approx. 100 feet to a new pumping station located at the adjacent property to the west at 713 W. 4th Street.[5] The proposed point of connection (POC) to the BCVWD non-potable water distribution system is shown on **Figure 3-3** (note that **Figure 3-10** depicts the BCVWD non-potable water distribution system), and as part of the proposed Project, the existing 16" diameter pressure pipeline on the WWTP property (currently capped at both ends) will be extended approx. 100 feet to the new pumping station and also will be extended approx. 75 feet to the existing BCVWD line in 4th Street.[6] This connection is located within Section 9, Township 3 South, Range 1 West of the USGS 7.5-Minute Beaumont, CA topographical quadrangle, with a latitude and longitude of 33.925852º, -116.991535º.

To use the treated wastewater to recharge the groundwater, one or more recharge basins would be developed on one or more sites within the Beaumont Basin. The City is currently considering

[4] BCVWD, 2026. 2025 BCVWD UWMP. https://bcvwd.gov/documents/2025-urban-water-management-plan/ (Accessed 09/25/26)
[5] This gravity pipeline was installed and capped but not extended to the adjacent property during the City's WWTP Salt Mitigation Project (2018-2022).
[6] This pressure pipeline was installed and capped but not extended to the adjacent property nor extended to tie-in to BCVWD's existing 24" recycled water line at 4th Street during the City's WWTP Salt Mitigation Project (2018-2022).

the following Assessor's Parcel Numbers (APNs): 400010001, 400010005, 400010006, 400010007, 400020030, 400250001, 400250012, 404140007, 407180003, 407190008, 407230010, 407230020, 407230027, 407230034, 414070001, 414070002, and 414070007. The specific site–or sites–for the recharge basin location within the context of the above APNs has not yet been identified. This area, within which up to 40 acres of recharge basin(s) will be developed, is shown on **Figure 3-4**. Parcel specific locational details are as follows (contiguous parcels are presented together):

- 400010001 is located in the City of Calimesa. The parcel is located south of Desert Lawn Drive, just south of its intersection with Brookside Avenue.
- 400010005 and 407230010: The address for these parcels is: 11058 and 11010 Desert Lawn Dr, Calimesa, CA 92320. These parcels are north of the intersection of Desert Lawn Drive and Brookside Avenue, and are south of Interstate 10 (I-10).
- 400010006 and 400010007: The address for these parcels is: 11106 and 11154 Desert Lawn Dr, Calimesa, CA 92320. These parcels are east of the intersection of Desert Lawn Drive and Brookside Avenue, and are south of I-10.
- 400020030 and 400250001. These parcels are part of the Morongo Golf Club at Tukwet Canyon within the City of Beaumont. The only areas considered for the Recharge Basin(s) within these parcels are the existing resort ponds, which are shown on **Figure 3-11, 3-12, and 3-12.**
- 400250012 is located in the City of Beaumont south of Brookside Avenue and east of Oak View Drive. The parcel is both south and east of Brookside Elementary School.
- 404140007 is located in the City of Beaumont south of Cougar Way and west of Beaumont Avenue. The parcel is south of Mountain View Middle School.
- 407230020, 407230027, and 407230034 are located in the City of Beaumont north of Brookside Avenue and east of I-10.
- 407190008, 407180003 are located within Unincorporated Riverside County north of Brookside Avenue and west of Hannon Road.
- 414070001, 414070002 and 414070007 are located in the City of Beaumont south of Oak Valley Parkway between Oak View Drive to the west and Noble Creek Regional Park to the north and east.

These parcels are generally located within:

- Township 2 South, Range 1 West, Section 29
- Township 2 South Range 1 West Section 30
- Township 2 South Range 1 West Section 31
- Township 2 South Range 1 West Section 32
- Township 2 South Range 1 West Section 33
- Township 2 South Range 1 West Section 34
- Township 2 South Range 2 West Section 36, and
- Township 3 South Range 1 West Section 4

The Project falls within two USGS 7.5-Minute topographical quadrangles, El Casco, CA and Beaumont, CA, with a central latitude and longitude of 33.952574°, -117.0142546°. This area falls within the Cities of Beaumont and Calimesa, as well as in Unincorporated Riverside County.

3.3 ENVIRONMENTAL SETTING

This subsection describes the surface water hydrology, geologic setting, and hydrogeologic setting for the Project area and its vicinity. It also describes the surrounding land use setting and

geography of the City.

The City of Beaumont is located in the western portion of Riverside County (County) and is bounded on the west by the City of Calimesa and unincorporated areas, on the north by City of Calimesa and unincorporated County areas (e.g., Cherry Valley), on the south by unincorporated County areas and the City of San Jacinto, and on the east by the City of Banning. The City covers an area of approximately 30.6 square miles. The City of Beaumont is located at the peak of the San Gorgonio Pass, between San Bernardino and Palm Springs, with an elevation range of approximately 2,500-3,000 feet above sea level (approximately 760 - 915 meters).[7]

3.3.1 Surface Water Hydrology

The following subsections describe the surface water bodies and climate of the region.

3.3.1.1 *Surface Water Bodies*

Figure 3-1 shows most of the extent of the San Timoteo Watershed, within which the Project area is located. The San Timoteo Watershed (also known as the San Timoteo Wash Watershed) drains an approximately 125-square mile area receiving most of its water from runoff originating in the San Bernardino Mountains near Cherry Valley to the north. The eastern-most extent of the Watershed is located at a topographic high between the Cities of Beaumont and Banning. San Timoteo Creek is the main drainage of the San Timoteo Watershed, which flows northwest to its confluence with the Santa Ana River in San Bernardino, California.

Several smaller creeks are tributary to San Timoteo Creek. Noble Creek flows southwest from its headwaters in the San Bernardino Mountains to its confluence with San Timoteo Creek in the western portion of the City's limits. Cooper's Creek flows northwest to its confluence with San Timoteo Creek near the western boundary of the City's limits. Yucaipa and Oak Glen Creeks are the main drainages of the Yucaipa Valley, which is located to the northwest of the City of Beaumont. The headwaters of these creeks are located in the San Bernardino Mountains and flow to the west and southwest through the Yucaipa Valley. The confluence of the Oak Glen and Yucaipa Creeks is just south of Interstate 10 and east (upstream) of Live Oak Canyon. The confluence of Yucaipa Creek with the San Timoteo Creek is outside of the Project area, just downstream of the Henry N Wochholz Regional Water Recycling Facility (RWRF) Discharge Point 001 (DP001), which is operated by the Yucaipa Valley Water District (YVWD). Noble, San Timoteo, and Cooper's Creeks are the main drainages of the Beaumont GMZ, and San Timoteo Creek is the main drainage of San Timoteo GMZ.

Historically, streams in this region exhibited ephemeral and intermittent surface flows. However, discharges from the Beaumont WWTP and YVWD Henry N Wochholz RWRF have altered the natural hydrology, resulting in consistent flow in Cooper's Creek year-round. In contrast, the ephemeral streams that do not receive artificial discharges (e.g., from treated effluent) are observed to be flashier in nature, with intermittent flows apparent in their geomorphology, and confirmed through long-term observations from the Maximum Benefit Monitoring Program— a regulatory compliance monitoring program conducted by the City, YVWD, and other responsible agencies within the Beaumont and San Timoteo GMZs.

[7] City of Beaumont General Plan December 2020

3.3.1.2 *Climate and Precipitation*

Climatically, the region is classified as hot-summer Mediterranean. Precipitation was analyzed within the San Timoteo Watershed for the period of record from water year (WY) 1895 to 2023. Average annual precipitation estimates were computed as a spatial average across the San Timoteo Watershed using rasterized data from the PRISM Climatic Group (based on an 800-meter by 800-meter grid). The long-term average annual precipitation for 1895 to 2023 is 19.3 inches per year (in/yr). **Figure 3-5** is a time-history chart of the annual precipitation and cumulative departure from mean (CDFM) precipitation curve. The CDFM characterizes the occurrence and magnitude of wet and dry periods: positive sloping segments (trending upward to the right) indicate wet periods, and negative sloping segments (trending downward to the right) indicate dry periods. Thirty-three of the last forty years are considered 'dry' (1983 to 2023). The current dry period has extended from 1998 to 2023. The average annual precipitation for this current dry period since 1998 is 16.1 in/yr.

3.3.1.3 *Surrounding Land Use and Setting*

The Beaumont WWTP—at which both the Cooper's Creek DP001, and the proposed point of connection to the BCVWD non-potable water distribution system are located—is within the City of Beaumont, and is designated for Public Facility use by the City's General Plan. Surrounding land uses include Industrial to the north and west; Industrial and Single-Family Residential to the east; and Public Facility and Traditional Neighborhood to the south.

The proposed point of connection to the BCVWD non-potable water distribution system is also located within the City of Beaumont, and has a land use designation of Industrial use by the City's General Plan. This location is adjacent to the Beaumont WWTP and as a result, the surrounding land uses are the similar to the above: land uses to the north include Industrial uses; land uses to the east include Industrial uses and Single Family Residential use; land uses to the south include Public Facility uses; and, land uses to the west include Public Facility and Industrial uses.

The proposed recharge basin(s) could occur within the City of Beaumont, City of Calimesa, and/or unincorporated areas of Riverside County. Because the exact site— or sites—for the proposed recharge basins and associated pipeline connections is not determined yet, the specific land uses at and surrounding the basin locations are presently unknown. However, potential land uses could include the following: Open Space, Urban Village, Single Family Residential, Rural Residential, General Commercial, Industrial, Neighborhood Commercial, and Public Facility within the City of Beaumont; and, Rural Community – Estate Density Residential, Estate Density Residential, Commercial Retail, and Open Space and Recreation within Unincorporated Riverside County; and, Residential Low Medium (RLM), Commercial Neighborhood (CN), Open Space (OS), and Community Commercial (CC) within the City of Calimesa.

The City of Beaumont General Plan Land Use Map is provided as **Figure 3-6;** the City of Calimesa General Plan Land Use Map is provided as **Figure 3-7;** and, the County of Riverside General Plan Land Use Map depicting the Project area is provided as **Figure 3-8.**

3.3.1.3 *Geologic Setting*[8,9]

Figure 3-9 shows the geology of the Project area and its surroundings. The Project area is located

[8] Rewis et al., 2006 WY Report
[9] Fraser, 1931 WY Report

within the Peninsular Range geomorphic province and sits in a low-relief highland (or plateau) between the San Bernardino Mountain Range to the north and the San Jacinto Mountain Range and San Timoteo Badlands to the south and southeast. Bedrock outcrops to the south of the City and within the San Jacinto Mountains are dominantly Mesozoic-aged plutonic rocks (various granitoid compositions) and older Paleozoic to Mesozoic-aged metasedimentary rocks (shown in dark green on **Figure 3-9**). The San Bernardino Mountains are comprised of mostly of plutonic granitoid rocks of Pre-Cambrian to Mesozoic ages and are heavily fractured and weathered. The San Timoteo Badlands are generally made up of terrestrial sedimentary bedrock of the Pliocene and Pleistocene aged San Timoteo Formation (shown in tan on **Figure 3-9**), with instances of sandstone, claystone, and conglomerate.

Local Geologic Setting

Much of the City and Project area overlies Quaternary-aged alluvial surficial deposits (shown in gray on **Figure 3-9**) that are Holocene to Pleistocene in age comprised of unconsolidated to semi-consolidated gravels, sands, silts, and clays. The plateau (commonly referred to as the Yucaipa-Beaumont Plain), slopes generally to the south and west draining from the San Bernardino Mountains and San Gorgonio Pass area and has been incised by the San Timoteo Creek and its tributaries. The San Timoteo Formation generally underlies the alluvial deposits above and a topographic "high" or divide is located between the Cities of Banning and Beaumont where a bedrock high within the San Timoteo Formation occurs (shown as the watershed divide on **Figure 3-9**). The incised portion of the San Timoteo Canyon overlies Quaternary-aged alluvial surficial deposits, while the hillslopes are predominantly San Timoteo Formation.

Geologic Structure

Structurally, the Project area is located within the San Andreas Fault Zone. The modern trace of the San Andreas Fault lies to the north. Several other fault zones are located in the area and help relieve stresses applied by the San Andreas Fault Zone – the Banning Fault and the San Gorgonio Pass Fault Zone to the north, the Beaumont Plain Fault Zone to the southeast, and the San Jacinto Fault Zone to the southwest. General trends of these fault zones are to the northwest and southeast. A major anticlinal fold structure is present within the San Timoteo Formation and San Timoteo Badlands that plunges to the northwest.

3.3.1.4 *Hydrogeologic Setting*[10,11,12,13,14,15]

Figure 3-9 shows the hydrogeologic setting of the Project area and its surroundings. As previously described, the Project area is located within the San Timoteo Watershed and the Upper Santa Ana Valley San Timoteo Subbasin. The Project area partially overlies the western portion of the adjudicated Beaumont Basin and portions of the Beaumont and San Timoteo GMZs. The southeastern portion of the Project area is located within the Beaumont GMZ and the northwestern portion of the Project area is within the San Timoteo GMZ. The Beaumont GMZ is generally within the Quaternary-aged alluvial sediments and is bordered by the Banning Fault to the north. The San Timoteo GMZ borders the southern boundary of the watershed and extends downstream toward the Santa Ana River. The northern extent of the San Timoteo GMZ is generally bordered by the Banning Fault to the north and the GMZ consists of Quaternary-aged

[10] Rewis et al., 2006 WY Report
[11] Dutcher and Garrett, 1963 WY Report
[12] Wildermuth Environmental Inc. (WEI), 2005 WY Report
[13] ALDA Inc. and Thomas Harder & Co, 2024 WY Report
[14] USGS, 2006 WY Report
[15] Dudek, 2022 WY Report

alluvial sediments and the San Timoteo Formation.

Water Bearing Formations

The local water-bearing formations generally consist of two formations: the older and upper portion of the Pliocene and Pleistocene San Timoteo Formation and the overlying younger Quaternary-aged alluvium. The alluvium is defined as the upper aquifer and the regional unconfined water table, while the San Timoteo Formation is defined as the lower aquifer and is confined. Thicknesses of these aquifers range from 400 to 800 feet (ft) (upper) and up to 400 ft (lower), respectively. The lower aquifer is observed to be more cemented and contains higher percentages of silts and clays. Transmissivity values average approximately 6,000 square feet per day (sf/day) in the upper aquifer and 2,000 sf/day in the lower aquifer. The upper aquifer generally contributes more than 75 percent of groundwater produced from wells in the area.

Groundwater Occurrence and Flow

Groundwater recharge replenishes the aquifer system via infiltration within unlined streams (e.g., Cooper's and San Timoteo Creeks), regional recharge basins, underflow from adjacent groundwater subbasins, mountain-front recharge, and deep percolation from precipitation. Groundwater discharge occurs from groundwater production, underflow to the west through the San Timoteo Canyon, and rising groundwater to the San Timoteo Creek and as springs within San Timoteo Canyon and Creek. Groundwater occurs under confined and unconfined conditions with the Project area depending on location and depth.

Groundwater flow and gradient within the Project area and adjudicated Beaumont Basin is variable and likely controlled by faulting and location. General observations for groundwater flow direction and gradient for the region are outlined below:

- Northward in the west central portion of the adjudicated Beaumont Basin (west of Beaumont Plains Fault Zone)
- West near Calimesa and toward the San Timoteo Creek
- West-northwest adjacent to the San Timoteo Badlands and through the San Timoteo Creek

Groundwater flow beneath the Project area is to the northwest from the Beaumont Basin through the San Timoteo Canyon to the San Bernardino Valley. The numerous faults in the vicinity of the City and Project area act as flow barriers, which are apparent in the difference in groundwater elevation across fault traces, up to 100s of feet in some areas.

Groundwater depths below the ground surface vary throughout the Project area, with shallower depths observed near Cooper's and San Timoteo Creeks and are deeper away from the Creeks. Based on 2022 groundwater elevations, depths to groundwater also fluctuate along the channel with shallower depths observed near the Beaumont and YVWD discharge points.

Groundwater Age and Quality

Generally, groundwater is of good quality. A primary focus of monitoring through the Maximum Benefit Monitoring Program is total dissolved (TDS) and nitrate-nitrogen concentrations. The program requires sampling at selected wells at a minimum once every three years in the area. Sources of TDS and nitrate-nitrogen in the region and the Project area are from:

- Beaumont WWTP DP001 and YVWD Henry N. Wochholz RWRF DP001
- Imported water
- Recycled water use

- Stormwater runoff

Groundwater quality varies generally with depth and location. A 2006 USGS study in the region indicated TDS concentrations ranging from 177 mg/L to 823 mg/L, nitrate-nitrogen concentrations ranging from 1.0 mg/L to 11.3 mg/L, and fluoride concentrations ranging from 0.5 mg/L to 3.0 mg/L. The groundwater is generally characterized as calcium/magnesium- bicarbonate type water or sodium-bicarbonate type water. Between 2020 and 2022, TDS concentrations ranged from 230 mg/L to 840 mg/L and nitrate-nitrogen concentrations ranged from non-detect to 16 mg/L in the San Timoteo GMZ. Over this same time period, TDS concentrations ranged from 170 mg/L to 870 mg/L and nitrate-nitrogen concentrations ranged from 0.98 mg/L to 18 mg/L in the Beaumont GMZ.

3.3.1.5 *Water Rights*

Groundwater beneath portions of the City is within the adjudicated Beaumont Basin, to the north and east of the Study Area (see **Figure 3-1**). Pursuant to a Judgment issued in 2004, the Superior Court of the County of Riverside appointed a five-member Watermaster committee, the Beaumont Basin Watermaster, consisting of representatives from the City of Banning, BCVWD, the City, South Mesa Water Company (SMWD), and YVWD (ALDA Inc. and Thomas Harder & Co, 2024). The Judgment regulates the amount of water that can be pumped from the Basin and defines monitoring and management actions to ensure that pumpers in the Basin can utilize groundwater in accordance with their rights.

3.4 PROJECT PURPOSE AND OBJECTIVES

CEQA Section 15124(b) states that an Environmental Impact Report (EIR) Project Description should include "*A statement of the objectives sought by the proposed project. A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project and may discuss the project benefits."* Thus, it is the goal of the Beaumont WWTP Change of Use Project to obtain approval for the lowest feasible discharge volume—identified herein as 1.7 MGD—to Cooper's Creek to maximize the amount of recycled water that can be used for recharge and for distribution to the BCVWD non-potable water distribution system. The objectives described below are intended to facilitate the provisions of CEQA Section 15124(b), as the Beaumont WWTP Change of Use Project objectives are suited to the purpose of this Project, as defined by the lead agency, the City of Beaumont, and enable a reasonable range of feasible alternatives.

The Beaumont WWTP Change of Use Project objectives are to:

- Incrementally reduce discharge from the outfall into Cooper's Creek DP001 to the maximum extent feasible to support non-potable supply and recharge projects in the Beaumont groundwater basin, while balancing the need to minimize impacts on riparian habitat and hydrology downstream.
- Maximize the use of recycled water for non-potable supply or recharge projects in the Beaumont groundwater basin to improve groundwater sustainability.
- Avoid unmitigable degradation of riparian habitat downstream of Cooper's Creek DP001 due to a decrease in discharge from DP001.
- Leverage existing infrastructure to facilitate the use of recycled water within the City and BCVWD service areas.

3.5 PROJECT SUMMARY

3.5.1 Beaumont WWTP Change of Use Project Overview

The City of Beaumont seeks to increase the amount of treated wastewater used for municipal supply and to add groundwater recharge as a designated use for its recycled water. To accomplish those objectives, the City proposes to reduce the amount of treated wastewater that is currently being discharged to Cooper's Creek. To support this effort, the City prepared the CCSTC Habitat Characterization and Sustainability Report. The purpose of the report was to inform strategies for reducing recycled water discharges and to prepare an Adaptive Management and Mitigation Plan (AMMP) for riparian habitat along Cooper's Creek and San Timoteo Creek that could be impacted by reduced flows.

This EIR is being prepared as part of the City's pursuit of reducing its discharge of treated wastewater (i.e. recycled water) from the Beaumont WWTP to Cooper's Creek, and applying the recycled water to other beneficial uses discussed below. To reduce the volume of discharge to Cooper's Creek, the City must file a Wastewater Change Petition (Change Petition) under California Water Code Section 1211 with the State Water Resources Control Board (SWRCB), Division of Water Rights. Thus, a key component of this Project is the reduction in discharge to Cooper's Creek from its present discharge, which varies as shown in **Table 3-2**, below, to 1.7 MGD.

Table 3-2
HISTORICAL WWTP DISCHARGES[a]

Year	Beaumont WWTP		
	DP-001, AF [b,c]	DP-001, MGD	DP-007, AF
1987	--	--	--
1988	--	--	--
1989	1,232.30	1.10	--
1990	1,299.79	1.16	--
1991	1,292.81	1.15	--
1992	1,353.32	1.21	--
1993	1,370.77	1.22	--
1994	1,346.34	1.20	--
1995	1,403.36	1.25	--
1996	1,475.50	1.32	--
1997	1,517.39	1.35	--
1998	1,579.07	1.41	--
1999	1,593.03	1.42	--
2000	1,605.83	1.43	--
2001	1,601.18	1.43	--
2002	1,711.72	1.53	--
2003	1,909.54	1.70	--
2004	2,162.05	1.93	--
2005	2,427.36	2.17	--
2006	2,622.86	2.34	--
2007	2,910.04	2.60	--
2008	2,860.21	2.55	--
2009	2,869.93	2.56	--
2010	2,422.85	2.16	573.68
2011	2,371.03	2.12	660.18

Year	Beaumont WWTP		
	DP-001, AF [b,c]	DP-001, MGD	DP-007, AF
2012	2,537.27	2.27	542.91
2013	2,628.21	2.35	518.11
2014	2,994.87	2.67	420.02
2015	3,356.84	3.00	--
2016	3,547.84	3.17	--
2017	3,663.22	3.27	--
2018	3,799.72	3.39	--
2019	4,103.63	3.66	--
2020	4,343.66	3.88	--
2021	3,839.48	3.43	--
2022	3,637.96	3.25	--
2023	3,836.55	3.43	--
Summary Statistics			
Minimum	1,232.30	1.10	420.02
Mean	2,435.07	2.17	542.98
Maximum	4,343.66	3.88	660.18

a) WWTP - Waste Water Treatment Facility
b) AF - acre-foot.
c) From November 1, 2022, to January 31, 2023, the discharge data for Beaumont WWTP DP-001 was estimated based on October 2022 discharge.
d) Yucaipa Valley Water District
e) Discharge is estimated for November 2023 using October 2023 discharge volumes.

Total annual discharges to Cooper's Creek increased monotonically year-to-year from 1989[16] to 2003, from about 1,200 to 1,900 AFY, a 55 percent increase over 15 years. In 2004, the rate of increase in the annual discharge increased. For the 17-year period from 2004 to 2020, discharges increased from about 2,000 AFY to 4,300 AFY in 2020, a 100 percent increase. In 2023, total discharge was 3,837 AF and daily discharge averaged about 3.3 MGD. Note that there were two historical Beaumont WWTP discharge locations, one located on Noble Creek (DP008) and the other on a tributary to Noble Creek (DP007). These locations are shown on **Figure 3-1**. The City has no record of discharging from DP008, and discharges at DP007 occurred between 2010 and 2014 averaging about 543 AFY. As shown on **Exhibit 3-1**, there was a reduction in the annual discharge from DP001 during these five years when the DP007 was active.

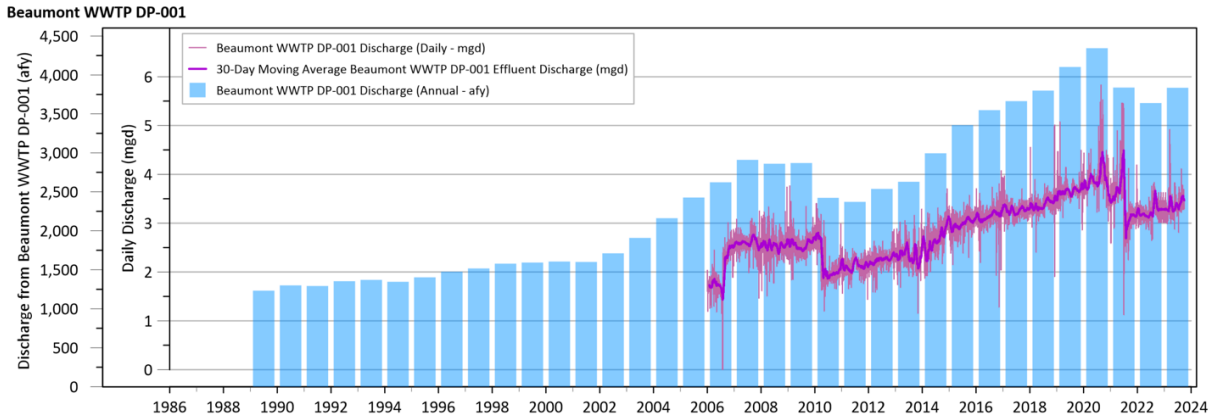


Exhibit 3-1: Daily Effluent Discharge to Cooper's Creek at Beaumont WWTP DP-001

[16] Data is unavailable prior to 1989

A key factor in determining the reduction point from the current variable discharge from Cooper's Creek DP001, shown in **Exhibit 3-1** and further detailed in **Table 3-2**, above, is the downstream riparian health. As identified in the Project Objectives, a key objective for the Project is to avoid unmitigable degradation of riparian habitat downstream of Cooper's Creek DP001 due to a decrease in discharge from DP001.

The key takeaways of the CCSTC Habitat Characterization and Sustainability Report were that:

a) The total annual discharge increased monotonically year-to-year from 1989 to 2003 and during this time riparian habitat health showed stable conditions.
b) Discharge in 2003 was 1.7 MGD or 1,900 AF per year, which represents the maximum discharge between 1984 and 2003.
c) From 2004 to 2023 discharge increased year to year at an increased rate. This correlated with noticeable increase in riparian habitat health.
d) Groundwater levels remained stable while surface water increased.

Based on the above takeaways, the City's consultant team (West Yost, HDR, and Tom Dodson & Associates) collectively with the City (referred to as the Project Team) determined that a reduction in discharge to Cooper's Creek DP001 from the City's WWTP to 1.7 MGD would likely sustain groundwater levels and riparian health, and the City has defined the proposed project to include reducing the Beaumont WWTP discharge to 1.7 MGD.

3.5.2 Beaumont WWTP to BCVWD Non-Potable System Connection Project

As part of the proposed reduction in discharge to 1.7 MGD from the Beaumont WWTP, the City plans to implement two capital sub-projects that would use the treated wastewater in excess of 1.7 MGD. The first sub-project would use Project Partner BCVWD's non-potable water distribution system to move recycled water to existing non-potable water users. This sub-project would involve a new point of connection and pipeline from the Beaumont WWTP, shown on **Figure 3-3,** to deliver the recycled water. The pipeline would extend northwest from the point of connection at the Beaumont WWTP**,** to a new pump station (100 linear feet (LF) of 24" gravity line). From there, it would connect from the new pump station to an existing recycled water pipeline to the proposed point of connection to the BCVWD non-potable water distribution system located adjacent to West 4th Street (approximately 100 LF of this connection pipeline remains to be completed). This connection would require construction within both the City's WWTP property (Assessor's Parcel Number [APN] 417020031) and the neighboring property, which is owned by the City (APN 417020053). Additionally, a third new segment of pipeline from the northerly terminus of the existing pipeline at the City's WWTP property (APN 417020031) would extend about 75 LF to meet the BCVWD's non-potable water distribution system located along the northerly right-of-way of 4th Street (refer to **Figure 3-3**). In total, this sub-project would require the installation of approximately 275 LF of pipeline in total. Further, an additional 100 LF of connection pipelines internal to the pump station would be installed.

The new pump station that will connect to BCVWD's system would be installed within an existing structure on the neighboring property. The pump station would have a capacity of approximately 3,000 gallons per minute (gpm). This EIR evaluates a possible pathway for the proposed pump station and connection to BCVWD's system, as shown in **Figure 3-3**.

BCVWD would own and operate the pump station on the neighboring property. This action may require a land exchange between the City and BCVWD to grant ownership of the neighboring parcel (APN 417020053). In this case, the Project would include (1) extending an existing 24"

recycled water gravity pipeline to the new pump station within the neighboring parcel and (2) extending an existing 16" dia. pressure pipeline from the new pump station approximately 75 LF to make the connection at 4th Street. Collectively, these pipeline extensions from make up a planned project that BCVWD identified in its Non-Potable Water System Master Plan (refer to **Figure 3-10**).

3.5.3 Beaumont WWTP to Recharge Basin Project

The second individual capital project that the City is pursuing to utilize the treated wastewater in excess of 1.7 MGD is a recharge Project to recharge the underlying Beaumont Groundwater Basin. At this time, the City has selected a number of APNs that are suitable for the Recharge Basin(s), but has not made a final selection between the sites described under Section 3.2, Project Location. Refer to the parcels shown in **Figure 3-4.** It is anticipated that the Project would install up to 40 acres of recharge basin(s), either as a singular recharge basin or multiple recharge basins. This capacity was intentionally sized to accommodate the potential use of additional non-recycled water sources for diluent blending, if required to comply with Santa Ana Water Board permits or SWRCB Division of Drinking Water (DDW) regulations—though such blending is not expected to be necessary at this time (see Sections 3.6.3 and 3.6.4). If a dilution source for blending is necessary, it is anticipated that water may be obtained from San Gorgonio Pass Water Agency (SGPWA). The recharge basin(s) would be utilized for recycled water recharge during the periods where there is less demand for direct use by BCVWD customers. Recycled water recharge is more likely to occur during the winter season/cooler months, as well as the shoulder seasons thereof (one-to-two months on either side of winter), as demand for water for irrigation and other recycled water uses is greater in the warmer months (i.e. the summer months and shoulder seasons thereof). Recharged water may be used to replenish the underlying Beaumont groundwater basin, and it also would be available for pumping according to the terms of the Adjudication, in the Judgment discussed under Subsection 3.3.1.5*,* above.

It is likely that recycled water will be conveyed to the recharge basin through BCVWD's existing non-potable water distribution system, pursuant to a transmission agreement between BCVWD and the City. The connections presented in Subsection 3.5.2, above, would serve as the primary connection to BCVWD's non-potable water distribution system. However, as the precise location of the recharge basin(s) is presently unknown, it is possible that connecting non-potable pipeline(s) would be required to convey recycled water to the recharge basin(s). As a result, this EIR assumes that the up to 2,700 LF of up to 24" pipeline may be installed to connect the recharge basin(s) to the nearest BCVWD non-potable water distribution system.

Further, as discussed above, if a dilution source for blending is necessary to operate the recharge basin(s), a connection to SGPWA's system may be required. As the precise location of the recharge basin(s) is presently unknown, it is possible that connecting non-potable pipeline(s) would be required to convey dilution water (raw water) to the recharge basin(s). As a result, this EIR assumes that the up to 5,000 LF of up to 24" pipeline may be installed to connect the recharge basin(s) to the nearest SGPWA raw water distribution system. This EIR also assumes that a volume of up to approximately 650 AFY of raw water from SGVWA would be needed for dilution, if deemed necessary.[17] While a small volume of this raw water would be lost to evaporation (less

[17] The estimated 650 AFY represents the maximum assumed diluent water requirement under a 15% growth scenario for WWTP effluent flows, assuming all treated wastewater exceeding the minimum 1.7 MGD discharge to Cooper's Creek is directed to recharge and diluent water constitutes 20% of the total recharge volume. Under existing WWTP flow conditions, the estimated diluent water requirement would be approximately 500 AFY. Diluent water would not

than 10%), it is assumed that the majority of the raw water would be replenished for storage in the Basin, and available for reuse once it reaches the groundwater table.

3.5.4 Beaumont AMMP

The CCSTC Habitat Characterization and Sustainability Report identified that the reduction in discharge to Coopers Creek to 1.7 MGD must adhere to the following performance criteria, which will be discussed further in regards to the proposed AMMP.

- Riparian habitat will not be adversely affected by the reduction in discharge.
- Minimum discharges will be maintained to levels determined necessary to sustain habitat along the Project area identified in the CCSTC Habitat Characterization and Sustainability Report that have historically benefited from WWTP discharges.
- Reductions in discharge should be done in a manner that results in surface water flows that mimic the natural seasonal flow system, which typically begins to decay around the end of April. Higher surface water flows should be maintained in the early and peak growing season (i.e. March-May), should taper off toward the end of the growing season (i.e. June-October). Lower flows should be maintained during the dormant season (November-February).
- The groundwater table in the riparian zone will be monitored to ensure that reductions in surface water flows do not result in a drop in groundwater elevations that results in a negative impact to the riparian habitat health.

To meet the above performance criteria, the City proposes to implement an AMMP. The AMMP is being drafted by West Yost and HDR, in coordination with Tom Dodson & Associates with the City's oversight. The AMMP would:

- Establish Project-specific management objectives and performance criteria.
- Implement a monitoring program to track compliance with environmental approvals and regulatory permits and environmental conditions.
- Define mitigation measures to avoid or reduce potential impacts.
- Provide an adaptive management framework linking monitoring results to management responses.
- Identify trigger thresholds and corresponding corrective actions.
- Assign agency and responsible party roles for implementation and oversight.
- Specify data evaluation methods, reporting schedules, and communication protocols.
- Include contingency measures if mitigation is unsuccessful or performance targets are not met.
- Provide long-term review and plan updates to help maintain effectiveness over the life of the Project.

The AMMP would serve as the main mitigation measure to protect the established riparian habitat within Cooper's and San Timoteo Creeks.

3.6 REGULATORY REQUIREMENTS

To decrease the volume of Beaumont WWTP effluent discharge to Cooper's Creek, the City is required to submit a Wastewater Change Petition pursuant to California Water Code Section 1211 to the SWRCB Division of Water Rights. This section describes the regulatory framework and

necessarily need to be supplied by SGPWA and could potentially be obtained from other sources, including groundwater, subject to availability, water quality considerations, and applicable regulatory approvals.

agencies for the permitting of proposed non-potable recycled water projects (i.e. reuse and recharge) using the decreased effluent discharge approved under a 1211 Change Petition.

3.6.1 Recycled Water Policy

In 2009, the State Water Resources Water Quality Control Board (State Board) adopted the *Water Quality Control Policy for Recycled Water* (Recycled Water Policy). The Recycled Water Policy was amended in 2019. The purpose of the policy is to encourage increased use of recycled water statewide in a manner that implements state and federal water quality laws. The policy defined: mandates for the use of recycled water; the implementation roles of the SWRCB, Regional Water Quality Control Boards (Regional Water Boards), and other state agencies; requirements and guidelines for the development of Salt and Nutrient Management Plans (SNMPs); provisions for streamlining the permitting of recycled water landscape irrigation projects; requirements for permitting of recycled water recharge projects; antidegradation requirements for recycled water use; and a process to convene a Science Advisory Panel to provide guidance on monitoring constituents of emerging concern (CECs) in recycled water.

The production, distribution, and use of recycled water may be permitted through various regulatory mechanisms, including general or individual Waste Discharge Requirements (WDRs) (California Water Code [CWC] §13263), Water Reclamation Requirements (WRRs) (CWC §13523), a Master Reclamation Permit (MRP) (CWC §13523.1), or amendments to an existing order, such as a WDR or National Pollutant Discharge Elimination System (NPDES) permit.

All proponents of non-potable recycled water projects must enroll under the statewide General Water Reclamation Requirements for Recycled Water Use (Order No. WQ 2016-0068-DDW) to ensure permit coverage for the distribution and/or use of recycled water. The nine Regional Water Boards issue these permits. The Regional Water Boards coordinate with the SWRCB DDW to ensure compliance with all state regulations protecting public health. Each recycled water project must demonstrate compliance with California Code of Regulations (CCR), Title 22, including preparation of an engineering report detailing the treatment process, intended uses, and any additional safety measures.

To initiate the permitting process, project proponents must contact both the appropriate Regional Water Board and the SWRCB DDW Recycled Water Unit.

3.6.3 Santa Ana Water Board Permitting

The Regional Water Board with jurisdiction over the City of Beaumont and surrounding area is the Santa Ana Regional Water Quality Control Board (Santa Ana Water Board). The Santa Ana Water Board regulates waste discharges in the Santa Ana Watershed to minimize and control the impacts on the quality of the region's groundwater and surface water resources. Discharge from the Beaumont WWTP is regulated by the Santa Ana Water Board in accordance with Order No. R8-2022-0042 (NPDES No. CA0105376).18 The Santa Ana Water Board will issue permits for the City's proposed reuse and/or recharge of recycled water from the Beaumont WWTP, consistent with the SWRCB Recycled Water Policy and Basin Plan requirements.

[18] Santa Ana Water Board, 2022

3.7 SUMMARY OF FACILITY CONSTRUCTION AND OPERATIONS

The Project consists of construction and operation of various facilities that fall within three categories: (1) Project Category 1: Conveyance Facilities and Ancillary Facilities; (2) Project Category 2: Recharge Basin(s); (3) Project Category 3:Wastewater Change Petition.

Project Category 1: Conveyance Facilities and Ancillary Facilities
This Project Category would install up to 8,075 LF of raw and/or recycled water/non-potable pipeline up to 24" in diameter. Further, this Project Category covers the installation of a pump station and associated connection pipelines with a capacity of approximately 3,000 gallons per minute (gpm).

Project Category 2: Recharge Basin(s)
This Project Category would install up 40 acres of a single recharge basin or would install several recharge basins equal to 40 acres. The recharge basin(s) would have a capacity for recharging up to 3,600 AFY to the Beaumont Groundwater Basin (Beaumont Basin).

Project Category 3: Wastewater Change Petition
This City would obtain authorization from the SWRCB to use its recycled water above 1,7 MGD for the purposes described in Subsections 3.5.2 and 3.5.3 of this Project Description above. This would result in an anticipated reduction in the amount of recycled water discharged to Cooper's Creek by about 1.8 AFY on average.

3.7.1 Project Category 1: Conveyance Facilities and Ancillary Facilities

As stated above, this Project Category consists of the installation of up to 3,500 LF of recycled water/non-potable pipeline up to 24" in diameter. Further, this Project Category covers the installation of a pump station with an capacity of up to 3.3 MGD.

3.7.1.1 Conveyance Facilities: Construction Scenario

An estimated 8,075 LF of pipeline may be installed in support of the Project. The maximum pipe length that would be installed in a single year would be 8,075 LF. It is forecast that most of the pipe will be up to 24-inches in diameter. It is assumed that an underground utility installation team can install an average of 200-500 LF of water pipeline, recycled water line, or storm drains per day. A team can install 200-500 feet of pipeline per day based on the following equipment and staffing:

1 Excavator
1 Backhoe
1 Paver
1 Roller
1 Water truck
1 Pavement Cutter
1 Grinder
1 Crane
1 Compactor
Traffic Control Signage and Devices
10 Dump/delivery trucks (40 miles round trip distance)
Employees (14 members per team, 40-mile round-trip commute)

The emissions calculations are based upon the above assumptions for each pipeline installation team. Within undeveloped areas, 400-800 feet of pipeline trench could be excavated, the pipe installed, backfilled, and compacted each day during pipeline installation in undeveloped areas, whereas only 200-500 feet per day can be installed in developed roadways utilizing the team described above. In either case, equipment would be operated for roughly the same portion of the day and daily equipment emissions would be the same, except that undeveloped areas would not require pavement removal and reinstallation.

It is assumed that one team will be installing pipelines for a maximum total of 500 LF per day. It is assumed that the proposed pipeline installation, pipeline connections and street restoration will occur for a maximum of 60 days in one calendar year.

Ground disturbance emissions assume roughly half an acre of land would be actively excavated on a given day.

The pipelines are anticipated to use push-on joints (e.g., gasketed bell-and-spigot) that do not require welding. However, the contractor may occasionally use a portable generator and welder for equipment repairs or incidental uses.

The construction timeline for the pipelines is 4 months. Construction is anticipated to begin as early as the first quarter of 2028, with early completion anticipated by the second quarter of 2028.

3.7.1.2 Conveyance Facilities: Operational Scenario

Once a pipeline is installed, operations do not require any visits unless unforeseen circumstances or a maintenance need arises that would require maintenance or repair of the pipelines. In the event of routine maintenance or unforeseen circumstances one vehicle trip per event would be required. The pipelines are anticipated to be operational in 2028.

3.7.1.3 Pump Station: Construction Scenario

Booster stations are required to pump water from the WWTP to elevated storage which will deliver to areas located at a higher elevation than the WWTP. It is anticipated that the project will require one pump station. The pump station will be housed in an existing structure on APN 417020053 (the neighboring property to the Beaumont WWTP). It will require a transformer to be installed to handle the electric power delivered to the pumps. A backup generator may be installed as part of the proposed project. The proposed station may include a pump room, electric control room, odor control facilities, chemical tanks, and storage room. Construction of the pump station would involve installation of piping, valves and appurtenances, electrical equipment, excavation and structural foundation installation, pump and motor installation, sitework, and final site completion. It is forecast that no more than 0.5 acre will be actively graded on a given day for site preparation of the pump station. The entirety of the pump station footprint is less than 1 acre. Grading may or may not be required for the development of the pump station, as it is located within a developed site. However, minor grading activities may be needed to facilitate the development of this new facility housed within an existing structure therein. It is anticipated that, if needed, grading activities will occur during weekdays and will require one bull dozer or motor grader operating 8 hours per day, one water truck operating 4 hours per day and one dump truck operating 4 hours per day. Calculations assume five workers will each commute 40 miles round-trip to each work site.

Construction of the pump station will require the delivery and installation of equipment and materials. This phase of construction will result in 6 truck trips on the worst-case day with an average round trip of 20 miles delivering construction materials and equipment (concrete, steel, pipe, etc.). Installation of the pump station will require the use a crane, forklift, backhoe and front loader operating 4 hours per day. Calculations assume five workers will each commute 40 miles round-trip to the work site.

The proposed pump station site has permanent power available for construction;, as such a generator is not anticipated to be required for welding required to construct the pump station.

The construction timeline for the pump station is up to 24 months. Construction is anticipated to begin as early as the first quarter of 2028, with completion anticipated by the first quarter of 2030.

3.7.1.4 Pump Station: Operational Scenario

The pump station would convey an annual average of 1.7 MGD of recycled water to and throughout BCVWD's non-potable water distribution system (including delivery to recharge points as described herein), with higher deliveries during warmer months ranging between 2 MGD to 3.3 MGD.[19] It is assumed that the pump station pump would range between about 125 HP to 150 HP. The pump station is anticipated to be operational in 2030.

3.7.2 Project Category 2: Recharge Basin(s)

As stated above, this Project Category would install up 40 acres of a single recharge basin, including internal access roads, or would install several recharge basins equal to 40 acres. The recharge basin(s) would have a capacity for recharging up to 3,600 AFY to the Beaumont Basin.

3.7.2.1 Recharge Basin(s): Construction Scenario

It is forecast that for site preparation of a basin and supporting access road, no more than 2 acres of the total up to 40 acre basin(s) will be actively graded on a given day. The recharge basin(s) are anticipated to be excavated to a maximum depth of 25 feet. Given the area required to install the new recharge basin(s), it is anticipated that the time required for the construction of the recharge basin(s) is about 4 months.

It is anticipated that grading activities and appurtenance installation (overflow and transfer pipelines, monitoring systems, etc.) will occur over an average of up to 90 to 120-day period and will require two bulldozers, two front end loaders, two water trucks, several scrapers, two excavators and twenty-five dump/haul trucks operating 6-8 hours per day. Calculations assume 20 workers will each commute 40 miles round-trip to the recharge basin site.

Construction of the recharge basin(s) will require the delivery and installation of equipment and materials. It is not known whether each site will balance as the basin(s) will require excavation to reach the desired depth. However, it is anticipated that about 130,000 cubic yards (CY) of materials total would be hauled off site by at a minimum, 15 CY trucks. About 100 round trips per day at 30 miles round-trip would be required to accomplish the effort to remove excess materials off-site. This would occur over a period of 4 months with some periods of no hauling activities, and other periods that would reach 100 round trips per day. Additionally, given that contaminated

[19] Table 5-1 "Historic Water Use in BCVWD's Non-potable Water System", BCVWD Non-potable Water Master Plan, June 2022

soils may exist at the future recharge basin site, any contaminated soils will need to be properly characterized by identifying the contaminant discovered and, based on the contaminants discovered, the soils will either be treated, blended, or directly disposed of at an appropriate facility. The 100 hauling round trips per day incorporates any trips needed to remove contaminated soils.

In addition to the above construction equipment, heavy duty trucks will be deployed for on-site deliveries. Smaller trucks and automobiles will be utilized for on-site supervision and employee commuting. The diesel delivery trucks are assumed to require 300 on-road miles per day for a total of 30 days.

The construction timeline for the recharge basin(s) is 4 months. Construction is anticipated to begin in second quarter of 2029, with completion anticipated by the third quarter of 2029.

3.7.2.2 Recharge Basin(s): Operational Scenario

Operation of the recharge basin consists of pumping the recycled water, and possible SGPWA dilution water to the recharge basin(s) and maintenance of the recharge basin and associated conveyance facilities. The energy required to pump stored water to the recharge basin(s) is accounted for as part of the new pump station addressed under Subsection 3.7.1.4, above. Minimal additional energy would be needed to pump the SGPWA raw dilution water to the recharge basin(s), as the transmission would fall within the SGPWA's existing operations. Basin maintenance is expected to occur every two to three months with an assumed one trip per maintenance visit for the recharge basin(s), consisting of removal of debris and trash, removal of vegetation and as needed vector management.

3.7.3 Project Category 3: Change of Use Petition

3.7.3.1 Change of Use Petition: Summary

As stated above, this Project Category would consist of reducing the Beaumont WWTP discharge to Cooper's Creek to 1.7 MGD. To facilitate this reduction in discharge and the subsequent use of the recycled water produced by the Beaumont WWTP in excess of 1.7 MGD, the facilities outlined herein (as part of Section 3.7 Summary of All Facilities) are intended to support this effort. This component of the Beaumont WWTP Change of Use Project is supported by the data found in the CCSTC Habitat Characterization and Sustainability Report, provided as **Appendix 1** to this EIR.

3.8 ENTITLEMENTS, APPROVALS AND OTHER AGENCY PARTICIPATION

Implementation of future individual sub-project(s) in accordance with the Beaumont WWTP Change of Use Project will require approvals from other agencies. This section summarizes agency approvals that have been identified to date. This list may be expanded as the environmental review proceeds. Consequently, it should not be considered exhaustive.

- Notice of Intent (NOI) to the SWRCB for a NPDES general construction stormwater discharge permit. This permit is granted by submittal of an NOI to the SWRCB, but is enforced through a Storm Water Pollution Prevention Plan (SWPPP) that identifies construction best management practices (BMPs) for the site. In the Project area, the Santa Ana Water Board enforces the BMP requirements described in the NPDES permit

by ensuring construction activities adequately implement a SWPPP. Implementation of the SWPPP is carried out by the construction contractor, with the Santa Ana Water Board and county providing enforcement oversight.

- The Project may include the potential discharge of fill into or alterations of "waters of the United States," "waters of the State," and stream beds of the State of California. Regulatory permits to allow fill and/or alteration activities due to Project activities such as pipeline installation are likely be required from the Army Corps of Engineers (ACOE), the Santa Ana Water Board, and California Department of Fish and Wildlife (CDFW) over the life of the construction and operation of the Beaumont WWTP Change of Use Project. A Section 404 permit for the discharge of fill material into "waters of the United States" may be required from the ACOE; a Section 401 Water Quality Certification may be required from the Regional Board; a Report of Waste Discharge may be required from the Santa Ana Water Board; and a 1600 Streambed Alteration Agreement may be required from the CDFW.

- The U.S. Fish and Wildlife Service (USFWS) and/or CDFW may need to be consulted regarding threatened and endangered species documented to occur within an area of potential impact for future individual projects. This could include consultations under the federal Endangered Species Act (ESA) and California Endangered Species Act (CESA).

- Land use permits may be required from local jurisdictions, such as from the City of Calimesa, City of Beaumont, and County of Riverside.

- Air quality permits may be required from the South Coast Air Quality Management District (SCAQMD).

- Encroachment permits may be required from local jurisdictions, such as from the City of Calimesa, City of Beaumont, and County of Riverside, Flood Control agencies, and private parties such as Southern California Edison, So Cal Gas, etc.

- Watermaster may need to approve the use of a recharge basin for storage within the Beaumont Basin.

- Santa Ana Water Board is the primary permitting agency for non-potable recycled water recharge and reuse projects. If these projects are overlying the Beaumont, San Timoteo, and Yucaipa GMZs they can be incorporated within the existing Maximum Benefit SNMP defined in the Santa Ana Water Board's Basin Plan SNMP. This framework streamlines Project approval, aligning projects with established management measures and water quality objectives.

- The Santa Ana Water Board will consult with the SWRCB DDW to ensure a proposed recycled water recharge project complies with all regulations for the protection of public health in the DDW's GRRP. The DDW will approve a Title 22 Engineering Report prior to project operation.

- SWRCB will be a responsible agency if permits or funding are requested from the State Revolving Fund Program or SWRCB's DDW. Additionally, water supply connection permits will be required from DDW upon connecting an agency supply to a new source of supply.

- SWRCB will be a responsible agency for the Wastewater Change Petition for the Change of Use proposed by this Project.

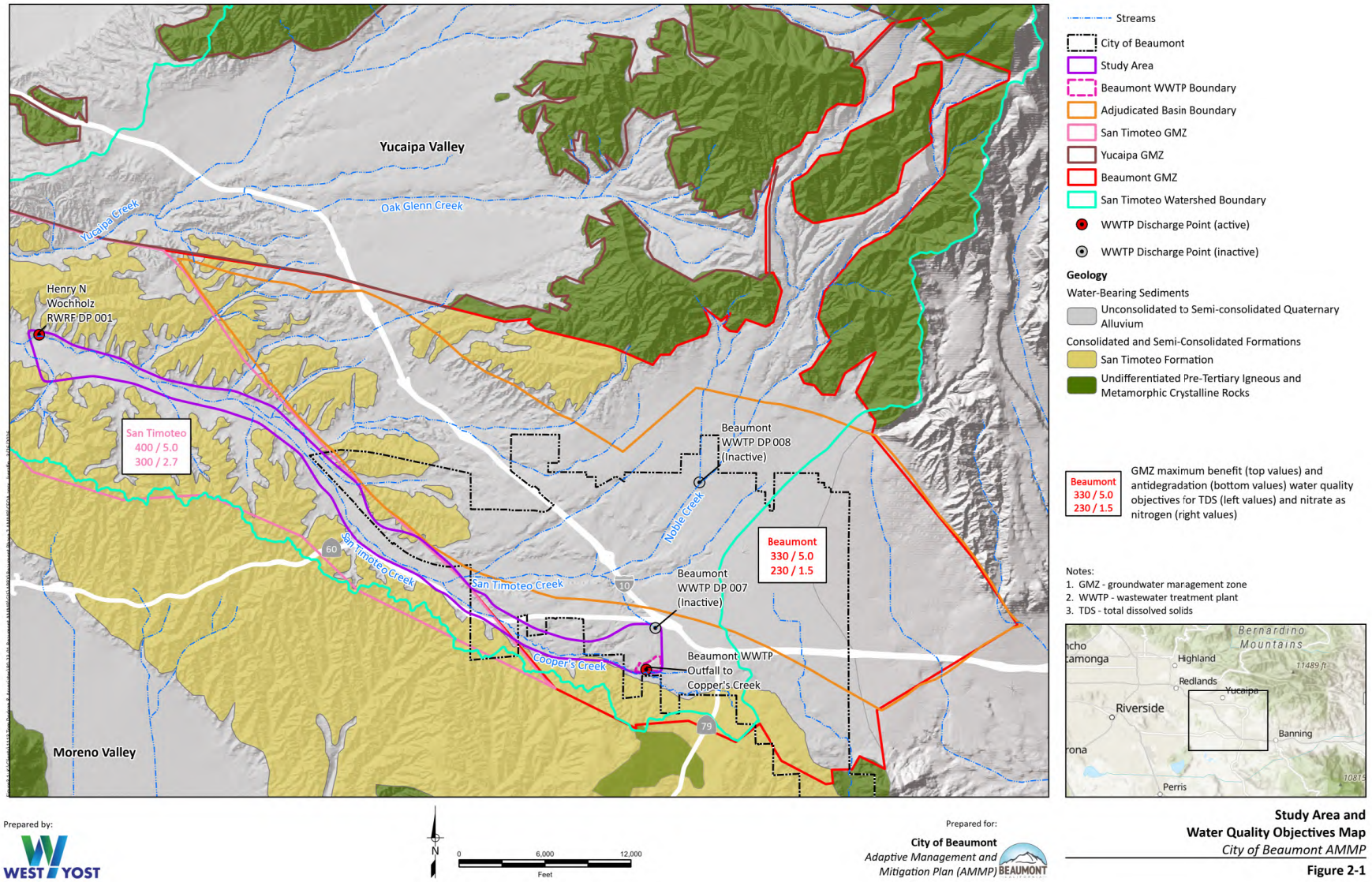
3.9 AREAS OF KNOWN CONTROVERSY

None known.

3.10 CEQA RESPONSIBLE AGENCIES

Below is a list of the agencies that may be responsible agencies under CEQA for the Beaumont WWTP Change of Use Project:

- City of Beaumont
- Beaumont Cherry Valley Water District
- City of Calimesa
- County of Riverside
- San Gorgonio Pass Water Authority
- California Department of Fish and Wildlife
- State Water Resources Control Board
- Santa Ana Regional Water Quality Control Board
- South Coast Air Quality Management District



Study Area and Water Quality Objectives Map
City of Beaumont AMMP
Figure 2-1

FIGURE 3-1

Tom Dodson & Associates
Environmental Consultants

Project Study Area



FIGURE 3-2

Tom Dodson & Associates
Environmental Consultants

Beaumont WWTP Outfall to Cooper's Creek

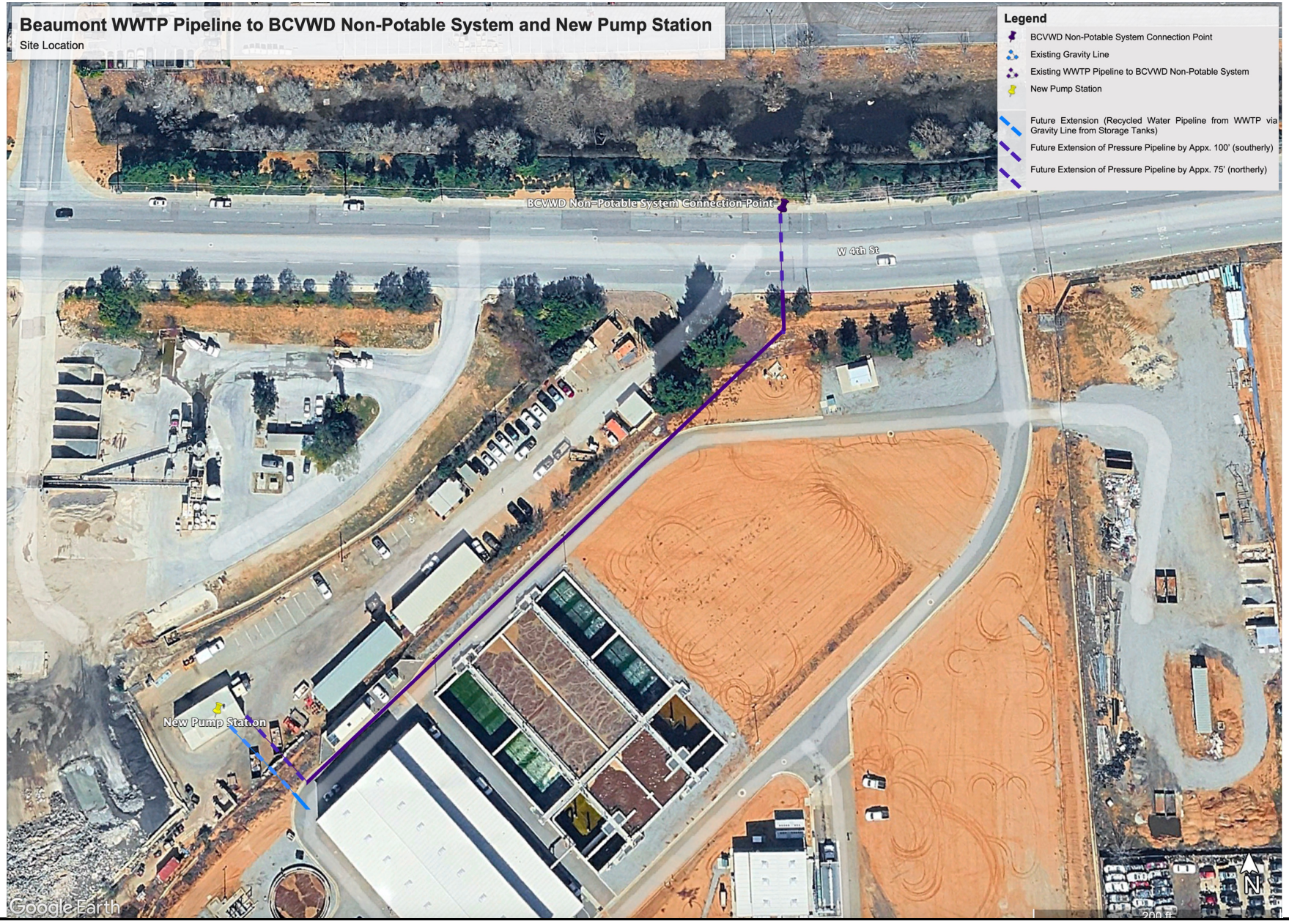


FIGURE 3-3

Tom Dodson & Associates
Environmental Consultants

Beaumont WWTP Pipeline to BCVWD Non-Potable System and New Pump Station

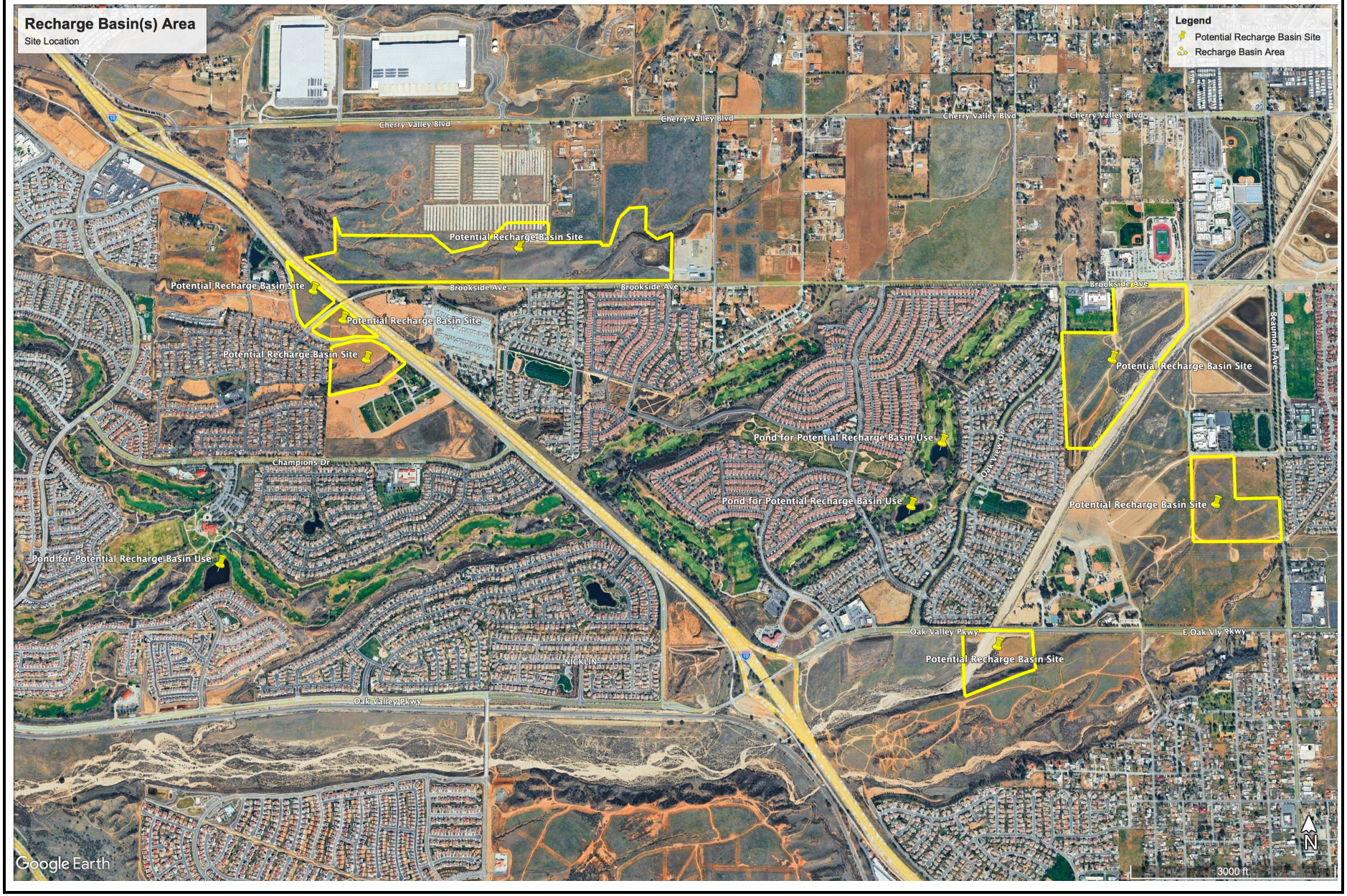
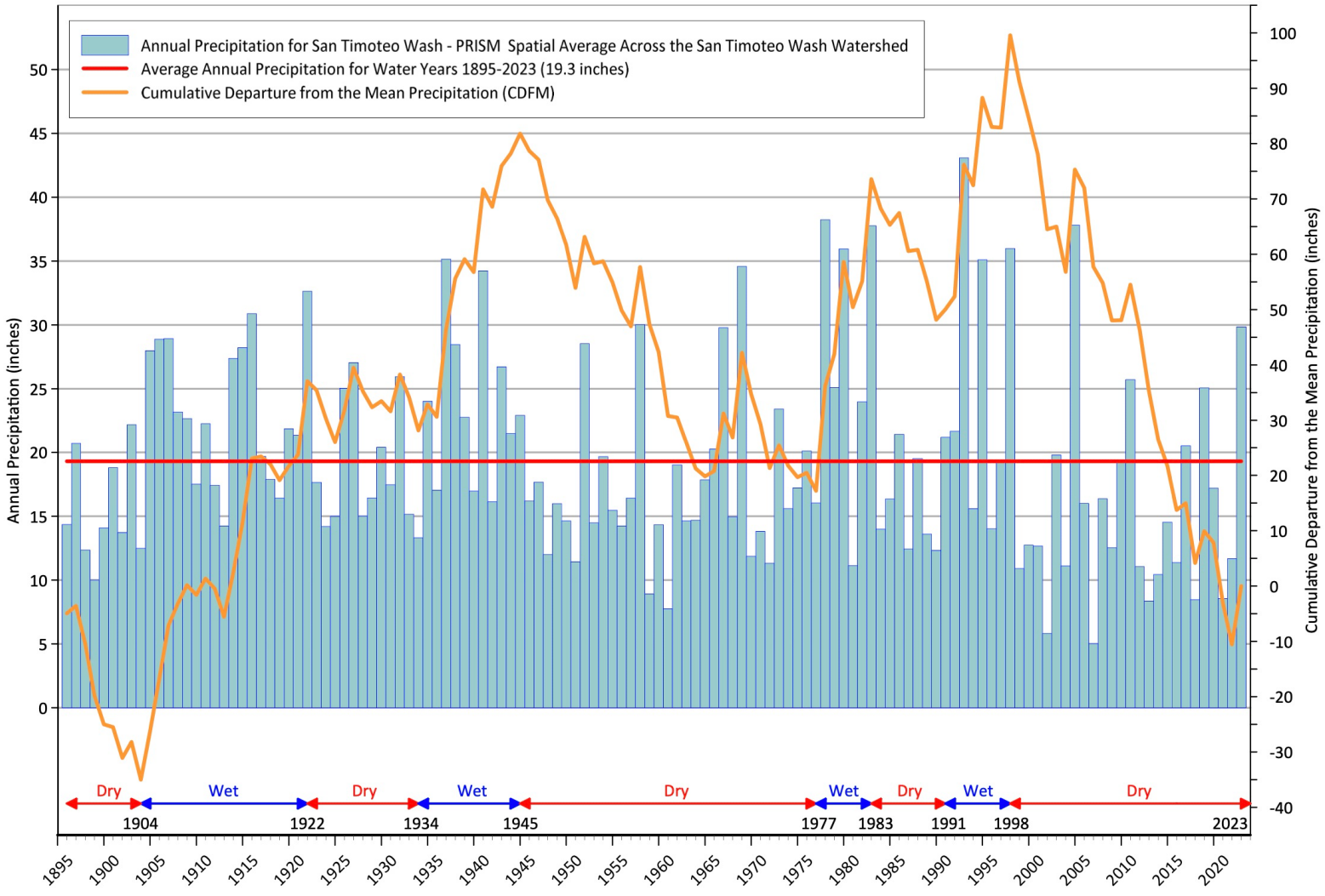


FIGURE 3-4

Tom Dodson & Associates
Environmental Consultants

Recharge Basin Area(s)



WEST YOST
Water. Engineered.

Author: AK
Date: 20250102
File: Figure 2-4 Beaumont CDFM.grf

Annual Precipitation in the San Timoteo Watershed
Water Year 1895 - 2023

FIGURE 3-5

Tom Dodson & Associates
Environmental Consultants

Anticipated Precipitation in the San Timoteo Watershed

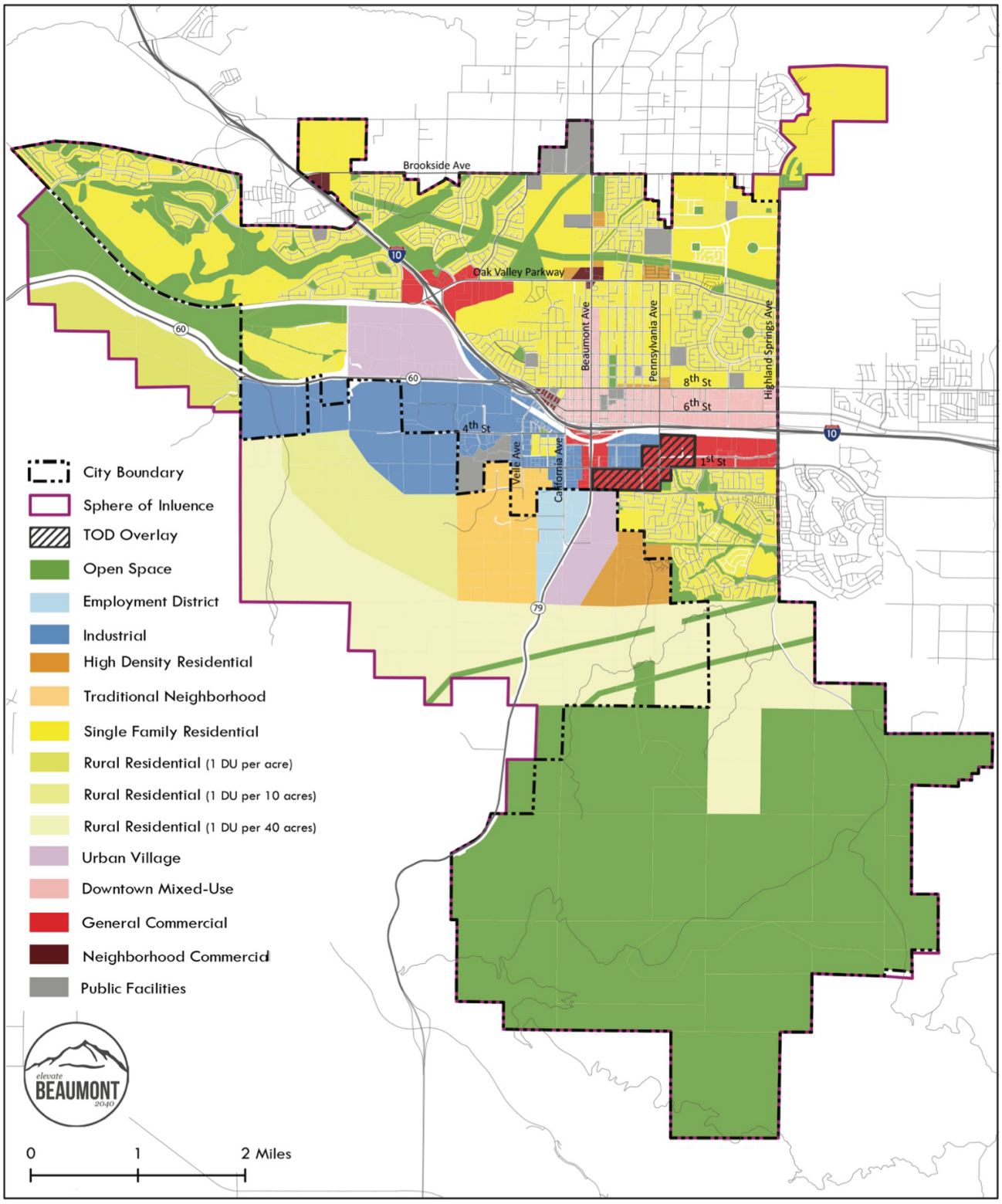


Figure 3-4 - Land Use Plan

City of Beaumont General Plan Update

FIGURE 3-6

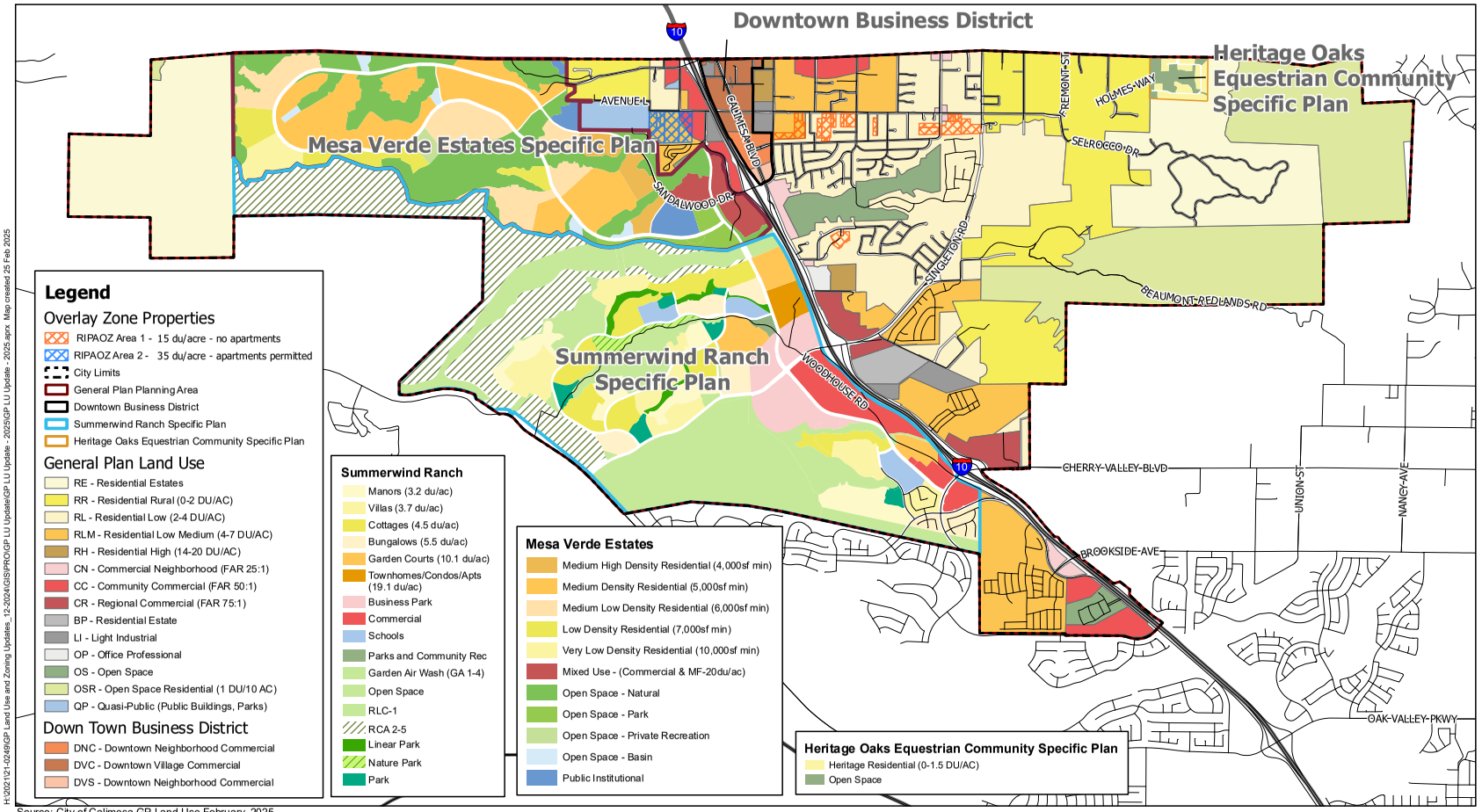


FIGURE 3-7

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City of Calimesa Land Use and Zoning

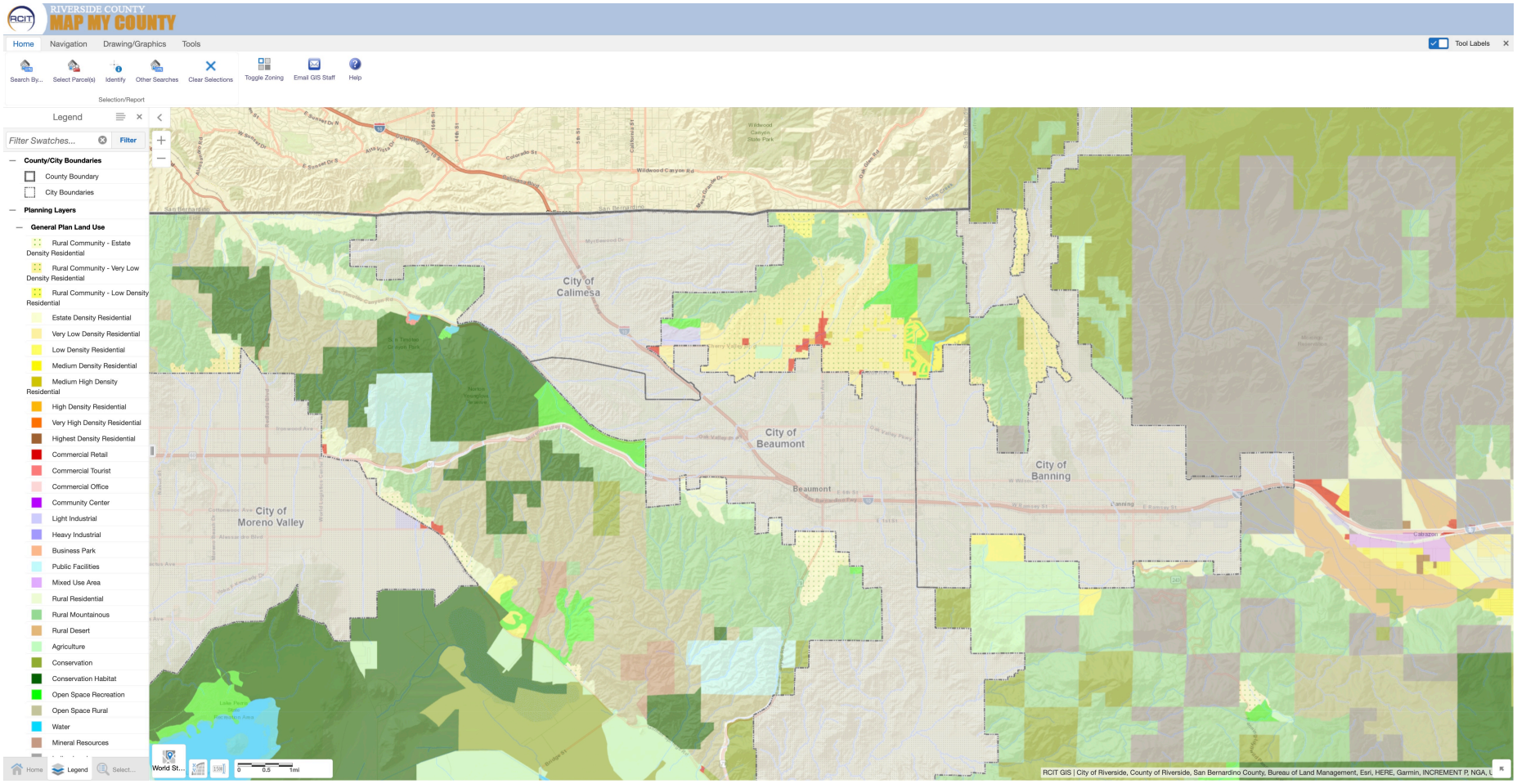

FIGURE 3-8

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County of Riverside Land Use

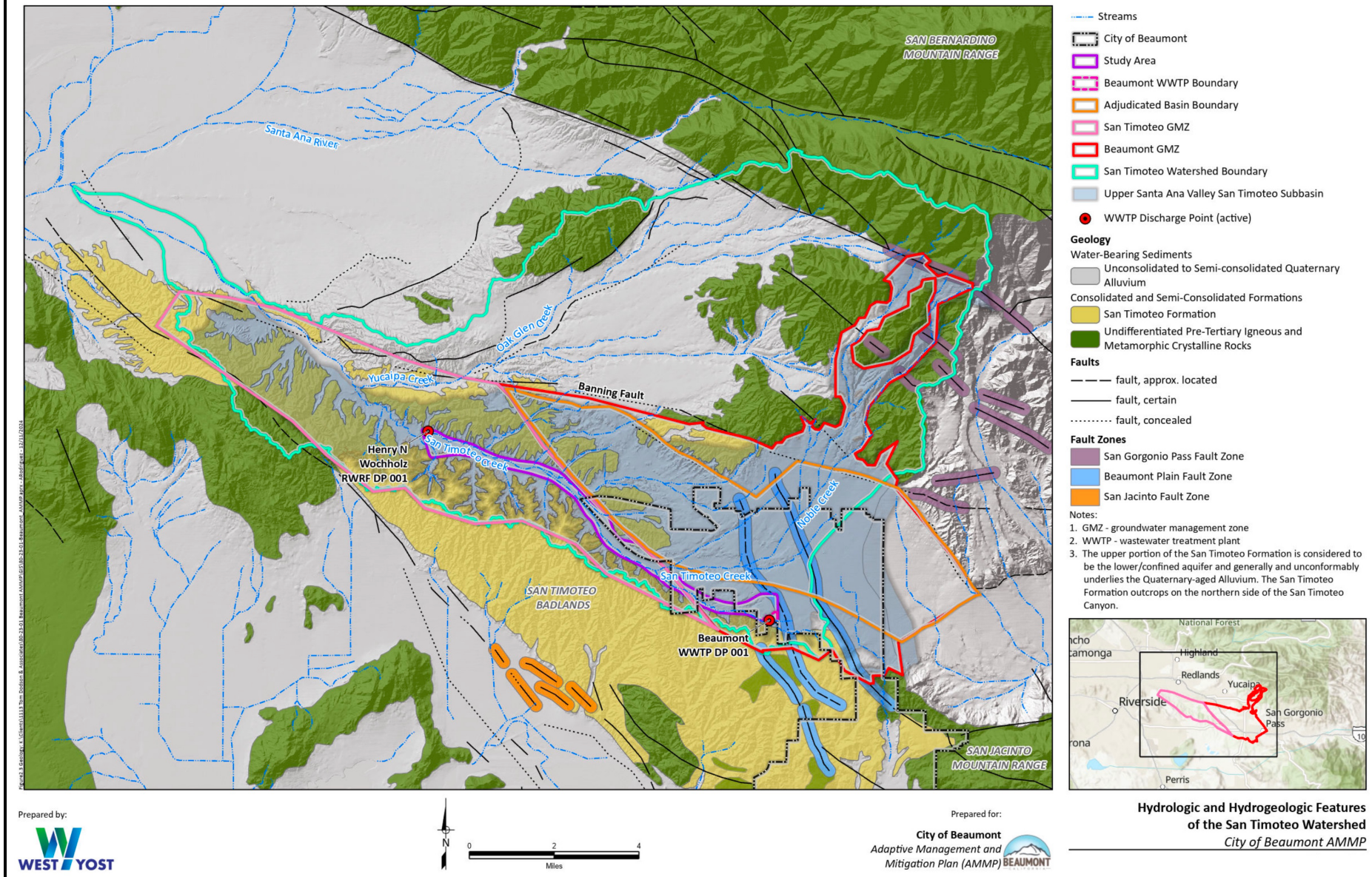

FIGURE 3-9

Tom Dodson & Associates
Environmental Consultants

Hydrologic and Hydrogeologic Features of the San Timoteo Watershed

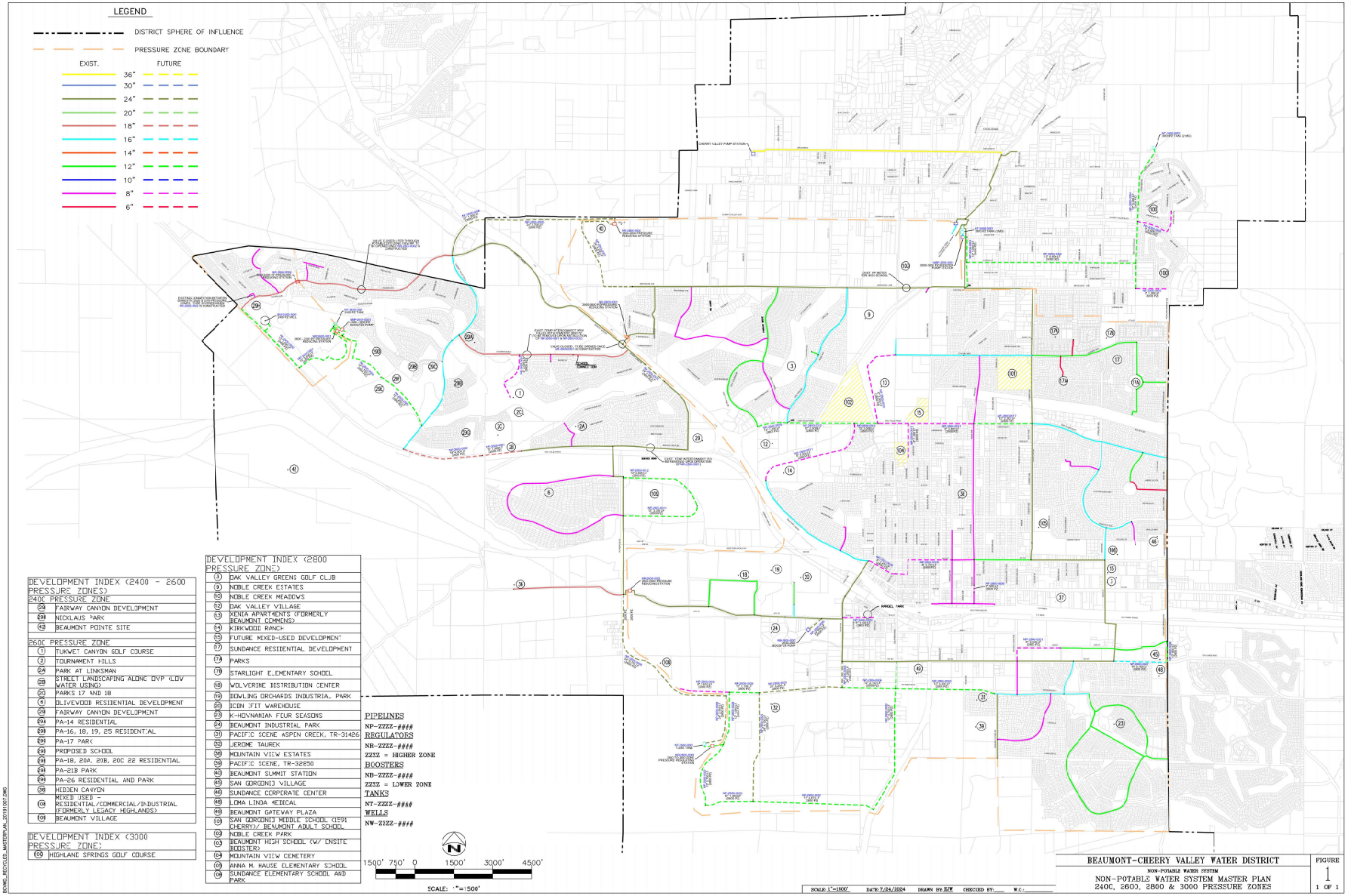

FIGURE 3-10

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BCVWD Non Potable Water System Master Plan