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Countywide Water and Wastewater Municipal Service Review

Riverside Local Agency Formation Commission

LAFCO 2019-01-1,2,3,4,5

Volume 2

Pass/Mountain Area Water and Wastewater Agencies

City of Banning, City of Beaumont, Beaumont Cherry Valley Water District, Cabazon County Water District, Fern Valley Water District, High Valleys Water District, Idyllwild County Water District, Pine Cove County Water District, Pinyon Pines County Water District, San Gorgonio Pass Water Agency, Yucaipa Valley Water District

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Riverside Local Agency Formation Commission

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Acronyms and Abbreviations

AADF	Average Annual Dry Weather Flow
AF	Acre Feet
AFY	Acre Feet per Year
BCVWD	Beaumont-Cherry Valley Water District
CCR	Consumer Confidence Report
CCWD	Cabazon County Water District
CDP	Census Designated Place
CFD	Community Facilities District
CFS	Cubic Feet per Second
CIP	Capital Improvement Projects
DBP	Disinfection By-Products
DDW	State Water Resources Control Board Division of Drinking Water
DUC	Disadvantaged Unincorporated Communities
DWR	Department of Water Resources
EDU	Equivalent Dwelling Unit
EFM	Enhanced Flux Maintenance
EMWD	Eastern Municipal Water District
FAC	Finance & Audit Committee
FLTP	Foster Lake Treatment Plant
GFD	Gallons per square Foot per Day
GPCD	Gallons Per Capita per Day
GPD	Gallons Per Day
GPM	Gallons Per Minute
HAA	Haloacetic Acids
HVWD	High Valleys Water District
IWD	Idyllwild County Water District
IEBL	Inland Empire Brine Line
IFAS	Integrated Fixed film Activated Sludge
IRWMP	Integrated Regional Water Management Plan
IWD	Idyllwild County Water District
LHMP	Local Hazard Mitigation Plan
MF	Microfiltration
MGD	Million Gallons per Day
MHI	Median Household Income
MIH	Miner's Inch Hours in Southern California is reported to be 0.02 CFS (Cubic Feet per Second)
MSL	Mean Sea Level
MWC	Mutual Water Company
OCSD	Orange County Sanitation District
PCWD	Pine Cove County Water District
PPCWD	Pinyon Pines County Water District
RCFCD	Riverside County Flood Control and Water Conservation District
RO	Reverse Osmosis
RUWMP	Regional Urban Water Management Plan

RWQCB	Regional Water Quality Control Board
SAWPA	Santa Ana Watershed Project Authority's
SBVMWD	San Bernardino Valley Municipal Water District
SCADA	Supervisory Control And Data Acquisition
SGMA	Sustainable Groundwater Management Authority
SGPWA	San Gorgonio Pass water Agency
SMMWC	South Mesa Mutual Water Company
SWP	State Water Project
SWRCB	State Water Resources Control Board.
SWRCBDDW	State Water Resources Control Board's Division of Drinking Water
TDS	Total Dissolved Solids
THM	Trihalomethanes
TIN	Total Inorganic Nitrogen
TOC	Total Organic Carbon
UV	Ultra Violet
UWMP	Urban Water Management Plan
WRWRF	Wochholz Regional Water Recycling Facility
WSA	Water Supply Assessment
WWTP	Wastewater Treatment Plant
YVRBL	Yucaipa Valley Regional Brine Line
YVRWFF	Yucaipa Valley Regional Water Filtration Facility
YVWD	Yucaipa Valley Water District

1. Executive Summary

The *Countywide Water and Wastewater MSR Study* focuses on 12 cities and 32 special districts (29 independent districts and 3 County Service Areas) for a total of 44 public agencies which currently provide water and/or sewer services to residents within Riverside County. For ease of presentation, the agencies are divided into three separate reports by sub-region: 1) Western County (Volume 1), 2) Pass/Mountain Area (Volume 2), and 3) Coachella/Eastern County (Volume 3).

This report (Volume 2) is focused on the Pass/Mountain sub-region only. The two cities and nine special districts considered in Volume 2 include:

- City of Banning
- City of Beaumont
- Beaumont-Cherry Valley Water District
- Cabazon County Water District
- Fern Valley Water District
- High Valleys Water District
- Idyllwild County Water District
- Pine Cove County Water District
- Pinyon Pines County Water District
- San Gorgonio Pass Water District
- Yucaipa Valley Water District

Municipal Service Review Determinations

The Riverside Local Agency Formation Commission (LAFCO) is required to conduct periodic reviews of each service provider, and to adopt determinations addressing current service levels and the ability of each agency to continue to provide adequate services into the future. Specifically, the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires that LAFCO review municipal services before updating spheres of influence (SOIs), and to prepare a written determination addressing each of the following:

1. Growth and population projections for the affected area.
2. The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence.
3. Present and planned capacity of public facilities, adequacy of public services, and infrastructure needs or deficiencies including needs or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the sphere of influence.

4. Financial ability of agencies to provide services.
5. Status of, and opportunities for, shared facilities.
6. Accountability for community service needs, including governmental structure and operational efficiencies.
7. Any other matter related to effective or efficient service delivery, as required by commission policy.

Sphere of Influence Determinations

This report does not include analyses of agency spheres of influence, or make recommendations regarding potential sphere amendments. This report could, however, be used as background and support information should Riverside LAFCO decide to pursue specific agency sphere changes in the future.

MSR Approach and Review Opportunities

A collaborative approach has been used throughout the preparation of this MSR. Multiple opportunities were provided for input from public agencies. Initially, draft statistical profiles of each agency were developed and provided to each agency and LAFCO for review and comment. Throughout October and November 2018, individual Draft agency reports were completed and distributed to each agency and LAFCO for additional review and comment in December 2018.

Distribution of this Public Review Draft of the MSR Study, which incorporates all agency and LAFCO comments received to date, provided another opportunity for public agencies, LAFCO, and the general public to review and comment on the MSR-SOI Draft report. A Final Draft MSR Study is anticipated to be completed by February 2019 which will allow a third opportunity for affected agencies to review and provide comments. In addition, public hearings will be conducted by LAFCO to consider the Draft and Final versions of the MSR Study, allowing additional opportunities for comment before the Commission.

City and Special District Summaries

The following provides an overview of the recommended MSR determinations on an agency-by-agency basis:

City of Banning: The City, through its Public Works Department and Water Division, provides municipal water and sewer services to its service area, which includes a 23.2 square mile area within the City's boundary as well as some unincorporated areas of Riverside County. San Gorgonio Pass Water Agency (SGPWA) overlaps the City of Banning (water service only) and SGPWA sells water to the City of Banning. Currently, there are two significant developments planned within the City's water service area – Butterfield Ranch and Rancho San Gorgonio – that could affect population growth and future municipal services provision. One future project annexation is the Rancho San Gorgonio Specific Plan that consists of approximately 831 acres of land, of which approximately 670 acres are presently located within the existing boundaries

of the City of Banning and approximately 161 acres are located in the City's adopted Sphere of Influence. (The proposed annexation territory is located on the south side of Banning, 0.4 miles south of Interstate 10, and generally bounded by Sunset Avenue and Turtle Dove Lane on the west, Coyote Trail and Old Idyllwild Road on the south, San Gorgonio Avenue (State Route 243) on the east, and portions of Westward Avenue to the north.) The City anticipates submitting an application to annex the property in the near future. Additionally, the City supplies potable water to the High Valleys Water District under agreement. It is not realistic for organizational changes to be considered at this time.

City of Beaumont: The City of Beaumont provides wastewater services within the City limits and to two developments outside the City - the Highland Springs Country Club/Golf Course and the Highland Springs Village Mobile Home Park which surrounds the golf course. Wastewater services are provided to 15,350 accounts of which 92 percent are single family residential. The City's Public Works Department maintains and operates the City owned Wastewater Treatment Plant (WWTP). The plant's current capacity of 4 million gallons per day (MGD) is not sufficient to accommodate all expected future growth within the City. The July 2017 MSR outlined the steps taken to address the capacity issue with the WWTP and funding for the Brine Line to address salinity problems in the effluent. The upgrade to the WWTP is part of the City's five year capital improvement plan approved on September 5, 2017. Beaumont has been through significant political and financial upheaval and has been financially insolvent for at least 10 years. As of April 4, 2017, the City was still on the verge of bankruptcy. A settlement agreement successfully negotiated with WRCOG to extinguish the $67 million judgement against the City was the largest factor in creating this stability. Additionally, the City implemented sound management principles and financial practices over the past two years to further stabilize the community. The City has no plans to expand beyond its current sphere of influence. The City administration is focused on improving transparency, accountability, improving its financial situation, and upgrading the capacity of its wastewater treatment facility. Due to the differences in the agency service area with the Beaumont- Cherry Valley Water District, consideration of a reorganization with the City is not being considered.

Beaumont-Cherry Valley Water District: The Beaumont-Cherry Valley Water District (BCVWD) provides potable and non-potable water service to 17,997 connections. The District's service area, virtually all of which is within Riverside County, includes portions of the City of Beaumont and the community of Cherry Valley. The San Gorgonio Pass Water Agency (SGPWA) overlaps BCVWD (water service only), and SGPWA sells water to the BCVWD. The District's service population, 48,377 in 2015, is expected to reach 94,804 by 2040. BCVWD's potable water system is supplied by wells in Little San Gorgonio Creek (Edgar Canyon) and the Beaumont Basin. The District has a total of 24 wells including one standby. No capacity or storage issues have been identified. Based on the most recent financial data, it appears the District is financially healthy. No reorganization proposals appear to be appropriate for the District at this time.

Cabazon County Water District: The District encompasses 7,040 acres around and including the unincorporated town of Cabazon. The San Gorgonio Pass Water Agency overlaps the Cabazon County Water District (water service only). The Cabazon County Water District provides water service to approximately 1,000 customers within its service area from four groundwater wells. The service area experienced significant growth in the last six years. Housing projections indicate there will be a need for an additional 300 connections in the next five years. The District has adequate storage and pumping capability to supply enough water to the District's future needs. The District has been primarily operating at a loss in FY 16 and FY 17. The loss, although due to depreciation, has been over $100,000 a year. Consequently, the District hired NBS to perform a rate study to recommend a rate structure that would make the District fiscally sound. The District is not looking to expand its boundaries or provide services outside the District.

Fern Valley Water District: The Fern Valley Water District (FVWD) serves water to a population of approximately 2,000 through 1,185 connections. The FVWD system relies on surface water with groundwater backup. The District operates 11 groundwater wells with a total pumping capacity of 320 GPM. Water storage includes five reservoirs with a capacity of approximately 4.5 million gallons for finished water. In addition, there are three reservoirs with a capacity of 2.34 million gallons for raw or untreated water. No capacity or storage issues have been identified. The District had begun discussions with Pine Cove Water District and Idyllwild Water District on possible consolidation of the three agencies. The FVWD, as of June 20, 2018, has indicated it has no interest in considering consolidation but will continue to work with other agencies for opportunities to increase efficiency and/or achieve economies of scale.

High Valleys Water District: The High Valleys Water District is located within the San Jacinto mountains, overlooking the Banning/Pass area and provides potable water to approximately eight square miles with 227 connections. The San Gorgonio Pass Water Agency overlaps the High Valleys Water District (water service only). The District purchases its water from the City of Banning and also receives water from three wells located in the Beaumont storage unit operated by the Beaumont-Cherry Valley Water District and the City of Beaumont. The District's population from the 2010 Census was estimated at 500. The District anticipates growth in population to 714 in 2023, to 748 in 2028, and to 816 in 2038. Based on the most recent financial data, it appears the District is financially healthy. The District has no interest in expanding its sphere or changing its boundaries.

Idyllwild County Water District: The Idyllwild County Water District (ICWD) provides water to 1,560 customers in the community of Idyllwild. Improvement District No. 1 was established by action of the Board on March 10, 1966 to provide wastewater services. There are 587 sewer connections in Improvement District No. 1. The District estimates a year-round population of 2,600, and 7,000+ in summer. In total, the District anticipates a 708 population increase over the next 30 years with the development of 250 vacant parcels. The District relies on groundwater as its source of water supply. In the second quarter of 2018, values for

trihalomethanes (THMs) and haloacetic acids (HAAs) exceeded their respective maximum allowable limits of 80 µg/L and 60 µg/L, respectively. The primary cause was an elevated concentration of naturally-occurring total organic carbon (TOC) in the groundwater produced by the Foster Lake Wells. To address this issue, the installation of a granular activated carbon filtration system is currently in process. The District's wastewater treatment plant (WWTP) is in need of replacement but continues to meet the discharge requirements established by the RWQCB. A District consultant has recommended replacement of the main unit of the WWTP at an estimated cost of $3.9 million. The Board directed staff to continue to research options for improving the WWTP and funding options for a new WWTP. The District has considered consolidation opportunities with the neighboring water districts of Fern Valley and Pine Cove, but both districts have expressed no interest at this time.

Pine Cove County Water District: The District (PCWD) provides retail water to 1,108 connections of primarily single and multi-family customers in the Pine Cove area. The estimated population of the District is 3,585 with little or no growth anticipated in the next five years. The District's water source is groundwater which is treated at one of its two treatment facilities. The District has experienced a net positive income in the last three fiscal years. However, operating revenues, primarily water sales, are insufficient to meet expenses. The District had begun discussion with the Fern Valley Water District and Idyllwild Water District on consolidation of the three agencies. After considering its options, PCWD has indicated it has no further interest in consolidation but will continue to work with other agencies for opportunities to increase efficiency or achieve economies of scale.

Pinyon Pines County Water District: The Pinyon Pines County Water District serves potable to water to approximately 80 connections covering approximately 320 acres. It also provides water to two U.S. Forest Service campgrounds (Pinyon Flats and Ribbonwood Equestrian campgrounds) and to Riverside County Fire Department Station #30. The water source is groundwater. District population is estimated at 253, and there are no known plans for expansion of the District or new development within its boundaries. The District has no plans for expansion of its sphere or territory in the foreseeable future. There have been no new connections since 1976 due to lack of water.

San Gorgonio Pass Water Agency: The San Gorgonio Pass Water Agency (SPGWA) contracts with the State of California to import water through the State Water Project. The agency boundaries extend through the Cities of Calimesa, Beaumont, and Banning. The Agency has a contract with the California Department of Water Resources (DWR) to receive an annual allotment of 17,300 acre-feet from the State Water Project. The population of SGPWA is currently estimated at 87,192. The UWMP estimates 2.2 percent annual growth for the agency. At that rate the estimated population would reach 96,954 in 2020 and 107,809 in 2025. Primary factors affecting SWP supply availability include: the availability of water at the source of supply in northern California, the ability to transport that water from the source to the primary SWP diversion point in the southern Delta, and the magnitude of total contractor demand for that water. The Agency works cooperatively with the DWR and a number of local water agencies, including the City of Banning, the Beaumont-Cherry Valley Water District, and

the Yucaipa Water District. They also work with the Yuba County Water Agency and the City of Calimesa. The District has no plans for expansion of its SOI or for consideration of reorganizations with other agencies.

Yucaipa Valley Water District: The Yucaipa Valley Water District (YVWD) is responsible for water supply, treatment, and distribution, recycled water, and wastewater collection and treatment for the Yucaipa Valley. The San Gorgonio Pass Water Agency (SGPWA) overlaps YVWD (water service only), and SGPWA sells water to YVWD. YVWD's current service area encompasses approximately 25,742 acres, 40 square miles, which includes the incorporated cities of Yucaipa (San Bernardino County) and Calimesa (Riverside County) which are in San Bernardino and Riverside Counties respectively. In 2017, the population of the District was estimated at approximately 44,426. The District projects that at build out in 2060, the population of the cities of Calimesa and Yucaipa will reach 94,800. No capacity or demand issues were identified for water or wastewater services. Based on the most recent financial data, it appears the District is financially healthy. YVWD has identified a potential boundary discrepancy with the South Mesa Mutual Water Company. YVWD has also indicated that future annexation of the San Timoteo Canyon area would allow the District to provide recycled water to the area.

Municipal Service Review Determinations- Pass/Mountain Region

1. Growth and population projections for the affected area

Projections of growth provided by the agencies, Census data, Urban Water Management Plans, Sewer Master Plans and other resources indicate that growth will occur throughout much of Riverside County's Pass/Mountain Region over the next 20 years. Several agencies including Cabazon County Water District, Fern Valley County Water District, High Valleys County Water District, Idyllwild County Water District, Pine Cove County Water District and Pinyon Pines County Water District are projected to experience no or very limited population growth.

2. Location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence

Within the Pass/Mountain Area Region, Riverside LAFCO has identified a number of disadvantaged unincorporated communities (DUCs) within or contiguous to agency spheres of influence. All identified DUCs are currently provided water and sewer service by existing agencies through contract or have the opportunity to connect to such services in the future should homeowners elect to do so. Identified agencies with DUC's to be addressed are:

- City of Beaumont: Highland Springs area, referred to as Cherry Valley West in the SOI.
- Beaumont-Cherry Valley WD: Highland Springs is within the boundary of the District; there are no DUC's within or adjacent to the SOI.

3. Present and planned capacity of public facilities, adequacy of public services, and infrastructure needs or deficiencies, including needs or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the sphere of influence

Based on expected supplies from Metropolitan and the State Water Project, and local supplies from groundwater, through data and reports supplied by the agencies, the water service providers within the Pass/Mountain Area Region have adequate water to meet future needs. Wastewater providers, through upgrading existing facilities and constructing new facilities, can also meet future wastewater needs within the region. The agencies adequately address infrastructure needs and deficiencies through master plans, capital improvement plans and other long-range planning documents. Only one agency, Pinyon Pines County Water District, is limited to a single well source situation. As stated above, identified DUCs in the Pass/Mountain Area Region are currently provided water and sewer service or have the opportunity to connect to such services in the future.

4. Financial ability of agencies to provide services

All of the agencies prepare comprehensive annual budgets. Most maintain annual Capital Improvement Plans, and maintain adequate and appropriate reserves. For most of the agencies within the Pass/Mountain Area County Region, the amount of reserves held is matched to CIP and other infrastructure improvements. All agencies reviewed reported unqualified audits prepared in accordance with generally accepted accounting standards. The City of Beaumont is continuing to address financial stress from the immediate past five years and proceeding with expansion of its WWTF after issuing $80 million in bonds in 2017.

5. Status of, and opportunities for, shared facilities

There is extensive agency collaboration within agencies of the Pass/Mountain Area County Region. Excess capacity, facilities and staff are made available whenever possible. The agencies increase opportunities for shared facilities through joint powers agreements, inter-ties, service agreements and industry groups. Several agencies are in mountain areas separated from suburban services but cooperate with each other where possible. Specific cooperative programs are listed below by agency:

City of Banning: One of five members of Beaumont Basin Watermaster over the Beaumont Basin; member of the San Gorgonio Regional Management Group; sponsors of the regional IRWMP; member of the Beaumont Management Zone (BMZ) Maximum Benefits Program supporting long-term sustainability of water quality in the zone; party to Flume Improvement Project with Banning Heights Mutual Water Co. and Southern California Edison; since 2003, joint owner with Beaumont-Cherry Valley WD of three wells.

City of Beaumont: City Council is the Board of the Beaumont Financing Authority and Beaumont Utility Authority overseeing financing of projects.

Beaumont-Cherry Valley Water District: agreements to convey recycled water from City of Beaumont WWTF; interagency agreement with City of Banning, South Mesa Water Co., Yucaipa Valley Water District and San Gorgonio Pass Water District for sharing water; cooperative agreement with Riverside County Flood Control and other agencies for basin recharge; and member of the Beaumont Basin Watermaster Group.

Cabazon CWD: Participant in San Gorgonio Pass Water Agency SGMA process along with other area agencies.

San Gorgonio Pass Water Agency: as a wholesale agency, supplies portions of water to City of Banning, Beaumont-Cherry Valley Water District, Yucaipa Valley Water District and City of Calimesa; member of the San Gorgonio Regional Management Group sponsoring a regional IRWMP.

Yucaipa Valley WD: cooperative agreement with City of Yucaipa, Valley District and other agencies to develop a conjunctive use program in the Yucaipa Basin; participating in San Bernardino Valley IRWMP.

Fern Valley WD, Idyllwild County WD and Pine Cover County WD: the three districts cooperate as needed for operations and emergencies, and have had previous discussions concerning possible consolidation but these were discontinued in mid-2018. There may be opportunities to consider some functional sharing of services as an interim step to more cooperation.

6. Accountability for community service needs, including governmental structure and operational efficiencies

The governing bodies of the agencies are locally accountable through adherence to applicable government code sections, open and accessible meetings, and dissemination of information. All agencies have websites which help to promote transparency and accountability as well as allowing public oversight of agency activities.

There had been discussions among the three San Jacinto Mountain Area Districts of Idyllwild, Pine Cove and Fern Valley to study possible consolidation, however in early 2018, the Pine Cove and Fern Valley Districts each decided to not consider a consolidation study. As a result of completion of this MSR, it may be possible for these discussions to be encouraged by the Commission and reconsidered within the communities.

Some agencies lack mapping capabilities. All agencies are encouraged to develop standardized mapping systems and submit updated maps to LAFCO on a regular basis.

7. Any other matter related to effective or efficient service delivery, as required by commission policy

No other matters related to effective or efficient service delivery were identified by Commission policy.

2. Introduction

In 1997, the State Legislature convened a special commission to study and make recommendations to address California's rapidly accelerating growth. The Commission on Local Governance for the 21st Century focused their energies on ways to empower the already existing Local Agency Formation Commissions (LAFCOs), originally established in 1963. The Commission's final report, *Growth Within Bounds*, recommended various changes to local land use laws and LAFCO statutes. Assembly Speaker Bob Hertzberg incorporated many of the recommendations of the Commission into the Cortese-Knox-Herzberg Local Government Reorganization Act of 2000 (AB 2838). The law provided LAFCOs with additional responsibilities and powers.

Municipal Service Reviews

Beginning in 2001, LAFCOs in each county in California were required to review and, as necessary, update the sphere of influence (SOI) of each city and special district. SOIs are boundaries, determined by LAFCO, which define the logical, ultimate service area for cities and special districts. No SOI can be updated, however, unless the LAFCO first conducts a Municipal Service Review (MSR). MSRs evaluate how agencies currently provide municipal services within their agency service area and evaluate the impacts on those services from future growth and other changes that may occur over the next 10 to 20 years. The MSR report is also required to identify potential opportunities to address any shortfalls, gaps, and/or impacts on services and governmental structure that may currently exist or are anticipated in the future.

The MSR process does not require LAFCO to initiate changes of organization based on service review determinations. California Government Code §56430 do require, however, that LAFCOs, upon receipt and consideration of an MSR, adopt written determinations addressing each of the following areas:

1. Growth and population projections for the affected area.
2. The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence.
3. Present and planned capacity of public facilities, adequacy of public services, and infrastructure needs or deficiencies, including needs or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the sphere of influence.
4. Financial ability of agencies to provide services.
5. Status of, and opportunities, for shared facilities.
6. Accountability for community service needs, including governmental structure and operational efficiencies.
7. Any other matter related to effective or efficient service delivery, as required by commission policy.

Spheres of Influence

In 1972, LAFCOs were given the power to establish spheres of influence (SOIs) for all local agencies under their jurisdiction. As defined by the Cortese-Knox-Hertzberg Reorganization Act of 2000 (CKH Act), LAFCO's governing law, "sphere of influence" means a plan for the probable physical boundaries and service area of a local agency, as determined by the commission (Government Code Section 56076). SOIs are designed to both proactively guide and respond to the need for the extension of infrastructure and delivery of municipal services to areas of emerging growth and development. The requirement for LAFCOs to conduct MSRs was established by AB 2838 as an acknowledgment of the importance of SOIs and recognition that periodic reviews and potential updates of SOIs should be conducted. (Government Code §56425(g)) with the benefit of better information and data through MSRs (Government Code §56430(a)).

LAFCO is required to make five written determinations when establishing, amending, or updating an SOI for any local agency that address the following:

1. The present and planned land uses in the area, including agricultural and open-space lands.
2. The present and probable need for public facilities and services in the area.
3. The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.
4. The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.
5. For an update of an SOI of a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, the present and probable need for those public facilities and services of any disadvantaged unincorporated communities with the existing sphere of influence.

This report does not include analyses of agency spheres of influence or make recommendations regarding potential sphere amendments. This report could, however, be used as background and support information should Riverside LAFCO decide to pursue specific agency sphere changes in the future.

Disadvantaged Unincorporated Communities (DUCs)

Senate Bill 244 was a significant piece of LAFCO-related legislation passed in 2011. This bill required LAFCO to make determinations regarding disadvantaged unincorporated communities or (DUCs). DUCs are defined as inhabited, unincorporated territory that constitutes all or a portion of a community with an annual median household income that is less than 80 percent of the statewide annual household income (MHI). According to the 2012-2016 five-year American Community Survey data, 80 percent of the statewide median household income is $51,026.

Government Code §56375 specifically prohibits LAFCOs from approving an annexation to a city of any territory greater than 10 acres where there exists a disadvantaged unincorporated community that is contiguous to the area of proposed annexation unless an application to

annex the disadvantaged unincorporated community has also been filed. Within this MSR, each agency description includes a review of applicable DUCs (if any) for that agency and how water and wastewater services are currently provided to that area.

Each agency has been reviewed for possible DUCs and information is provided in their sections of the report.

Countywide Water and Wastewater MSR Study

The *Countywide Water and Wastewater MSR Study* focuses on 12 cities and 32 special districts (29 independent districts and 3 County Service Areas) for a total of 44 public agencies which currently provide water and/or sewer services to residents within Riverside County. For ease of presentation, the agencies are divided into three separate reports by sub-region: 1) Western County (Volume 1), 2) Pass/Mountain Area (Volume 2), and 3) Coachella/Eastern County (Volume 3).

This report (Volume 2) is focused on the Pass/ Mountain sub region only. Table 1, below, identifies the agencies studied by subregion and the service(s) provided.

Table 1 – Riverside County Agencies and Services Reviewed

	Services Provided	
	Water	Wastewater
Western Agencies		
1. City of Corona	✓	✓
2. City of Hemet	✓	✓
3. City of Norco	✓	✓
4. City of Perris		✓
5. City of Riverside	✓	✓
6. City of San Jacinto	✓	✓
7. Eastern Municipal Water District	✓	✓
8. Edgemont Community Services District		✓
9. Elsinore Valley Municipal Water District	✓	✓
10. Home Gardens County Water District		✓
11. Home Gardens Sanitary District	✓	
12. Jurupa Community Services District	✓	✓
13. Lake Hemet Municipal Water District	✓	✓
14. Rancho California Water District	✓	✓
15. Rubidoux Community Services District	✓	✓
16. San Bernardino Valley Municipal Water District	✓	
17. Temescal Valley Water District	✓	✓
18. West Valley Water District	✓	
19. Western Municipal Water District	✓	✓
Pass/Mountain Area Agencies		
20. City of Banning	✓	✓
21. City of Beaumont		✓
22. Beaumont-Cherry Valley Water District	✓	
23. Cabazon County Water District	✓	
24. Fern Valley Water District	✓	
25. High Valley Water District	✓	
26. Idyllwild County Water District	✓	✓
27. Pine Cove County Water District	✓	
28. Pinyon Pines County Water District	✓	
29. San Gorgonio Pass Water Agency	✓	
30. Yucaipa Valley Water District	✓	✓

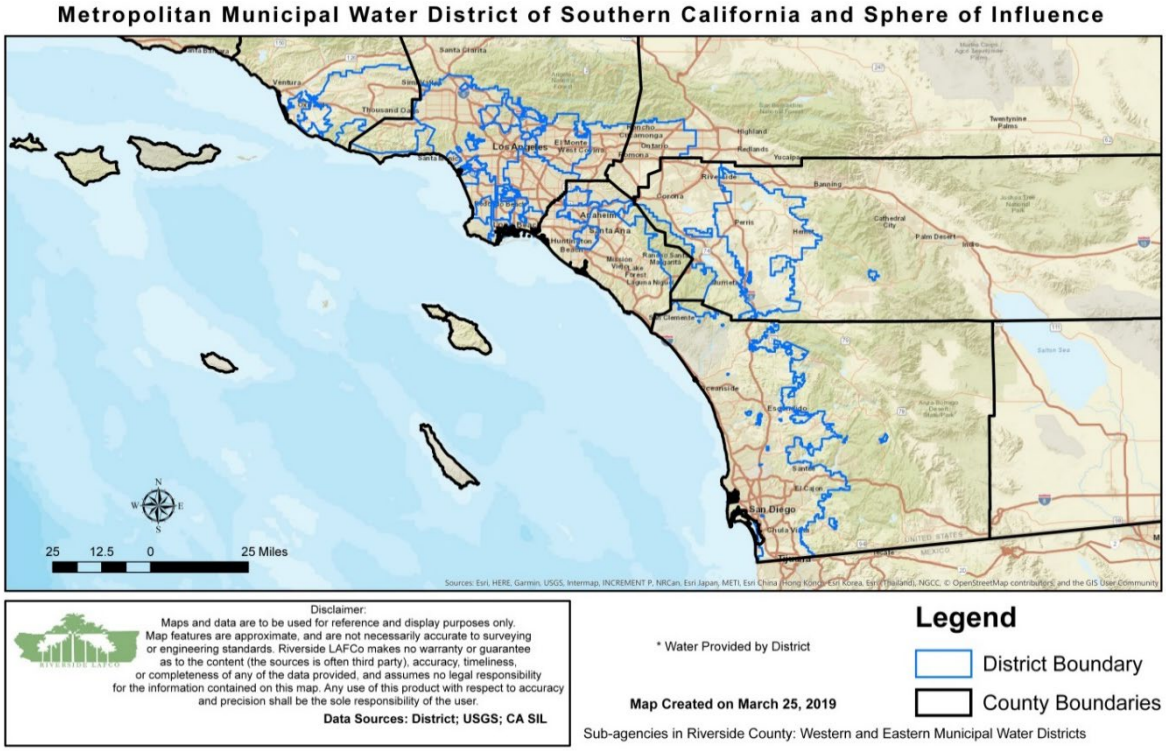
	Services Provided	
	Water	Wastewater
Coachella/Eastern County Agencies		
31. City of Blythe	✓	✓
32. City of Coachella	✓	✓
33. City of Indio	✓	
34. City of Palm Springs		✓
35. Chiriaco Summit County Water District	✓	
36. Coachella Valley Water District	✓	✓
37. Desert Water Agency	✓	✓
38. Imperial Irrigation District*	✓	✓
39. Mission Springs Water District	✓	✓
40. Palo Verde Irrigation District	✓	
41. Valley Sanitary District		✓
42. County Service Area 51 (Desert Center/Lake Tamarisk)	✓	✓
43. County Service Area 62 (Ripley)	✓	✓
44. County Service Area 122 (Mesa Verde)	✓	

* provides only electricity in Riverside County

Metropolitan Water District of Southern California

The Metropolitan Water District of Southern California's (MET) mission is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way. Today, MET serves Riverside County as part of a 5,200-square-mile service area that also includes Los Angeles, Orange, San Bernardino, San Diego and Ventura counties.

Exhibit 1 – MET Service Area Map



MET was established in 1928 under a special act of the California Legislature to build and operate the 242-mile Colorado River Aqueduct that would bring water to southern coastal areas. Southland residents voted for a major bond in the depths of the Great Depression to fund the herculean construction effort through the desert to deliver essential water supplies and generate badly needed jobs.

In 1960, MET, along with 30 other public agencies, signed a long-term contract that made possible the construction of the State Water Project, including reservoirs, pumping plants and the 444-mile California Aqueduct, which currently serves urban and agricultural agencies from the San Francisco Bay to Southern California, including Riverside County. As the largest of the now 29 agencies, MET contracts with the State Department of Water Resources, which owns and operates the State Water Project, for slightly less than half of all supplies delivered to Metropolitan.

More than 1,800 employees and many contractors perform a wide range of water management, planning, conservation and other activities to serve Metropolitan's 26 public member agencies, including both cities and special districts. Eastern Municipal Water District (EMWD) and Western Municipal Water District (WMWD) are Met's only two member agencies within Riverside County. MET provides more than 50 percent of the region's water through imported supplies and investments in new local projects including recycled water and conservation. Each member agency is entitled to at least one director; additional directors are based on each member agency's assessed valuation.

MET ratepayers have also invested over two billion dollars to build the Diamond Valley Lake and reserve, the largest local reservoir in California, located within Riverside County, which stores water that can be used to supply the region in dry years or during emergencies. Diamond Valley Lake has a surface area of 4,500 acres and capacity of 810,000 acre-feet of water. Adjacent to Diamond Valley is Lake Skinner and the Robert A. Skinner Water Treatment Plant that has capacity to treat up to 630 million gallons per day for the Eastern and Western MWD's and for the San Diego Water Authority service areas. Without this essential water source, Southern California would have faced water rationing three years ago during the recent drought cycle.

The two MET member agencies in Riverside County, EMWD and WMWD, are wholesale water suppliers to many of the other water purveyors within Riverside County. Each of these agencies are described in more detail as to their service areas and supply capabilities under their sections of the report.

Mutual Water Companies

Assembly Bill 54 (Solorio) was enacted in 2011 and added several requirements and responsibilities to managers of Mutual Water Companies (MWCs) effective January 1, 2012.

Corporations Code §14301.1 requires that each mutual water company submit to the LAFCO for its county a map showing its service area by December 31, 2012. In addition, a MWC must

respond to a request for non-confidential information from a LAFCO in conjunction with that agency's preparation of a municipal service review or sphere of influence. Government Code §56430(c) and (d) also allow a LAFCO conducting a municipal service review to investigate whether a MWC that operates a public water system is in compliance with the federal and state Safe Drinking Water Acts.

The following table lists MWCs that responded to the Riverside LAFCO request for information or have been identified as providing service within cities or water agencies in Riverside County. Several MWC's in the County have not responded to LAFCO's 2013 request for a map of their service area.

Table 2 – Mutual Water Companies – Pass Mountain Subregion

Company Name	Address	# of Connections	Contact
Banning Heights Mutual Water Company	7091 Bluff Street Banning, CA 92220	200 domestic water connections	John Covington or Ken Falls 951-849-2540
Cherry Valley Water Company	560 Magnolia Avenue Beaumont, CA 92223	79 connections 170 customers	Doyle Murray 951-845-0159
Western Heights Water Company (in Yucaipa but in San Bernardino County)	32352 Avenue D Yucaipa, CA 92399-1801	2210 connections	909-7901901 Debbie Patrick
South Mesa Water Company	391 W. Avenue L Calimesa	2,996 connections 13,000 residents (40% in Riverside Co.)	David A. Armstrong (909) 795-2401

3. Riverside County Overview

Riverside County is the fourth largest county in California by population, stretching nearly 200 miles across and comprising over 7,200 square miles of fertile river valleys, low deserts, mountains, foothills and rolling plains. Riverside County shares borders with Imperial, Orange, San Diego, and San Bernardino Counties, extending from within 14 miles of the Pacific Ocean to the Colorado River. Geographically, the county is mostly desert in the central and eastern portions, but has a Mediterranean climate in the western portion. Most of Joshua Tree National Park is located in the County.

Taking its name from the City of Riverside, the County was formed in 1893 from a small portion of San Bernardino County and a larger part of San Diego County. In May 1893, voters living within an area carved from San Bernardino County and San Diego County approved formation of Riverside County. On May 9, 1893, the County officially formed and began charting a course under its newly elected Board of Supervisors. The County's early years were linked to agriculture, most significantly as the birthplace of the citrus industry in California, but commerce, construction, manufacturing, transportation and tourism soon took hold, contributing substantially to the region's rapid growth.

Recent years have brought dramatic population growth. Between 1980 and 1990, the number of residents grew by over 76 percent, making Riverside the fastest-growing county in California. By 1992, the County was "home" to over 1.3 million residents, more than the entire population of 13 states, among them Maine, Nevada, Hawaii and New Hampshire. Since 1992, the population has nearly doubled. As depicted in Table 3 and Table 4, below, population and employment growth within Riverside County between 2015 and 2040 is projected to outpace every other county within the Southern California Association of Governments (SCAG) region with exception of Los Angeles.

Table 3 – Population by County

County	2000	2010	2015	2040	Difference 2015-2040
Imperial	143,151	175,594	182,390	282,024	99,634
Los Angeles	9,543,983	9,827,070	10,158,776	11,513,435	1,354,659
Orange	2,853,893	3,017,089	3,157,074	3,464,487	307,413
Riverside	1,557,271	2,191,800	2,316,438	3,167,584	851,146
San Bernardino	1,719,190	2,038,771	2,111,256	2,731,321	620,065
Ventura	756,902	853,188	853,188	965,210	112,022

Source: 2015-2040 SCAG RTP/SCS

Table 4 – Employment by County

County	2000	2010	2015	2040	Difference 2015-2040
Imperial	54,080	56,480	76,000	124,609	48,609
Los Angeles	4,444,600	4,140,040	4,463,010	5,225,707	762,697
Orange	1,516,770	1,492,940	1,633,000	1,898,685	265,685
Riverside	513,740	591,850	742,000	1,174,500	432,500
San Bernardino	587,340	652,830	729,000	1,028,132	299,132
Ventura	323,200	322,560	363,000	419,808	56,808

Source: 2015-2040 SCAG RTP/SCS

Water Supply Reliability and Policy Issues - Riverside County and California

The State of California and the region of Riverside County have been substantially impacted over the past five years of drought now being recognized as the one of the worst droughts in the State history. Since a majority of the water supply is imported, the continuing drought has an impact upon the current and future livelihood and economic viability of the region. Governor Brown and the State Water Resources Control Board (SWRCB), as the overseer of policy issues of water in the State of California, have taken actions to respond to the ongoing drought conditions in the state.

A summary of the actions taken to date include:

- On January 17, 2014, the Governor issued a proclamation of a State of Emergency under the California Emergency Services Act based on drought conditions;
- On April 25, 2014, the Governor issued a proclamation of a continued State of Emergency under the California Emergency Services Act based on continued drought conditions;
- On April 1, 2015, the Governor issued an Executive Order that, in part, (1) directs the State Water Resources Control Board (SWRCB) to impose restrictions on water suppliers to achieve a statewide 25 percent reduction in potable urban usage through February 28, 2016; and, (2) requires commercial, industrial, and institutional users to implement water efficiency measures;
- On April 17, 2015, the SWRCB issued conservation standards (targets) for each of the hundreds of water agencies in the state. Implementation began June 1, 2015. Each agency was designated a target reduction of eight percent, an amount in the lower range of the tiers of between six to 36 percent. Under the approved regulations, each agency is required to report water usage each month and will face the potential of penalties or fines for not achieving the established targets.

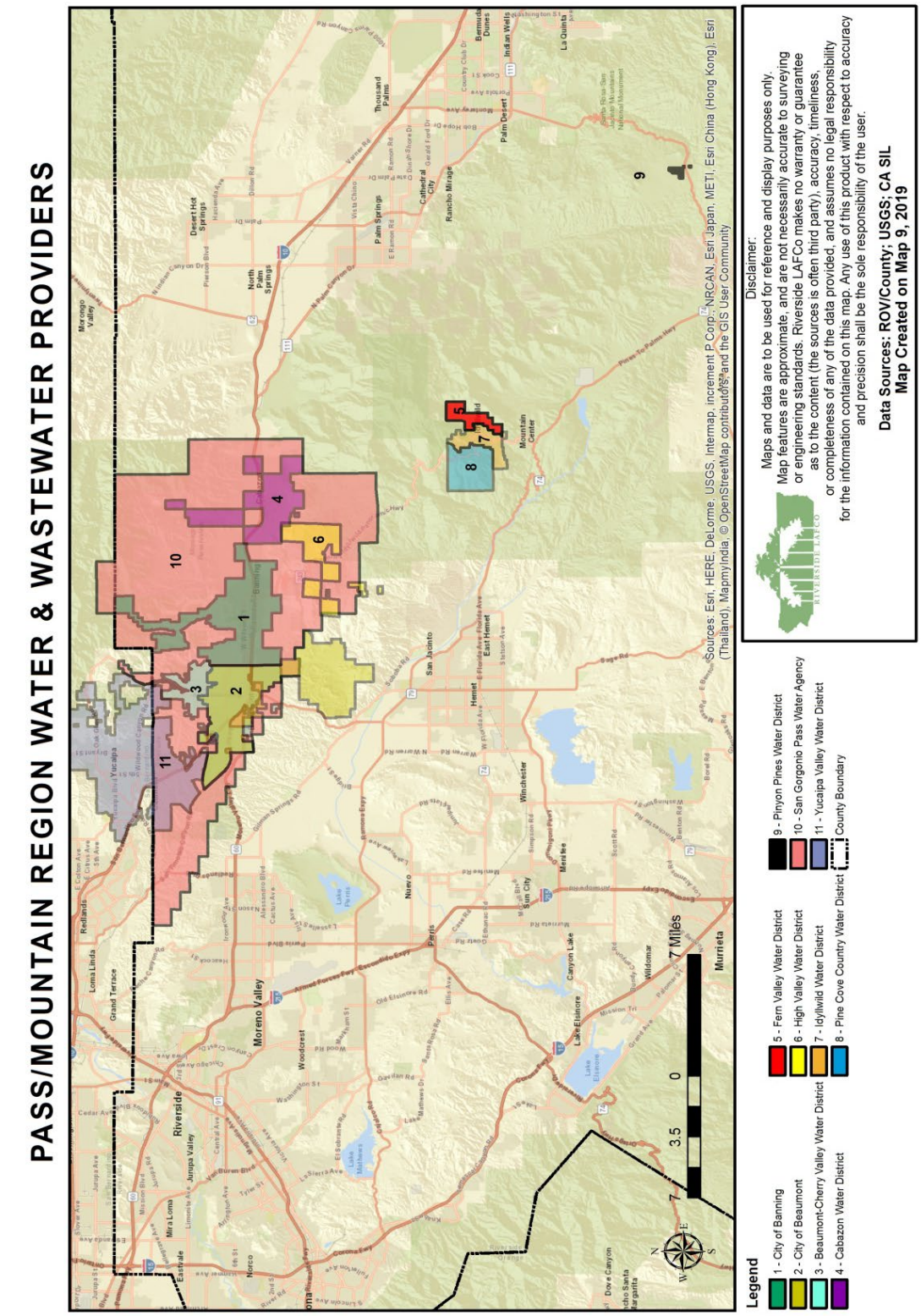
Although the Governor declared an end to California's historic five-year drought last year in June 2018, he signed two new laws that will require cities and water districts across the state to set permanent water conservation rules, even in non-drought years. The two bills, SB 606 by Senator Robert Hertzberg (D-Van Nuys) and AB 1668 by Assemblywoman Laura

Friedman (D-Glendale), require cities, water districts and large agricultural water districts to set strict annual water budgets, potentially facing fines of $1,000 per day if they are not met, and $10,000 per day during drought emergencies. Under the bills, each urban water provider will be required to come up with a target for water use by 2022. Fines for agencies failing to meet their goals can begin in 2027. The targets must be approved by the State Water Resources Control Board between now and then and will vary by city and county.

Standards will be based on a formula that is made up of three main factors: an allowance of 55 gallons per person per day for indoor water use, dropping to 50 gallons by 2030; a yet-to-be determined amount for residential outdoor use that will vary depending on regional climates; and a standard for water loss due to leak rates in water system pipes. The new laws make it likely that water agencies will need to offer more rebates for homeowners and business owners who replace lawns with drought-tolerant plants and who purchase water efficient appliances. The agencies could also limit the hours and days of landscape watering, even when droughts are not occurring.

Governor Brown and the Legislature are discussing further actions proposed to deal with the drought and to provide incentives for developing new or alternative water supplies. Funding from prior voter approved water bonds have been appropriated and additional assistance in coordinating efforts with Federal agencies is being considered. At this point, it is expected that water supply and demand management will continue to be very high priority topics within the State and among local government agencies, including LAFCOs.

4. Pass/Mountain Area - Water and Wastewater Agencies



City of Banning

Overview/History

The City of Banning was incorporated on February 6, 1913. The City currently comprises a total land area of approximately 23.2 square miles (14,848 acres) in northern Riverside County, approximately 25 miles east of downtown Riverside and approximately 30 miles west of the City of Palm Springs. The City of Banning is bounded by the City of Beaumont on the west and the Morongo Band of Mission Indians on the east. The unincorporated community of Cabazon lies approximately 1.5 miles to the east. The Banning Heights Mutual Water Company, a small mutual water company serving 200 connections, lies to the north and adjacent to the City of Banning.

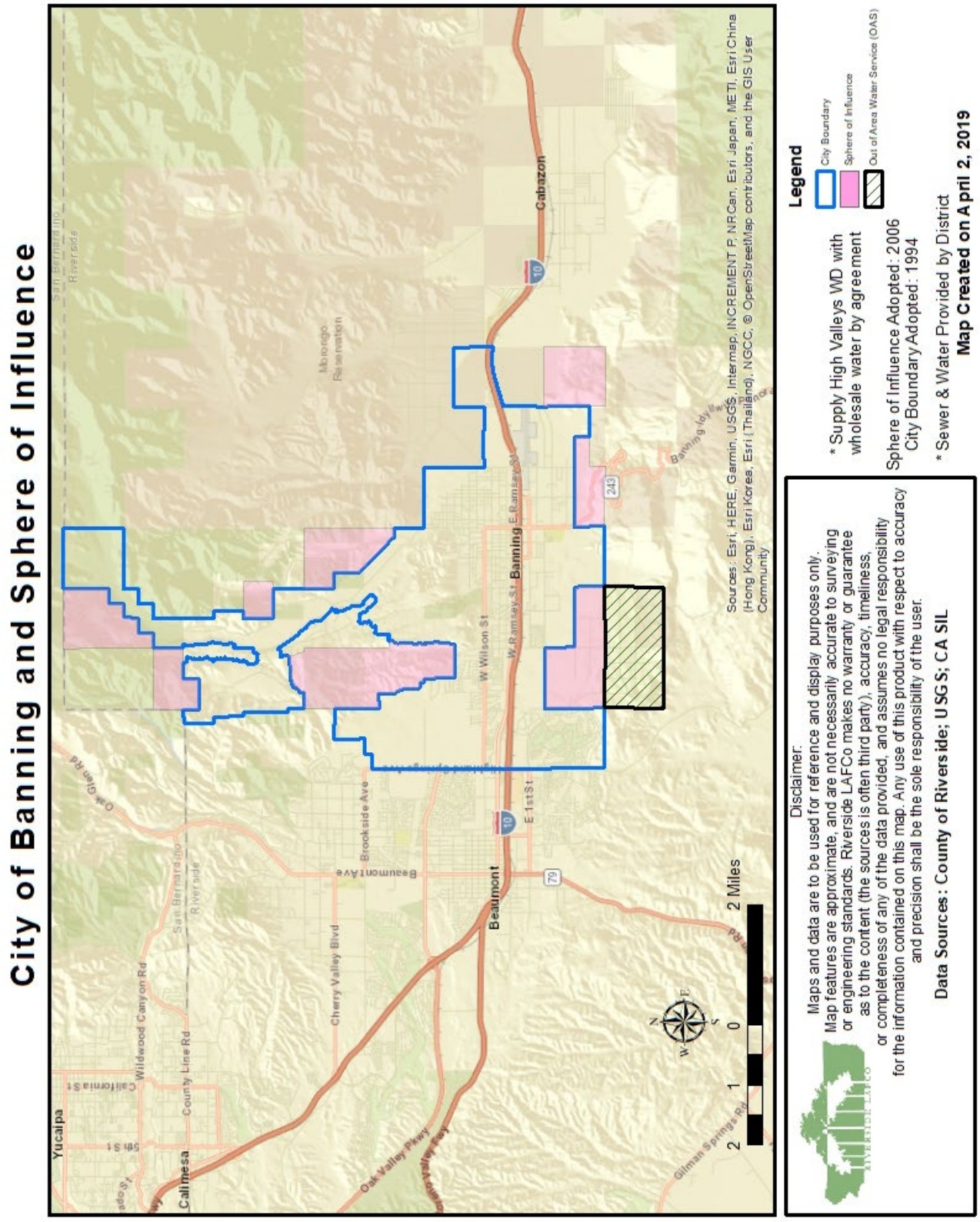
The Banning Water Company was incorporated in 1884 to provide delivery of domestic and irrigation water to various local customers. In 1913, the Banning Water Company began operating as a public utility, and, in 1967, the City of Banning acquired the Banning Water Company. Later, in 1997, the City purchased the Mountain Water Company which had supplied water to its customers from groundwater wells located within the City of Banning and in an unincorporated portion of the County of Riverside. The City's water system is currently part of the City of Banning Public Works Department Water Division.

The City, through its Public Works Department Water Division, provides municipal water to its service area, which includes the area within the City's boundary as well as some unincorporated areas of Riverside County. San Gorgonio Pass Water Agency (SGPWA) overlaps the City of Banning (water service only) and SGPWA sells water to the City of Banning. The City of Banning's water service area comprises approximately 23.2 square miles. Exhibit 1 shows the City boundaries as well as the area that receives City water. The City of Banning Agency Profile provides an overview of the City’s water and wastewater services.

The City is a full service city. It owns and operates its own electric and water utilities. It operates an airport and provides law enforcement, bus service, and park and recreation facilities.

City of Banning

Exhibit 2 – City of Banning



City of Banning

City of Banning - Agency Profile

General Information			
Agency Type	General Law City		
Date Formed	February 6, 1913		
Services	Water production and distribution. Wastewater collection and treatment; operations and maintenance of city owned WWTP is contracted out.		
Service Area			
Location	Northern Riverside County. 25 mi E of LA and 30 mi W of Palm Springs		
Square Miles/Acres	23.2 square miles or 14,848 ac		
Total Connections	10,450		
Population Served	31,068		
Water Infrastructure			
Facilities	4 wells Banning Storage Unit, 1 well Cabazon Storage Unit, 3 wells Banning Bench storage, 8 wells Banning Canyon and 5 wells and 3 co-owned wells in the Beaumont Basin.		
Storage Capacity	9 above ground storage reservoirs with a capacity of 19.63 million gallons.		
Primary Source of Supply	Groundwater production from 5 groundwater storage units from 21 production wells and 3 co-owned production wells, and imported SWP water from San Gorgonio Pass Water Agency.		
Water Rates (single-family home)	Base $21.57/ mo,; Tier 1 0-12 HCF $1.90; Tier 2 13-25 HCF $2.41; Tier 3 26+ HCF $2.72		
Sewer Infrastructure/Capacity			
Facilities	Waste Water Treatment Plant (WWTP)		
WWTP Capacity (MGD)	Designed for 3.6 expanding to 5.1; currently receives 2.0 MGD on average		
Primary Disposal Method	WWTP water treated to secondary standards and then discharged to percolation ponds overlying the Cabazon Storage Unit		
Sewer Rates (single-family home)	$21.09/month		
Budget Information - FY 2017-2018 (Water & Sewer Funds)			
	Revenues	Expenditures	Net Surplus/(Deficit)
Water Fund	$10,496,346	$10,241,171	$255,175
Sewer Fund	$957,002	$3,865,401	$91,601
Combined Funds	$14,453,348	$14,106,572	$346,776
Capital Expenditures	FY 2017-2018 $10,807,093	Long-Term Planned Expenditures Projects to be completed by FY 23	
Water Fund Balance/Reserves	$39,023,609		
Sewer Fund Balance/Reserves	$27,940,763		
Agency Net Position	n/a - Banning is a multi-service city.		
Governance			
Governing Body	5-member city council		
Agency Contact	Art Vela Director of Public Works 951-922-3130 avela@ci.banning.ca.us		

Sources: Questionnaire 2018; 2019-2020 Budget; 2017 CAFR

City of Banning

Growth and Population Projections

The City of Banning serves populations within and outside City Limits. Table 5 summarizes anticipated growth in the City's service area.

Table 5 – Population Projections in City of Banning Water Service Area, 2017-2040

	2017	2020	2025	2030	2035	2040
Population within the City's Water Service Area (without proposed specific plan developments)	31,068	31,913	33,335	34,757	36,179	37,700
Population within the City's Water Service Area (with proposed specific plan developments)	31,068	35,730	40,969	46,207	51,446	56,685

Source: City of Banning, 2016

Currently, there are two significant developments planned within the City's water service area that could affect population growth and municipal services: Butterfield Ranch and Rancho San Gorgonio.

Butterfield Ranch

The Butterfield Ranch Specific Plan (Butterfield Ranch), recently renamed to Atwell, is a master planned community project that encompasses 1,543 acres and includes approximately 4,900 residential dwelling units, two elementary schools, two commercial sites, community parks and open space and trails. The project is proposed to be constructed in five phases over an estimated period of 30 years.

A project-specific water supply assessment (WSA), titled Water Supply Assessment for Butterfield Specific Plan, Issued June 2011 with the Draft EIR, Modified December 2011 by Section 4.1 of the Final EIR, was prepared to determine the adequacy of existing and future water supplies available to serve the project.

The Environmental Impact Report (EIR) for Butterfield Ranch has been approved by the Banning City Council.

Rancho San Gorgonio

The Rancho San Gorgonio Specific Plan (Rancho San Gorgonio) is a master planned community project that is in the City's General Plan and encompasses approximately 831 acres including up to 3,385 residential dwelling units, almost 49 acres of neighborhood and community parks, over 160 acres of paseos and open space, and approximately 81 acres of right-of-way and utility easements. The project is anticipated to be constructed in six phases over a period of 18 years. This period is likely to be extended due to varying economic factors.

A project-specific WSA was prepared for Rancho San Gorgonio, titled Water Supply Assessment Rancho San Gorgonio Specific Plan, by Madole & Associates, Inc. and Encompass Associates, Inc. dated September 30, 2015.

The EIR for Rancho San Gorgonio has been approved by the City Council, and it includes an analysis of water supply supported by the project-specific WSA.

Disadvantaged Unincorporated Communities (DUCs)

There have not been any DUCs identified by Riverside LAFCO in the City of Banning or its SOI area.

Present and Planned Capacity of Public Facilities

This service review covers water and sewer services provided by the City. The City also currently provides water service, not sewer service, to the areas within the County jurisdiction south of the City limits.

Water

The City's main source of water is groundwater from water wells in the City's water canyon along with wells scattered throughout the City. The City does not use water treatment facilities. All potable water is pumped from local ground water basins. All of the City's wells currently meet the City's demands, although the need for future wells has been identified to meet the future demands at buildout conditions.

Groundwater Pumping

The City rests on the water basin known as the San Gorgonio Pass Subbasin (SGP Subbasin). The San Gorgonio Pass Subbasin is divided into water storage units. The City extracts groundwater from the Banning Storage Unit, the Banning Bench Storage Unit, the Cabazon Storage Unit, the Beaumont Storage Unit, and the Banning Canyon Storage Unit. Table 6 shows the quantities of ground water that are pumped from each unit.

Table 6 – City of Banning Current and Projected Groundwater Pumped

	2015 (acre-feet/yr)	2020 (acre-feet/yr)	2025 (acre-feet/yr)	2030 (acre-feet/yr)	2035 (acre-feet/yr)	2040 (acre-feet/yr)
Beaumont Storage Unit	1,675	840	1,645	2,372	3,162	3,643
Banning Storage Unit	527	1,130	1,130	1,130	1,130	1,130
Banning Bench Storage Unit	1,208	1,960	1,960	1,960	1,960	1,960
Cabazon Storage Unit	787	2,515	2,515	2,515	2,515	2,515
Banning Canyon Storage Unit	2,462	4,070	4,070	4,070	4,070	4,070
San Gorgonio Pass Subbasin Demand	6,659	10,515	11,320	12,047	12,837	13,318
San Gorgonio Pass Available Supply	6,659	13,659	13,538	13,422	13,318	13,318

Quantities are based on the projected water use. The City plans to pump only those quantities of water needed to meet demands.
Source: City of Banning 2016

City of Banning

Surface Water and Groundwater Recharge

Surface water is not used directly by the City. Since 1913, surface water from the Whitewater River has been diverted into the Banning Canyon Storage Unit, with an average of 1,500 AFY diverted into Banning Canyon since 1961. The water flowed within the Flume, and then through two hydroelectric power plants. Due to damage along sections of the Flume, surface flow is being diverted into Burnt Canyon to the north, and then back to the Flume upstream of Powerhouse No. 1. It then continues downstream through Powerhouse No. 2 to the reservoir operated by Banning Heights Mutual Water Company, which extracts approximately 1,000 AFY. The remaining water flows to the San Gorgonio River, where it recharges the Banning Canyon Storage Unit.

The City of Banning plans to conserve storm water flows from tributary creeks within its service area by allowing water to percolate into the ground. A preliminary evaluation by the City indicated that a portion of storm water flows from creeks in the area could be conserved as "new" water to meet future needs. The Butterfield Ranch Specific Plan includes design features that are estimated to capture and recharge approximately 1,370 AFY of storm water flows from Smith Creek by 2020. The Rancho San Gorgonio Specific Plan includes design features that are estimated to capture and recharge approximately 199 AFY of storm water at full buildout.

Wastewater/Reclamation (Sewer)

The City of Banning provides wastewater service to the area within its City limits. The City is responsible for the collection, conveyance, treatment, and disposal of effluent generated within its service area.

Collected wastewater is conveyed through sewer main lines, which are connected to the larger trunk lines. The trunk lines transport wastewater to the City's wastewater treatment plant (WWTP). The effluent is treated to secondary standards and is then discharged to percolation ponds to where it recharges the Cabazon Storage Unit.

The City’s wastewater treatment facility is designed for 3.6 MGD and receives an average of 2.0 MGD of effluent. A future expansion to 5.1 MGD will be needed to meet future demands.

As of 2016, the City of Banning currently does not produce recycled water. The City proposes to expand its 3.6 MGD wastewater treatment plant and construct facilities to support its planned recycled water storage and distribution capability in accordance with the City of Banning 2018 Integrated Master Plan (IMP). The City is also working on a recycled water line on Lincoln Street. The project is being funded from the Wastewater Tertiary Fund.

Phase I of the WWTP expansion consists of increasing the capacity from 3.6 MGD to 5.1 MGD and adding tertiary treatment facilities for production of recycled water. Upon completion of the near term improvements by year 2025, approximately 2,703 AFY of recycled water will be available to the City for irrigation use. According to the IMP, the City has a current recycled water demand of approximately 1,191 AFY. However, future recycled water use is limited to irrigation use in near proximity to the City's planned recycled water pipeline, as well as

quantities of recycled water available. Recycled water demand in excess of quantities available will be made up with potable water. According to the IMP, the City plans to utilize recycled water supply in excess of demand during the rainy season to recharge its local aquifers.

Emergency Preparedness (Supply or Treatment Interruption Capability)

Extended supply shortages are unlikely due to natural disasters or accidents which damage all water sources. However, the City's emergency response plan (ERP) calls for providing water via its groundwater storage and available wells. This is sufficient water to meet the minimum health and safety requirements of 50 gallons per day per capita for approximately 31,000 residents. This assumes reduction in uses and zero non-residential and landscape use.

Under emergency power outages or catastrophic earthquake conditions, the existing supply and storage is expected to provide a supply at minimum demand levels. The City has emergency generators that can be utilized at well locations. These generators can be located on primary pump stations and well sites to continue water delivery.

Wastewater treatment plants are required to have emergency power generators for minimal operating levels. Pump stations either have generators or portable generators.

Financial Ability to Provide Services

The City typically produces a two-year budget and then makes an adjustment for the second year if needed. The City recently approved the FY 19 and FY 20 budget.

Revenues and expense allocation in previous years for water are shown in Table 7 for water. The largest expenses go for supplies which are over 50 percent of the allocation. Salaries and depreciation are approximately 20 percent, respectively. The table shows revenues exceed expenses in all three years.

Table 7 – Banning Water Revenue and Expenses, FY 2014-15 - FY 2016-17

	FY 2014-15	FY 2015-16	FY 2016-17
Revenues			
Total Operating Revenues	$ 9,718,015	$ 8,883,649	$ 9,801,471
Inter Government Revenues	363	2,239	213,331
Interest Revenue	46,938	56,646	68,381
Total Revenues	$ 9,765,316	$ 8,942,534	$ 10,083,183
Expenses			
Salaries	$ 1,443,636	$ 1,296,607	$ 1,508,716
Supplies	3,649,175	3,642,564	3,857,901
Maintenance	9,803	11,782	16,872
Bad Debt	15,772	37,079	145,661
Depreciation	1,238,118	1,211,968	1,216,291
Total Operating Expenses	$ 6,356,504	$ 6,200,000	$ 6,745,441
Interest Expense	-1,474,266	-1,113,885	-1,015,835
Total Expenses	7,830,770	7,313,885	$ 7,761,276
Revenues less Expenses	$ 1,887,245	$ 1,569,764	$ 2,040,195

Source: City of Banning

City of Banning

Table 8 shows revenues and expenses for wastewater operations. The largest expenses are for supplies in similar proportions as for water services. The table shows revenues exceed expenses in all three years.

Table 8 – Banning Wastewater Revenue and Expenses, FY 2014-15 – FY 2016-17

	FY 2014-15	FY 2015-16	FY 2016-17
Revenues			
Total Operating Revenues	$ 3,486,276	$ 3,483,906	$ 3,610,920
Inter Government Revenues	–	1,375	–
Interest Revenue	45,532	64,635	77,490
Total Revenues	$ 3,531,808	$ 3,549,916	$ 3,688,410
Expenses			
Salaries	$ 708,590	516,155	669,727
Supplies	1,270,599	1,334,993	1,350,245
Maintenance	20,019	59,059	25,441
Bad Debt	14,652	11,670	14,517
Depreciation	561,191	533,025	513,895
Total Operating Expenses	2,575,061	2,454,842	2,573,825
Interest Expense	-317,468	-305,507	-291,882
Total Expenses	$ 2,892,529	$ 2,760,349	$ 2,865,707
Revenues less Expenses	$ 593,747	$ 723,557	$ 745,213

Source: City of Banning

The City of Banning produces a two year budget. Table 9 shows budgeted revenues and expenses for FY 18 and FY 19. The data shows a positive net position in each year with no discernable trends.

Table 9 – City of Banning Budget Information, FY 18 and FY 19

	FY 2017-18 Budget	FY 2018-19 Budget
Water Funds		
Water Fund Revenues	$ 10,496,346	$ 12,027,143
Water Fund Expenditures	10,241,171	11,346,301
Revenues less Expenditures	255,175	680,842
Ending Net Position	$ 39,023,609	$ 39.704,451
Wastewater Fund		
Wastewater Fund Revenues	$ 3,957,002	$ 4,177,683
Wastewater Fund Expenditures	3,865,401	4,079,343
Revenues less Expenditures	$ 91,601	$ 98,340
Ending Net Position	$ 27,940,763	$ 28,039,103

Source: City of Banning

3 Year Revenue/Expenditure Trends

The data shown in the tables indicate expenses are fairly consistent over the three year period for both water and wastewater services. There appear to be no discernable trends.

City of Banning

Ratios of Revenue Sources

Almost all revenues are through service charges. In addition, the City receives some non-operating revenues from interest.

Ratio of Reserves or Fund Balance to Annual Expenditures

An indicator of the ability to absorb an unexpected loss of revenue in a given fiscal year is exhibited by the amount of unrestricted cash reserve or fund balance the service fund maintains in relation to the annual fund expenditures. The City has a policy that the water and wastewater funds shall maintain a minimum fund balance reserve of 10 percent of the upcoming fiscal year's total operating appropriations and debt service payments. That amounts to approximately $1.2. million for water and $408,000 for sewer.

For the fiscal year ending June 30, 2016 the Water Fund had a cash balance of $9,278,125 and the Sewer Fund had a cash balance of $1,686,520. To maintain a certain level of liquidity the City has developed a goal of maintain unrestricted working capital reserves of at least 45 days. Both the water fund and the sewer fund exceed reserve requirements.

Annual Debt Service Expenditures to Total Annual Expenditures

In FY 2018-2019, debt service accounted for $1.89 million of the water fund's total expenditures of $11.440 million or 16 percent of total expenses. In FY 2018-2019, the Wastewater Fund was responsible for $304,289 for the State Revolving Loan and $396,494 for debt service. The total of $700,783 or 17 percent of the Wastewater total expenses of $4.89 million.

Rate Structures

The City Council contracted with Wildan Financial to update water and sewer fees. Wildan came back with a proposal to increase water and sewer rates three percent for each of the next five years. Table 10 shows the rate structure history and adopted rate increases through FY 2022-2023. The new water rate structure consists of a base rate plus a surcharge based on use.

City of Banning

Table 10 – City of Banning Water and Sewer Rates (Rate Study Approved 2018)

	Monthly Fixed Charge					
	Sept 2013	8/1/2018 FY 2019	7/1/2019 FY 2020	7/1/2020 FY 2021	7/1/2021 FY 2022	7/1/2022 FY 2023
Water						
Meter Size						
⅝"	$20.94	$21.57	$22.22	$22.88	$23.57	$24.28
¾"	$20.94	$21.57	$22.22	$22.88	$23.57	$24.28
1"	$31.75	$32.70	$33.68	$34.69	$35.73	$36.81
1½"	$58.74	$60.50	$62.32	$64.19	$66.11	$68.10
2"	$91.14	$93.87	$96.69	$99.59	$102.58	$105.66
3"	$166.77	$171.77	$176.93	$182.23	$187.70	$193.33
4"	$274.83	$283.07	$291.57	$300.31	$309.32	$318.60
6"	$544.79	$561.13	$577.97	$595.31	$613.17	$631.56
8"	$868.83	$894.89	$921.74	$949.39	$977.88	$1,007.21
Percentage Increased		3%	3%	3%	3%	3%
Commodity Charge Per Hundred Cubic Feet (HCF)						
Tier						
Tier 1 - 0-12 HCF	$1.84	$1.90	$1.95	$2.01	$2.07	$2.13
Tier 2 - 13-25 HCF	$2.34	$2.41	$2.48	$2.56	$2.63	$2.71
Tier 3 - 26+ HCF	$2.64	$2.72	$2.80	$2.88	$2.97	$3.06
City / Parks	$0.58	$0.60	$0.62	$0.63	$0.65	$0.67
Percentage Increased		3%	3%	3%	3%	3%
Wastewater						
Customer Class						
Residential	$18.48	$19.03	$19.61	$20.19	$20.80	$21.42
Commercial	$18.48	$19.03	$19.61	$20.19	$20.80	$21.42
Tertiary Surcharge	$2.00	$2.06	$2.12	$2.19	$2.25	$2.32
Percentage Increased		3%	3%	3%	3%	3%

Source: City of Banning

Capital Improvement Program/Plan

The City has developed and implemented an aggressive and comprehensive CIP for water and sewer facility infrastructure improvements. The City's current 5-Year CIP reflects approximately $9.65 million in improvements for water infrastructure, with approximately $4.425 million programmed for FY 2018-2019. Table 11 shows the projects that have funding for water projects and are scheduled to be completed by FY 2022-2023.

City of Banning

Table 11 – City of Banning Water Funded Capital Improvement Projects FY 2019-FY 2023

Project	Source	Completed	Cost
Flume Consultant Costs	Water Fund	FY 2020	$600,000
Replace SCADA Hardware/Software	Water Fund	FY 2020	$506,250
Water line Rept Lac *112* I Nicolet/Cott/George); Partially Unfunded	Water Fund	FY 2019	$656,250
Water Line Repl. Lac 13 (22nd/Roberge/Sunrise): Partially Unfunded	Water Fund	FY 2020	$676,503
Annual Main Replacement IPS&E)	Water Fund	FY 2023	$220,830
Annual Main Replacement (Const)	Water Fund	FY 2022	$883,050
Smart Meter Conversion (AMR/AM I)	Water Fund	FY 2023	$2,102,531
Water-Wastewater Yard Building	Water Capital Facilities	FY 2020	$600,050
Altitude Valves (Design & Construction)	Water Capital Facilities	FY 2019	$250,000
Well C8 Planning/Deslgn {PS&E)	Water Capital Facilities	FY 2019	$175,000
Pilot and Drill Well C8 in Cabazon SU	Water Capital Facilities	FY 2019	$1,012,500
Equip Well C8	Water Capital Facilities	FY 2020	$1,550,313
New Water Main to Connect C8	Water Capital Facilities	FY 2020	$414,000
Total			$9,647,224

Source: City of Banning 2018

The City's Sewer CIP includes $1.16 million in improvements. Table 12 shows the projects that have funding in the next five years. Most are expected to be completed in FY 2018-2019.

Table 12 – City of Banning Five-Year CIP Source of Funds - Sewer Fund

Project	Source	Completed	Cost
Iron Sponge Media Replacement	Wastewater Fund	FY 2022	$72,703
Repairs to Heat Exchanger WWTP/	Wastewater Fund	FY 2019	$30,625
Repairs to Boiler Gas Control Valves	Wastewater Fund	FY 2019	$40,813
PVC Digester Gas Piping	Wastewater Fund	FY 2020	$15,000
Capacity Project C-1	Wastewater Fund	FY 2019	$119,925
Capacity Project C-2	Wastewater Fund	FY 2020	$130,803
Nitrogen Removal Feasibility Study	Wastewater Fund	FY 2019	$250,000
Reserves	Wastewater Fund	FY 2019	$50,000
WWTP Tertiary Treatment Upgrades -3.6 MOD	Wastewater Capital Facilities	FY 2019	$50,000
PS&E	BUA Wastewater Capital	FY 2019	$50,000
Reserves	Wastewater Tertiary	FY 2019	$50,000
Reserves	Water Capital Facilities	FY 2019	$50,000
Lift Station Telemetry (SCADA)	Wastewater Capital Facilities	FY 2020	$250,000
Total			$1,159 860

Source: City of Banning, 2018

Key sewer improvement projects are the Nitrogen removal Feasibility Study, Tertiary Treatment Upgrades and Lift Station Telemetry.

Pension Liability and Other Post-Employment Benefits Liability

California law requires an annual calculation of the Net Pension Liability and contribution for each participating agency. This calculation is utilized by the agency to budget for and make

contributions to CALPERS toward its unfunded liability balance. In 2017, the City contributed $2,812,712 toward the pension services. As of June 30, 2017, the City reported $14,407,636 net pension liability for its proportionate share of the net pension liability. The 2016-17 CAFR contains a detailed description of the calculation of benefit and unfunded liability.

Status and Opportunities for Shared Facilities/Services

The City participates in the following cooperative agreements pertaining to water:

- The City of Banning and Beaumont-Cherry Valley Water District jointly own and operate three groundwater wells in accordance with an agreement between the two parties dated December 23, 2003.
- The City of Banning is party to an agreement with Banning Heights Mutual Water Company and Southern California Edison for restoration of the flume.
- The City of Banning purchases State Water Project water from the San Gorgonio Pass Water Agency. The City uses the water for groundwater recharge in the Beaumont Basin.
- The City of Banning participates in the Beaumont Management Zone (BMZ) Maximum Benefits Program, which is under the oversight of the Santa Ana Regional Water Quality Control Board (RWQCB) and is intended to ensure the long-term sustainability of water quality in the BMZ. Yucaipa Valley Water District, Beaumont-Cherry Valley Water District, and City of Beaumont are also participants in the program.
- The City of Banning is a member of the San Gorgonio Pass Regional Water Alliance (Alliance), which was created on November 6, 2012 by action of the Riverside County Board of Supervisors. The Alliance was created to identify challenges in water supply and water quality in the region and to improve coordination, collaboration, and communication among local, state, and federal governments and water purveyors and other water resource stakeholders in the San Gorgonio Pass region.
- The City of Banning is a member of the recently formed San Gorgonio Regional Water Management Group (RWMG) which developed the San Gorgonio Integrated Regional Water Management Plan (IRWM). The IRWM provides a pathway for agencies and stakeholders to collaboratively identify and implement water management solutions that provide multiple integrated benefits to the stakeholders and communities within the San Gorgonio IRWM Region. The members of the RWMG includes: the City of Banning, Banning Heights Mutual Water Company, Cabazon Water District, High Valley Water District, Riverside County Flood Control & Water Conservation District and the San Gorgonio Pass Water Agency.
- The City of Banning is one of five court appointed members of the Beaumont Basin Watermaster assigned with the responsibility of managing the adjudicated portion of the Beaumont Basin. The Watermaster members include: the City of Banning, the City

of Beaumont, the Beaumont-Cherry Valley Water District, the Yucaipa Valley Water District, and South Mesa Water Company.

- The City is currently working with other water agencies that overlay the San Gorgonio Pass Subbasin to develop a cooperative agreement to manage the Subbasin in accordance with the Sustainable Groundwater Management Act (SGMA). The other agencies involved include Desert Water Agency, Mission Springs Water District, High Valleys Water District, Morongo Band of Mission Indians, San Gorgonio Pass Water Agency, and Banning Heights Mutual Water Company.

Government Structure and Accountability

The City is governed by a five member city council. Historically the council members were elected by district with two elected at large to four-year staggered terms. In 2016, the Council split the City into five districts so that each council member represented a district. The City Council meets at 5:00 p.m. on the second and fourth Tuesday. Table 13 lists council members as of December 2018.

Table 13 – City of Banning Council Members

Council Member		Term Expires
Art Welch	Mayor	November 2020
Daniela Andrade	Mayor Pro Tem	November 2020
Don M. Peterson	Council Member	November 2020
David Happe	Council Member	November 2022
Colleen Wallace	Council Member	November 2022

The City's website is user-friendly and has easy access to City Council agendas, minutes, public notices, budgets, audits and other key City documents. City Council meetings are videotaped and accessible for on-line viewing. Phone numbers and email addresses for City Council members are listed as are phone numbers for City department heads. The City also has Facebook and Twitter accounts and a sign-up service for on-line City news and updates. In addition, residents can participate in the Planning Commission and the Parks & Recreation Advisory Committee. Table 14 shows the number of seats and meeting times for these boards.

Table 14 – City of Banning Commissions and Committees

Council Member		Term Expires
Planning Commission	5	1st Wednesday 6:30 p.m.
Parks & Recreation Advisory Committee	5	3nd Wednesday 6:00 p.m.

Source: City of Banning 2018

City of Banning

Staff Organization

The total authorized staff positions, not including elected officials, are 170 full time employees. The Water Department includes 16, while the Wastewater Department has six employees. The operation of the WWTP is performed by contract employees.

Changes of Organization

One future project annexation is the Rancho San Gorgonio Specific Plan that consists of approximately 831 acres of land, of which approximately 670 acres are presently located within the existing corporate boundaries of the City of Banning and approximately 161 acres are located in the City's adopted Sphere of Influence. The City anticipates submitting an application to annex the 161 acres in the near future. While the City provides potable water to the High Valleys WD under contract, there is no plan to consider a change of organization with that agency as it is well outside the City's SOI.

LAFCO Policies Affecting Service Delivery

With the anticipated application for annexation of Rancho San Gorgonio Specific Plan area, LAFCO's sphere and annexation policies may affect the ability to serve that area.

City of Beaumont

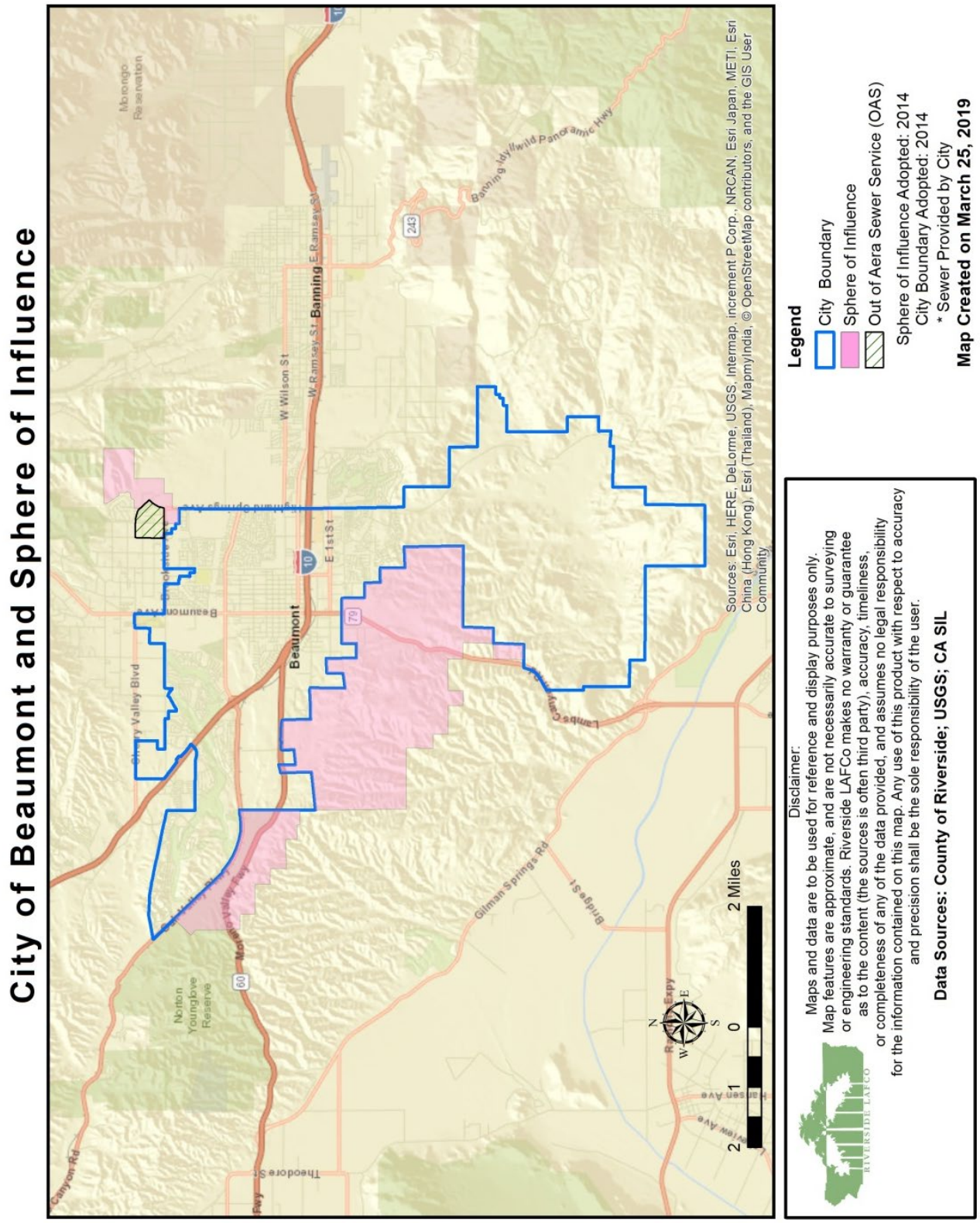
Overview/History

The City of Beaumont was incorporated on November 18, 1912. Beaumont is located at the mouth of the San Gorgonio Pass 79 miles east of Los Angeles, 111 miles northeast of San Diego and 28 miles west of Palm Springs. Beaumont's incorporated area encompasses two of the region's most important highway interchanges, I-10 and SR-60 and I-10 and SR-79, which provide convenient access to the Ports of Los Angeles, Long Beach and San Diego. Goods must travel through the community in order to be transported to and from Southern California.

The town served as a welcome “stopping-off point” for early travelers making their way from the Mohave desert to Los Angeles, and later for L.A. residents eager to vacation in Palm Springs. It is a "general law" city governed by a city council/city manager form of government. The City provides law enforcement, public works, city parks, a community pool, planning, bus service and wastewater services. Within the City of Beaumont are multiple special districts which are separate of the City and have their own governing boards. They include the Beaumont - Cherry Valley Recreation & Parks District, Beaumont - Cherry Valley Water District, and Beaumont Library District. This MSR will focus on wastewater services. Exhibit 3 shows the area that receives water from the City.

City of Beaumont

Exhibit 3 – City of Beaumont Water Service Boundary



City of Beaumont

City of Beaumont - Agency Profile

General Information			
Agency Type	General Law City		
Date Formed	November 18, 1912		
Services	Sewer		
Service Area			
Location	The City of Beaumont and the unincorporated community of Cherry Valley approximately 75 miles east of Los Angeles along Interstate 10.		
Square Miles/Acres	30 Sq. Miles		
Total Sewer Connections	16,265		
Population Served	48,237		
Water Infrastructure			
n/a – water provided by BCVWD			
Sewer Infrastructure			
Facilities	WWTP		
Current and Projected Treatment Capacity	4 MGD with cap improvements to reach a capacity of 8 MGD to accommodate growth through 2027		
Primary Disposal Method	Tertiary treatment		
Sewer Rates (single-family home)	$38.47/mo in FY 19 with 5% increases annually through FY 23		
Budget Information - FY 2017-2018 (Sewer Funds)			
	Revenues	Expenditures	Net Surplus/(Deficit)
Sewer Fund	$7,928,960	$6,069,772	$1,859,188
Combined Funds	n/a	n/a	n/a
Capital Expenditures	FY 2017-2018	Long-Term Planned Expenditures	
	$3,491,928	$109 million over next 5 years to upgrade WWTP	
Water Fund Balance/Reserves	n/a		
Sewer Fund Balance/Reserves	$4,320,340		
Agency Net Position	$336,117,879		
Governance			
Governing Body	5 member city council		
Agency Contact	Todd Parton tparton@beaumontca.gov 951-769-8520		

Notes: N/A- not applicable
City wide as of June 30, 2018
Source: Riverside LAFCO 2017, City of Beaumont

City of Beaumont

Growth and Population Projections

The estimated population in Beaumont increased by 4.5 percent in 2017, from 46,730 on January 1, 2017, to 48,237 on January 1, 2018. Table 15 shows the estimated population from the California Department of Finance estimates based on the 2010 census. The table shows average growth over the last five years of 3.6 percent. In 2017, the City contracted for a sewer rate study which estimated customer growth of 500 new connections for FY 2017-2018, 400 for FY 2018-2019 and 350 for FY 2019-2020 and beyond. In terms of growth rate, that equates to 2 to 2.5 percent annually, which is consistent with population increases over the last few years. Based on the average annual growth rates of 2.5 percent to 3.6 percent, the expected population of Beaumont would range from approximately 54,000 to 57,000 in five years and from 60,000 to 65,000 in ten years.

Table 15 – City of Beaumont Population Estimates, 2014-2018

	1/1/2014	1/1/2015	1/1/2016	1/1/2017	1/1/2018	Average
Estimated Population	41,659	43,370	44,821	46,179	48,237	–
% Increase	2.9%	4.1%	3.3%	3.0%	4.5%	3.6%

Source: CA Department of Finance, 2017, 2018

Disadvantaged Unincorporated Communities (DUCs)

There is one DUC area adjacent to the City of Beaumont within the City's SOI - a separate residential area west of Highland Springs, which is now referred to as "Cherry Valley West." Cherry Valley West is generally located north of Cherry Valley Boulevard, west of Beaumont Avenue, south of Orchard and east of Union Street, less than one mile to the west of Highland Springs. The area consists of large rural lots with mixed land uses ranging from low, medium and high density residential to general commercial, commercial retail, residential and light agricultural zoning. Cherry Valley West has an estimated population of approximately 1,017.

After a DUC is identified, it is necessary to identify backbone service providers, water, sewer and fire. The Riverside County Fire Department serves these areas. Beaumont Cherry Valley WD provides water. As these areas are outside the City limits, it is likely some residents are on septic systems.

Present and Planned Capacity of Public Facilities

The City of Beaumont provides wastewater services within the City limits and to two developments outside the City. The communities of Highland Springs Country Club and Highland Springs Village Mobile Home Park are outside of the City limits and are currently being served by the City. These areas are located north of City limits and outside of the City's sphere of influence. Services are provided to 15,350 accounts of which 92 percent are single family residential. The system's current capacity is 4 MGD dry weather flow.

City of Beaumont

The City's Public Works Department maintains and operates the City-owned Wastewater Treatment Plant (WWTP) located 715 W. 4th Street. The current capacity of 4 MGD is not sufficient to accommodate expected future growth within the City.

Generally, since January 2014, the City has routinely operated its WWTP at 75 percent or more of its capacity. Anytime a wastewater plant's dry-weather wastewater flow reaches or exceeds 75 percent of its treatment capacity in any given month, a report must be filed with the Regional Water Quality Control Board (RWQCB) and subsequently corrected. Initially, under prior City management, the City failed to file the report. Consequently, in April 2016, the City received a Notice of Violation from the RWQCB and was ordered to file a written report within 90 days of the violation. On May 3, 2016, the City responded in writing to the Notice of Violation and provided a plan to address capacity and salt mitigation issues.

The July 2017 MSR outlined the steps taken to address the capacity issue with the WWTP and funding for the Brine Line to address salinity problems in the effluent. The upgrade to the WWTP is part of the City's five-year capital improvement plan. The plan was approved on September 5, 2017. Table 16 shows the projects in the five-year CIP start date and completion date.

Table 16 – City of Beaumont Five Year CIP Projects, FY 18 to FY 23

CIP Project	Start	Complete
Upgrade Wastewater Treatment Plant	FY19	FY20
Inland Empire Brine Line	FY18	FY20
Sewer Collection Lines	FY18	FY22
Primary Treatment	FY18	FY22
Tertiary Treatment	FY18	FY22
Solid Handling	FY18	FY22
Future Routine CIP	FY23	–

Source: NBS 2018

On March 20, 2018 the City Council adopted the Initial Study/Mitigated Negative Declaration for the City of Beaumont Wastewater Treatment Plant Upgrade/Expansion and the Brine Disposal Pipeline Project.

The City has begun the process to issue bonds for the upgrade and let a contract to update sewer rates. The rate study included a financial plan, cost of service analysis, and a rate design analysis. The study was completed in May 2018. The City Council approved the proposed increase on June 19, 2018 and the bond issuance on July 3, 2018.

Construction for the WWTP expansion began in July 2018 and is scheduled to be completed by March 2020, prior to the plant reaching capacity. Table 17 shows estimated flows and capacity from 2016 to 2026. The data provided by the City assumes discharges of 210 gallons per day per unit. Projections assume an increase of 500 equivalent dwelling units per year. The table shows Average Daily Flow would exceed current capacity in 2024 if the upgrade was

not completed. However, the upgrade is scheduled for completion in 2020 as shown in the table. Progress on implementing this project should be monitored and reported to LAFCO.

Table 17 – Estimated Average Daily Flow and Capacity 2016-2026

Year	Equivalent Dwelling Units	Average Daily Flows (MGD)	Capacity (MGD)	Percent of Capacity
2016	15,053	3,171,973	4,000,000	79%
2017	15,553	3,277,333	4,000,000	82%
2018	16,053	3,382,693	4,000,000	85%
2019	16,553	3,488,053	4,000,000	87%
2020	17,053	3,593,413	6,000,000	60%
2021	17,553	3,698,773	6,000,000	62%
2022	18,053	3,804,134	6,000,000	63%
2023	18,553	3,909,494	6,000,000	65%
2024	19,053	4,014,854	6,000,000	67%
2025	19,553	4,120,214	6,000,000	69%
2026	20,053	4,225,574	6,000,000	70%

Source: Riverside LAFCO 2017

Emergency Preparedness (Supply or Treatment Interruption Capability)

The City provides wastewater collection and treatment facilities and services. Wastewater treatment plants and major pump lift stations are required to have emergency power generators for minimal operating levels. Pump lift stations either have generators or portable generators. This capability is included in the agency SSMP.

Financial Ability to Provide Services

Beaumont has been through significant political and financial upheaval and has been financially insolvent for at least ten years. As of April 4, 2017, the City was still on the verge of bankruptcy. A settlement agreement successfully negotiated with WRCOG to extinguish the $67 million judgement against the City was the largest factor in creating this stability. Additionally, the City implemented sound management principles and financial practices over the past two years to further stabilize the community.

According to the City Manager's May 10, 2017 budget message: "The General Fund was projected to end FY 17 with approximately $6.1 million cash reserves. This reservation of cash allows the City to establish minimum cash reserves for recurring General Fund operations, the City's self-insurance program and moves the City closer to budget solvency. It reduces the likelihood that a major unexpected event or a typical recession will cause the City to make drastic cuts to services in order to balance future budgets."

Although there are General Fund issues as described by the City Manager in his FY 2017-2018 budget message, this section will focus on the Sewer Fund which is separate from the General Fund.

City of Beaumont

Revenue/Expenditure Budget Trends

Table 18 shows the three years of revenues and expenses for the period FY 2015-2016 through FY 2017-2018. There are no noticeable trends in revenues as they depend on the current rate, however expenses are trending up.

Table 18 – Beaumont Wastewater Revenues and Expenses, FY 16-FY 18

	FY 2016	FY 2017	FY 2018
Revenues			
Rate Revenue	$ 7,136,742	$ 7,644,437	$ 7,849,438
Non-Rate Revenue	921	30	79,522
Total Revenues	$ 7,137,663	$ 7,644,467	$ 7,928,960
Expenses			
Operating Expenses	$ 3,611,204	$ 4,734,121	$ 4,534,772
Capital Expenses	–	–	1,535,000
Total Expenses	$ 3,611,204	$ 4,734,121	$ 6,069,722
Net Income/Loss	$ 3,526,459	$ 2,910,346	$ 1,859,238

Source: City of Beaumont

Table 19 shows the FY 2018-2019 budget for the Wastewater (Sewer) Fund. The table includes $90 million that is being set aside to upgrade the WWTP. It also shows a net improvement in the City's financial position by $3 million.

Table 19 – City of Beaumont Wastewater Fund, FY 19 Budget

	Operations	Development Impact Fees	Capital Fund	Total Waste Water
Revenue	$ 8,133,620	$ 2,050,000	$ 90,000,000	$ 100,183,620
Expense	-5,055,090	–	-90,350,000	-95,405,090
Transfers	–	-300,000	$ -350,000	$ 50,000
Net	$ 3,078,530	$ 1,750,000	–	$ 4,828,530

Source: City of Beaumont

Rates for Services

The key to financial stability for the Sewer Fund is the new rate structure adopted by the City Council in early 2018. The rate study was focused on four goals:

- Funding the required upgrades to the Brine Line and wastewater treatment plant.
- Avoiding operational deficits and depletion of reserves beyond the target minimum reserve level.
- Generating additional revenue needed to meet projected funding requirements.
- Developing a rate structure that reflects the proportionate cost of providing sewer service to each customer class.

City of Beaumont

More specifically the rate study was designed for the following:

- Meeting Net Revenue Requirements for FY2018-2019 through FY23 - The projected net revenue requirement (that is, total annual expenses plus debt service and rate-funded capital costs, less non-rate revenues) is expected to grow from $6.4 million to $11.7 million, annually. The estimated debt service payments for planned bond issues to fund the Brine Line and Wastewater Treatment Plant upgrades are the primary reason for this increase.
- Maintaining Reserve Funds - Reserve funds provide a basis for a utility to cope with fiscal emergencies such as revenue shortfalls, asset failure, and natural disasters, among other events. Reserve policies provide guidelines for sound financial management, with an overall long-range perspective to maintain financial solvency and mitigate financial risks associated with revenue instability, volatile capital costs, and emergencies. The City plans to accumulate approximately $5.5 million in reserves by the end of FY 2022-2023.

The reserve funds for the Utility are considered unrestricted reserves and consist of the following:

- The Operating Reserve should equal approximately 90 days of operating expenses (approximately $1.3 million in FY 23). An Operating Reserve is intended to promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures. Fluctuations in revenue can be caused by weather patterns, the natural inflow and outflow of cash during billing cycles, natural variability in demand-based revenue streams (such as volumetric charges), and — particularly in periods of economic distress — changes or trends in age of receivables.
- The Capital Rehabilitation and Replacement Reserve should equal 3 percent of net capital assets (approximately $4 million by the end of FY 23), which is set aside to address long-term capital system replacement and rehabilitation needs. Table 20 shows estimated reserve levels and targets with the new rate adjustment.

Table 20 – City of Beaumont Wastewater Unrestricted Reserves and Target Values for Replacement and Capital Improvements

Unrestricted Reserves	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
Operating & Capital Replacement						
Ending Balance	$1,133,700	$1,164,400	$748,143	$857,351	$1,323,500	$1,361,400
Target	$1,133,700	$1,164,400	$1,251,300	$1,286,800	$1,323,500	$1,361,400
Capital Rehabilitation & Replacement						
Ending Balance	$3,325,488	$3,272,253	$3,272,253	$3,272,253	$3,417,427	$4,217,290
Target	$1,468,100	$1,700,000	$4,296,300	$4,216,300	$4,140,100	$4,070,800

Source: NBS 2018

Funding the Brine Line and Wastewater Treatment Plant Upgrades

The City plans on using revenue bonds to fund most of the $100 million expected costs for the Brine Line and treatment plant upgrades.

City of Beaumont

Funding Other Capital Improvement Projects

The City must also be able to fund necessary capital improvements to maintain current service levels. City staff has identified roughly $1.6 million annually in expected capital expenditures for FY 2018-2019 through FY 2022-2023. With the recommended rate increases, these expenditures can be funded, while increasing reserves to the minimum recommended target.

Maintaining Adequate Bond Coverage

In completing the rate study analysis, it was assumed that the City will be required by the revenue bond covenants to maintain a debt service coverage ratio of at least 125 percent.

Table 21 shows the new sewer rates for a single family residence (EDU) per month. The number of customer classes has been reduced from 30 to 7. Premium rates for customers outside City Limits will be eliminated. The rate is calculated to meet operations and to fund capital improvements to the WWTP and Brine Line. The rates will be adjusted on July 1 for FY 20 through FY 23.

Table 21 – City of Beaumont Sewer Rates, June 2018

Year	Percent Increase	SFAM Rate	MFAM Rate
FY19		38.47	23.83
FY20	6%	40.78	25.26
FY21	5%	42.82	26.52
FY22	5%	44.96	27.85
FY23	5%	47.21	29.24

Source: NBS 2018

Annual Debt Service Expenditures to Total Annual Expenditures

Table 22 shows debt service as compared to expenses for the period FY 18 to FY 23. The table shows that debt service will be approximately 80 percent of expenses between FY 20 and FY 23. However, after adoption of the rate increase there is a projected surplus after FY 20.

Table 22 – City of Beaumont Debt Service Compared to Expenses, FY 2018 - FY 2023

Sources of Sewer Funds	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
Operating Expenses	$ 4,534,772	$ 4,657,765	$ 5,005,172	$ 5,147,164	$ 5,293,919	$ 5,445,623
Debt Service	–	1,929,642	4,447,275	4,386,200	4,388,200	4,601,500
Debt Coverage Revenue Requirement	$ 5,990,250	$ 6,492,798	$ 10,973,754	$ 11,095,010	$ 11,281,082	$ 11,786,856
Debt Coverage after Rate Increase		1.81	1.26	1.39	1.52	1.57

Source: NBS 2018

City of Beaumont

Capital Improvement Program/Plan

The Capital Improvement Program was part of the rate study since some of the CIP costs can be distributed to the sewer service customers. The rate study was designed to pay the debt service on the approximately $85 million in bonds needed to upgrade the system. Table 23 and Table 24 show the projects and sources to pay for the 5-year CIP.

Table 23 – City of Beaumont Wastewater 5-Year Capital Improvement Program

Project	Start	Complete	Total Cost
Upgrade Wastewater Treatment Plant	FY19	FY20	$93,247,000
Inland Empire Brine Line	FY18	FY20	$6,000,000
Sewer Collection Lines	FY18	FY22	$1,061,647
Primary Treatment	FY18	FY22	$3,981,852
Tertiary Treatment	FY18	FY22	$1,778,561
Solid Handling	FY18	FY22	$1,327,284
Future Routine CIP	FY23	–	$1,889,506
Seneca Springs Lift Station Design	FY19	FY19	$200,000
Seneca Springs Lift Station Evaluation	FY19	FY19	$100,000
Seneca Springs Lift Station Construction	FY20	FY20	$800,000

Source: NBS 2018

The projects listed above total $109 million. To pay for the upgrade to the WWTP and the connection to the Brine Line, the City sold $81.1 million in bonds.

Table 24 – City of Beaumont Wastewater CIP Funding Sources

Sources of Sewer Funds	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
Sewer Connection Fees	$ 2,000,000	$ 7,901,500	$ 5,081,116	–	–	–
Revenue Bond Proceeds	–	–	84,264,384	–	–	–
Cash Reserves and Rate Revenue	$ 1,535,000	$ 1,581,050	$ 1,628,482	$ 1,677,336	$ 1,727,656	$ 1,889,506

Source: NBS 2018

The City continues to work its way out of financial difficulties. The City's new budget and new city manager are making an effort to keep the City solvent. The adoption of the new rate study for sewer services plus securing the loan for capital improvements on the WWTP has at least allowed those enterprise services to be fully funded in the future.

Pension Liability and Other Post-Employment Benefits Liability

California law requires an annual calculation of the Net Pension Liability and contribution for each participating agency. This calculation is utilized by the agency to budget for and make contributions to CALPERS toward its unfunded liability balance. In 2017, the City contributed $864,860 toward the pension services. As of June 30, 2017, the District reported $5,818,570

City of Beaumont

net pension liability for its proportionate share of the net pension liability. The 2016-2017 audit contains a detailed description of the calculation of benefit and unfunded liability.

Status and Opportunities for Shared Facilities/Services

The City is working cooperatively with the Regional Water Quality Control Board to ensure they have adequate capacity and funding to provide wastewater services. The City is participating with neighboring agencies to complete the Brine Line which will convey salt water to Orange County Sanitation District for processing and dispersal.

One measure of management efficiencies is the ability for long range planning. The City has a five-year CIP plan and produces a budget each year for its sewer fund activities. The budget process allows the City to review its accomplishments and needs for the coming fiscal year.

Government Structure and Accountability

The City is governed by a five-member City Council elected at-large for four-year staggered terms. Table 25 shows the current council members and when their terms expire. The City Clerk and the City Treasurer are also elected positions. Elections are held in November of even-numbered years. The City Council selects one of its members to serve as Mayor and another to serve as Mayor Pro Tem for one year but no more than two consecutive years. The City Council also serves as the Board of Directors for the Beaumont Financing Authority, Beaumont Utility Authority, Beaumont Parking Authority, and Beaumont Successor Agency.

The City Council meets regularly on the first and third Tuesdays of each month at 6:00 p.m. at the Beaumont Civic Center, 550 E. Sixth Street, Beaumont, CA 92223. Meetings are posted according to the Brown Act. Agendas are available prior to the meetings, and the minutes are available following approval on the City's website. As of November 2016, the City Council's regularly scheduled meetings are video recorded and are available on YouTube, where they can be streamed live or viewed later.

Table 25 – City of Beaumont City Council Members

Council Member		Term Expires
Julio Martinez	Mayor	November 2020
Rey SJ Santos	Mayor Pro-Tem	November 2022
Nancy Carroll	Councilman	November 2020
Mike Lara	Councilman	November 2022
Lloyd White	Councilman	November 2022

Staffing

The wastewater function falls under the Public Works Department. Table 26 shows staff for the various City departments including elected officials, the five council members plus the City Clerk and the City Treasurer. As shown, the total was reduced from 162 in FY 2014-2015 to

City of Beaumont

143 in FY 2016-2017. The total does not include legal services, and solid waste collection services which are contracted out.

Table 26 – City of Beaumont Staffing, FY 2014 through FY 2017

Department	FY 2014	FY 2015	FY 2016	FY 2017
Administration Department	18	17	10	11
Community Development Department	5	6	7	5
Police Department	67.5	65.5	55.5	55.5
Public Works Department	6	6	4	6
Community Services Department	39.5	38	29.5	29.5
Transit Department	18.5	22	26	29
Elected Officials	7	7	7	7
Total	162	162	139	143

Source: City of Beaumont, 2016

The City's website is user-friendly and has easy access to City Council agendas, minutes, public notices, budgets, audits and other key City documents. As of November 2016, the City Council's regularly scheduled meetings are video recorded and are available on YouTube, where they can be streamed live or viewed later.

The City has no plans to expand beyond its current sphere of influence. The City administration is focused on improving transparency, accountability, improving its financial situation, and upgrading the capacity of its wastewater treatment facility. No other reorganization possibilities are being considered by the City or overlaying Districts.

LAFCO Policies Affecting Service Delivery

Riverside LAFCO's municipal service review policies on monitoring progress to address determinations from prior MSR's would apply. At the end of FY 2016-2017, there were questions about whether the City had sufficient capacity or funding to provide wastewater services. Even though the City's MSR was completed in July 2017, the capacity and financial ability to provide services was still in question. In case there was a need for a change of organization for sewer services, a more current MSR may be needed. The implementation of the WWTF should be monitored and reported by the City to LAFCO.

Fortunately, the City has taken steps to increase capacity with a capital improvement program and issue bonds to make the improvements. In order to cover long term debt generated by issuing bonds, the City engaged a consultant to calculate rates that would allow the City to achieve its bond covenant ratio, provide sufficient funding for services and debt service, provide for needed reserves that would allow the City to provide services in case of an unforeseen shortfall of revenues, and generally provide for increased capacity and financial stability for the sewer enterprise fund.

Beaumont-Cherry Valley Water District

Overview/History

The Beaumont-Cherry Valley Water District (BCVWD) was formed in 1919 as the Beaumont Irrigation District under California Irrigation District Law, Water Code Section §20500 *et seq*. The name was changed to the Beaumont-Cherry Valley Water District in 1973. The District is approximately 75 miles east of Los Angeles along Interstate 10. Exhibit 4 shows the current boundaries of the District.

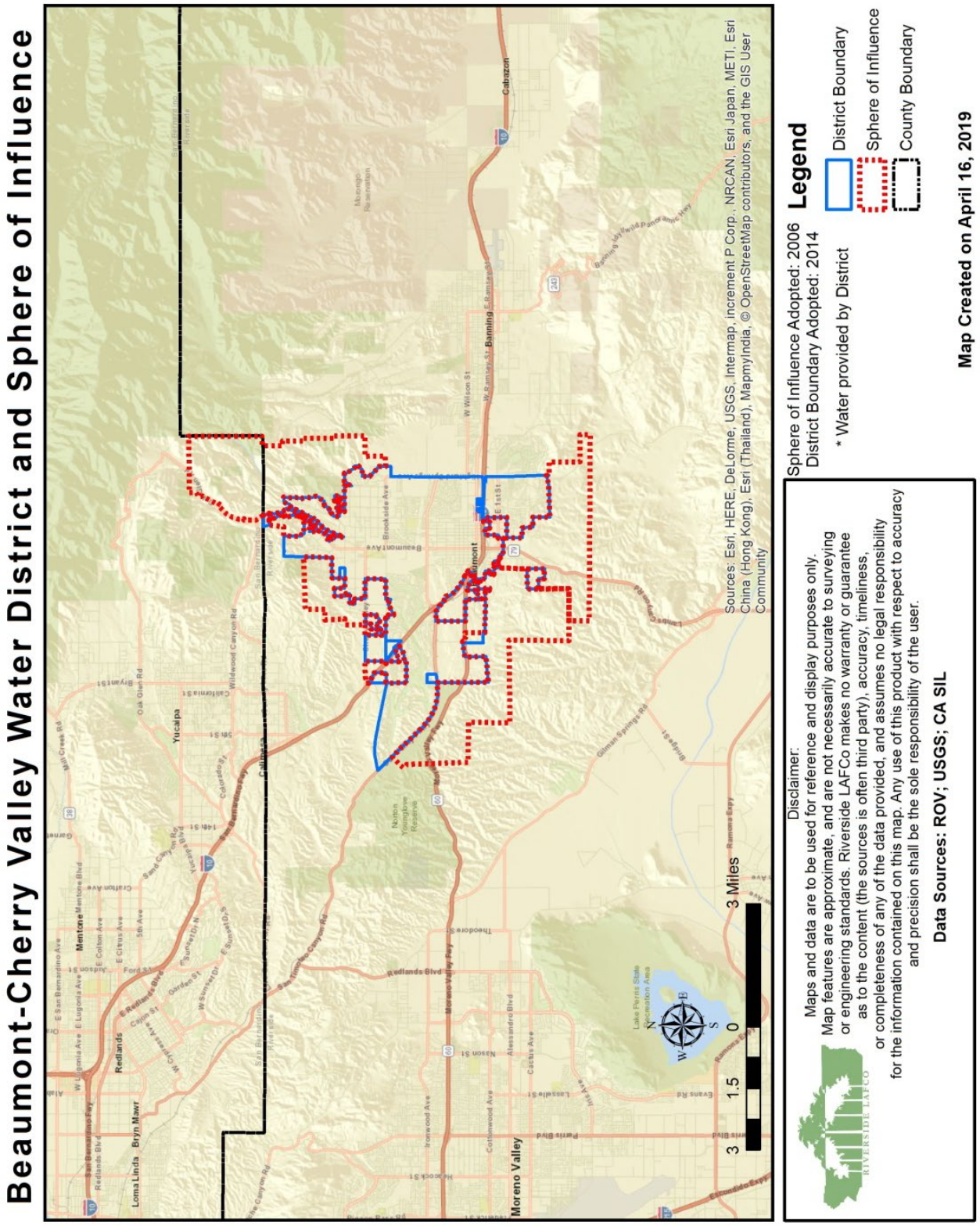
The Beaumont-Cherry Valley Water District (BCVWD) provides potable and non-potable water service to 17,997 connections by the end of 2017. The District's present service area covers approximately 28 square miles, virtually all of which is in Riverside County, and includes the City of Beaumont and the community of Cherry Valley. The San Gorgonio Pass Water Agency (SGPWA) overlaps BCVWD (water service only), and SGPWA sells water to the BCVWD. The District owns 1,524 acres of watershed land in Edgar Canyon in San Bernardino County located just north of the Riverside-San Bernardino County line where the District operates a number of wells and several reservoirs.

The District's service area ranges in elevation from 2,300 feet above mean sea level (MSL) in Fairway Canyon area of Beaumont on the western boundary, to 2,900 feet in Cherry Valley, and over 4,000 feet in the upper reaches of the current SOI. The area serves primarily as a "bedroom" community for the Riverside/San Bernardino Area and the communities east of Los Angeles County along the I-10 corridor.

In its early years, the principal industry in the District was agriculture. The area was known for its cherries and other fruits and egg ranching. Over the years, the agricultural areas were urbanized. One major egg ranch, Sunny Cal, no longer operates. A specific plan has been developed for that site, and infrastructure plans are nearing completion.

Beaumont-Cherry Valley Water District

Exhibit 4 – Beaumont-Cherry Valley Water District



Beaumont-Cherry Valley Water District Profile

General Information					
Agency Type	Irrigation Water District; Water Code Section §20500 et seq.				
Date Formed	Initially in 1919, renamed 1973				
Services	Potable and recycled water				
Service Area					
Location	The City of Beaumont and the unincorporated community of Cherry Valley approximately 75 miles east of Los Angeles along Interstate 10.				
Square Miles/Acres	28 Sq. Miles				
Total Water Connections	17,997				
Population Served	approximately 48,000				
Water Infrastructure/Capacity					
Facilities	Groundwater recharge facility and extraction wells				
Storage Capacity	Well capacity 27.5 MGD Storage capacity 22 MG or 1.4 days				
Primary Source of Supply	Groundwater for potable supply, non-potable groundwater, and recycled water (anticipated) for non-potable irrigation supply and untreated imported water for groundwater recharge and anticipated non-potable water use.				
Water Rates (single-family home)	$18.01 Base	$0.96/ccf 0-4400 cf	$1.45/ccf >4400 cf	$0.33 /ccf SCE power	$0.46/ccf SWP charge
Budget Information - FY 2017					
	Revenues	Expenditures	Net Surplus/(Deficit)		
Water Fund	$13,639,221	$13,272,131	$367,090		
Sewer Fund	N/A	N/A	N/A		
Combined Funds	N/A	N/A	N/A		
Capital Expenditures	FY 2017-2018 $12,425,124	Long-Term Planned Expenditures $35,639,422			
Water Fund Balance	$27,261,540				
Sewer Fund Balance	N/A				
Agency Net Position	$161,399,305				
Governance					
Governing Body	5 member board of directors				
Agency Contact	Dan Jaggers 951-845-9581 dan.jaggers@bcvwd.org				

Notes: N/A - not applicable
Source: Beaumont CV Water District

Beaumont-Cherry Valley Water District

Growth and Population Projections

Several major commercial centers have been built since 2000 as well as a number of distribution centers. Several large housing projects started around 2005 but were not completed because of the recession. Home building restarted in 2014 with an average of 550 single family homes in the last five years. Additional housing projects have been issued "will serve" letters, but have not yet completed infrastructure plans, executed necessary agreements, or started construction, including: Hidden Canyon Industrial, Kirkwood Ranch, Potrero Creek Estates and Nobel Creek Meadows. Growth in Cherry Valley has been much slower.

Table 27 shows historical population and housing for the District from 1980-2015. The table shows a steady increase in both housing and population.

The estimated population in 2015 in the District was 48,337, and the estimated housing units 17,631. Table 27 shows all of the people living in the District's service area. Except for a relatively few residences that are on private wells or local water systems, all are served by the District.

Table 27 – BCVWD Historical Population and Housing, 1980-2020

	1980	1990	2000	2010	2015	2020
City of Beaumont						
Population	6,818	9,685	11,384	36,877	41,780	37,700
Housing Units	–		4,258	12,908	14,646	56,685
Occupied Housing Units	–		3,881	11,801	13,390	–
Estimated Annual Growth	–	4.2%	1.8%	22.4%	2.7%	–
Cherry Valley						
Population	5,012	5,945	5,891	6,362	6,597	–
Housing Units	–	–	2,627	2,874	2,985	–
Occupied Housing Units	–	–	2,434	2,612	2,715	–
Estimated Annual Growth	–	1.9%	-0.1%	0.8%	0.7%	–
Total						
Population	11,830	15,630	17,275	43,239	48,377	–
Housing Units	–	–	6,885	15,782	17,631	–
Occupied Housing Units	–	–	6,315	14,413	16,105	–
Estimated Annual Growth	–	3.2%	1.1%	15.0%	2.4%	–

Source: BCVWD

Table 28 shows the estimated growth in EDU's from 2015 to 2045. About two-thirds of this growth occurred between 2000 and 2007 based on building permits issued by the City of Beaumont. The high rate of growth continued until mid-2008 when development slowed markedly following the economic turndown in the US and California. The population in Cherry Valley remained relatively constant since 1990. Cherry Valley did not experience the growth spurt of other areas in the region.

Beaumont-Cherry Valley Water District

Table 28 – Summary of New EDUs in BCVWD Service Area (base year 2013)

	Cumulative New EDUs							
Area	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**Build-out**
Beaumont	893	5,530	8,301	11,382	14,144	15,852	16,317	17,856
Cherry Valley	13	23	82	251	552	1,661	2,233	4,655
Totals	918	5,553	8,383	11,633	14,696	17,513	18,550	22,511
Average New EDUs/year		927	566	650	612	563	207	

Source: Beaumont Cherry Valley Water District

Table 28 shows population projections based on the EDU projections. Table 29, which has been taken from BCVWD's 2015 UWMP, projects higher growth than growth estimates based on historical data. By 2025, the District population is projected to be 69,306.

Table 29 – Current and Projected Population in BCVWD Service Area

Area	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**	**Build-out**
Beaumont	41,780	54,764	62,522	71,149	78,883	83,665	92,806
Cherry Valley	6,597	6,622	6,784	7,244	8,066	11,139	19,494
Totals	48,377	61,386	69,306	78,393	86,949	94,804	112,300

Source: Beaumont Cherry Valley Water District

At build-out, the District estimates of the City of Beaumont's will reach 90,600, while Cherry Valley will be 21,700, for a total of 112,300. However, build out is not expected until 2050 or later. In the next five years, based on the annual average growth from 2010-2015, or 2.4 percent annually, the District's population is estimated to reach 54,126 in 2020 and 60,557 in 2025. The two estimates show that in 2025 the population will range between 60,557 and 69,306.

Disadvantaged Unincorporated Communities (DUCs)

Although there is a DUC within the District's boundaries, Highland Springs, there are no DUCs identified within or adjacent to BCVWD's SOI. The one DUC consists of a separate residential area located less than one mile to the west of Highland Springs, identified hereafter as "Cherry Valley West." The area consists of large rural lots with mixed land uses ranging from low, medium and high density residential to general commercial and commercial retail and residential and light agricultural zoning. Cherry Valley West has an estimated population of approximately 1,017.

After a DUC is identified it is necessary to identify backbone service providers, water, sewer and fire. The Riverside County Fire Department serves these areas. Beaumont Cherry Valley WD provides water. As these areas are outside City Limits it is likely residents are on septic systems.

Beaumont-Cherry Valley Water District

Present and Planned Capacity of Public Facilities

The Beaumont Cherry Valley Water District (BCVWD) provides potable and non-potable water service to 17,997 connections. Approximately 325 of those are non-potable water connections for landscape irrigation.

Supply

BCVWD's potable water system is supplied by wells in Little San Gorgonio Creek (Edgar Canyon) and the Beaumont Basin (sometimes called the Beaumont Storage Unit or the Beaumont Management Zone). The District has a total of 24 wells including one standby.

Wells in Edgar Canyon have limited yield, particularly in dry years, and take water from shallow alluvial and bedrock aquifers. The Edgar Canyon Wells provide about 15 to 20 percent of the total annual supply. The Edgar Canyon wells are very inexpensive to operate and are the preferred source; however, those wells are not able to meet the current average day demand.

The Edgar Canyon wells pump to a gravity transmission main that extends the full length of the District-owned properties in Edgar Canyon. The transmission main connects to the distribution system in Cherry Valley. Water from the Edgar Canyon Wells, which is not used in the developed areas adjacent to Edgar Canyon or Cherry Valley, is transferred to lower pressure zones serving the City of Beaumont.

The other sources are wells in the Beaumont Basin are large capacity and pump from deep aquifers – some as deep as 1,500 ft below the ground surface.

BCVWD has two active stream diversion locations within Little San Gorgonio Creek (Edgar Canyon) that are in the State Water Resources Control Board, Division of Water Rights database (S014351, S014352). The diversions have pre-1914 recorded water rights amounting to 3,000 miner's inch hours (MIH) or approximately 45,000 acre-feet per year (AFY) of right for diversion of water for domestic and irrigation uses. At the present time, the District diverts streamflow in Edgar Canyon to a series of percolation ponds which recharge the shallow wells in Edgar Canyon. This water is then extracted for domestic purposes.

The District has 11 pressure zones and 14 reservoirs (tanks) ranging in size from 0.5 million gallons (MG) to 5 MG. Total storage is approximately 22 MG – almost 2.5 average days or slightly more than one maximum day. The reservoirs provide gravity supply to their respective pressure zones. The BCVWD's system is constructed such that any higher zone reservoir can supply water on an emergency basis to any lower zone reservoir. There are booster pumps in the system to pump water up from a lower pressure zone to a higher pressure zone.

The transmission system in the main pressure zones is 24-in diameter. (There are some 30-inch diameter pipelines at some reservoirs.) The bulk of the pipe is ductile iron pipe with cement mortar lining and was installed in the last 10 to 15 years. There are a number of small

distribution lines (4-inch and smaller) that are gradually being replaced over time with minimum 8-in diameter cement mortar lined ductile iron pipe. All developments since the early 1980s have installed mortar lined, ductile iron pipe. The distribution system is capable of providing over 4,000 gallons per minute (GPM) fire flow in the industrial/commercial areas of the service area.

BCVWD's total well capacity is approximately 27.5 million gallons per day (MGD) with the largest well out of service. In 2017, the maximum day demand was 19.3 MGD. As a result, the District has adequate supply to meet the demands of its customers even if the customer base expanded as projected through 2025.

BCVWD has adequate water supply facilities including imported water recharge facilities and well supply for the future. A Potable Water Master Plan, adopted by the Board of Directors on January 13, 2016, identifies the facilities needed to accommodate projected growth to build-out. This Master Plan is supported by BCVWD's 2015 Urban Water Management Plan (UWMP) completed in 2017.

A Non-Potable Water Master Plan is in the final stages of completion and will be presented to the Board sometime in 2019. The Board of Directors approved a 10-year Capital Improvement Program (CIP) in February 2018 for 2017-2027 to ensure facilities are constructed to meet projected needs and demands.

Recharge Facility

In 2001, the District purchased an 80-acre site on the east side of Beaumont Avenue between Brookside Ave. and Cherry Valley Rd. (the Oda Property) and located a recharge facility which was completed in two phases. Phase 1 was completed in 2006, and Phase 2 in 2014. The site has experienced percolation rates of between 7 and 10 acre-ft/acre/day. The capacity of the recharge facility is more than CVWD is projected to need at build-out. BCVWD's 24-inch diameter connecting pipeline from the East Branch Extension (EBX) of the State Water Project to the recharge facility has capacity to well beyond 2040.

The Beaumont Groundwater Basin has large storage capacity for banked water. BCVWD has an 80,000 acre-ft storage account in the Basin. During wet years, BCVWD can bank SPW for dry years, as was successfully done from 2006 through the end of 2017, when over 72,000 acre-ft were recharged. The Beaumont Basin Watermaster keeps an accounting of stored water. As of the end of 2017, BCVWD has 32,295 acre-feet in banked storage or more than a three-year water supply when the normal Edgar Canyon well supply is included.

Recycled Water

The District has over 44 miles of non-potable transmission lines. The non-potable system serves slightly more than 300 landscaping connections. The system includes a 2 million gallon non-potable water reservoir which receives non-potable groundwater and potable water, and

Beaumont-Cherry Valley Water District

has facilities to receive untreated imported State Project Water. The non-potable system could have a blend of recycled water, imported water, and potable and/or non-potable ground water. A large part of the non-potable water system demand is currently supplied by Well 26. In 2017, the recycled system provided 1,612 acre-feet of water. BCVWD is working with the City of Beaumont to provide recycled water. A draft MOU addressing this issue has been circulated for review by both parties.

Demand

Demand for 2015 and the next 25 years is shown in Table 30. The table shows demand will be increasing with as the District moves toward buildout, which is not anticipated until at least 2050. The table also shows that in 2020 groundwater recharge will be increasing. In the future, landscape water will be primarily recycled water so there will be less demand on potable water supplies for this system.

Table 30 – BCWD Actual Demand 2015 and Demand Projections to 2040

End Use	Source	2015 (acre-ft/yr)	2020 (acre-ft/yr)	2025 (acre-ft/yr)	2030 (acre-ft/yr)	2035 (acre-ft/yr)	2040 (acre-ft/yr)
Single Family	Potable	6,612	12,702	14,191	16,084	17,878	19,533
Multi-Family	Potable	287	400	625	710	785	855
Commercial	Potable	118	126	135	145	155	165
Industrial	Potable	169	180	190	200	210	220
Institutional/Governmental	Potable	611	650	685	730	770	820
Landscape	Potable	772	0	0	0	0	0
Landscape	Raw	514					
Agricultural irrigation	Potable	49	60	55	50	45	40
Other	Potable	160	300	315	325	340	350
Losses	Potable	500	335	380	430	473	500
Other raw water supplement	Raw	0	163	280	455	449	398
Groundwater recharge	Raw	0	1000	1500	2000	2500	2500
Total		9,792	15,916	18,356	21,129	23,605	25,381

Source: Beaumont Cherry Valley Water District

Reliability

Table 31 shows reliability for four drought scenarios, 1-year, 2-year, 3-year, and 6-year durations. The table shows sources are groundwater, storm water, recycled water and imported water. Together with contributions from banked water, the District is able to meet demands. The imported water quantities are shown to increase with drought duration. This is based on the amount of imported water available from a statistical analysis of the California Department of Water Resources 2015 Delivery Capability Report for the stated drought durations. It is also interesting to note the storm water increases with each scenario, however that is counter intuitive since with longer drought periods there would be fewer storms. Nevertheless, the key conclusion from the table is that imported water and banked water

would address the shortfall. In addition, for a six-year drought, conservation ordinances kick in to reduce demand.

Table 31 – BCVWD Supply Reliability 2025 Single Dry Year 2, 3, and 6 Dry Years

	2025			
	1 Dry Year (acre-feet/yr)	2 Dry Years (acre-feet/yr)	3 Dry Years (acre-feet/yr)	6 Dry Years (acre-feet/yr)
Demand				
Potable Water Demand	16,856	16,856	16,856	14,328
Non-Potable Water Demand	2,525	2,525	2,525	2,146
Total Water Demand	19,381	19,381	19,381	16,474
Supply				
Groundwater				
Edgar Canyon	1,117	1,173	1,230	1,367
Beaumont Basin	1,675	1,675	1,675	1,675
Storm Water	255	325	325	470
Recycled Water	2,260	2,140	2,140	2,140
Imported SPW	570	1,430	2,280	3,190
Subtotal Supply	5,877	6,743	7,650	8,842
From Banked Beaumont Basin Storage	13,504	12,638	11,731	7,632
Total Withdrawn from Storage Over Dry Period	13,504	25,276	35,193	45,791

Source: BCVWD

Emergency Preparedness (Supply or Treatment Interruption Capability)

Extended supply shortages are unlikely due to natural disasters or accidents which damage all water sources. However, BCVWD's emergency response plan (ERP) includes provisions to provide water via its groundwater storage and available wells. This is sufficient water to meet the minimum health and safety requirements of 50 gallons per day per capita for approximately 48,000 residents. This assumes reduction in uses and zero non-residential or landscape use.

Under emergency power outages or a catastrophic earthquake conditions, the existing storage and supply is expected to provide a supply at minimum demand levels.

The District has several portable back-up generators that can be used in the event of an area-wide power outage. These generators can be located on primary pump stations and well sites to continue water delivery.

Financial Ability to Provide Services

The District's fiscal year coincides with the calendar year. Table 32 shows revenues expenditures and the fund balance for fiscal years 2014-2017 ending on December 31.

Beaumont-Cherry Valley Water District

3 Year Revenue/Expenditure Budget Trends

Table 32 shows the three-year expenses and revenues as well as the change in total assets of the District. The table shows operating revenues increase as sales increased when the drought restrictions were lifted. Average water sales are just under $12 million, and average expenses are $10.3 million which result in an average net income of $1.7 million. The capital contributions represent capacity charges to new development. The increase indicates that new developments are planned and perhaps accelerated by the economy and the lifting of the drought restrictions.

Table 32 – BCVWD Revenues and Expenses, FY 2015-2017

	FY 2014-15	FY 2015-16	FY 2016-17
Revenues			
Operating revenues	$ 10,832,295	$ 12,139,440	$ 13,177,509
Non-operating revenues	139,885	194,122	461,712
Total revenues	$ 10,972,180	$ 12,333,562	$ 13,6392,21
Expenses			
Operating expenses	$ 9,721,673	$ 10,923,833	$ 13,235,100
Non-operating expenses	–	–	37,031
Total expenses	$ 9,721,673	$ 10,923,833	$ 13,272,131
Income (loss) before contributions & special item	$ 1,250,507	$ 1,409,729	$ 367,090
Capital contributions	7,389,402	9,541,491	11,270,398
Special item	–	–	–
Change in net position	$ 8,639,909	$ 10,951,220	$ 11,637,488

Sources: BCVWD

The table also shows that the net position which represents total net assets of the District have been increasing over the three-year period at a rate of $9 million a year. In 2016, the District's total net position increased $10,951,220 from the prior fiscal year. The $9.5 million of the increase is a result of capital contributions from developer activities, which comprises $1 million in dedicated and transferred capital assets and $8.5 million in capacity charges.

In 2015, the District's total net position increased $8,639,909 from the prior fiscal year. The increase is a result of the combined effects of decreased operating expenses of $459,614 and capital contributions from developer activities of $1,092,505 in donated dedicated and transferred capital assets and $6,296,897 in capacity charges. Operating expenses decreased in 2015 by $459,614 primarily due to a decrease in water purchases of $517,344. Capital contributions in 2015 of $7,389,402 increased from $2,677,180 in 2014 due to an increase in development activity and the resulting capacity charges.

In 2014, the District's total net position increased $8,267,830 from the prior fiscal year. The increase is a result of the combined effects of increased revenues (e.g., water sales) of $198,278; decreased operating expenses of a decrease in water purchases of $1,211,232;

Beaumont-Cherry Valley Water District

capital contributions from developer activities of $2,677,180; and a revision of assumptions regarding OPEB costs amounting to $2,964,502.

Ratio of Reserves or Fund Balance to Annual Expenditures

Table 33 shows allocation of reserve funds and a comparison with expenses. The data show the District has adequate reserves to cover one to two years of expenses. This ratio of reserves to expenses has increased each year from 2014 through 2016.

Table 33 – BCVWD Reserve Funds

	FY 2014-15	FY 2015-16	FY 2016-17
Capital Replacement	$ 6,952,493	$ 7,999,767	$ 20,769,815
Operating	4,391,636	4,205,524	2,252,877
Emergency	1,317,491	1,261,657	1,351,726
Total Reserves	$ 12,661,620	$ 13,466,948	$ 24,374,418
Total Expenses	$ 10,923,833	$ 9,721,673	$ 10,181,587
Ratio Reserves to Expenses	1.16	1.39	2.39

Sources: BCVWD

Annual Bond Debt Service Expenditures to Total Annual Expenditures

As of December 31, 2016, the District had no long-term debt.

Rate Structures

BCVWD's current water rates and charges are included in Section 5 of BCVWD's Rules and Regulations. The charges were adopted in 2010. The 2015 rates are still in effect. According to the District, a consultant will be retained to review the water rate structure and recommend changes. That study is expected to be completed in 2019.

The current charges consist of the sum of:

- Fixed Water Charge (Service Charge) based on meter size and type of service
- Two-tiered Water Use Charge depending on the amount of water used
- SCE Power Charge – depending on the amount of water used ($0.33/100 cu ft currently)
- State Water Project Charge – to cover the cost for imported water ($0.46/100 cu ft currently)

Table 34 summarizes rates for residential, commercial, and outside the area charges.

Table 34 – BCVWD Rates

Class	Base	Tier 1 0-44 (100 CF)	Tier 2 45+ (100 CF)	SCE Power per 100 CF	SWP per 100 CF
Residential	$18.01	$0.96	$1.05	0.33	$0.46
Commercial	$18.01	$0,99	$0,99	0.33	$0.46
Outside Area	$24.00	$0.96	$1.05	0.33	$0.46

Notes: SCE Power- Southern California Edison surcharge SWP State Water Project surchage
Source: BCVWD

Beaumont-Cherry Valley Water District

Capital Improvement Program/Plan

In late 2009, BCVWD completed a 5-year capital improvement program (CIP) study to support a water rate study prepared by Wildan and Associates in May 2010. The CIP identified a number of water resource projects including storm water capture, and a pollution control project to pump high nitrate groundwater and convey it to the non-potable water system for reuse. The CIP was updated in the 2016 Master Plan and shown in Table 35.

Table 35 – Reconciliation of 2015 Master Plan CIP with 2007 Facilities Fee Study

Item	Cost (million $)
Potable Water Costs in 2007 Study without Financing or Water Rights, 2007 dollars	$261.9
Escalation from 2007 to Master Plan ENRCCI = (9845- 7937)/7937= 0.24	$62.9
Subtotal Potable Water Costs in 2007 Study, without Financing or Water Rights, updated to current cost	$324.8
Water Rights, from based on 64% reliability	$142.4*
Well head treatment, not anticipated in 2007	$12.0
Subtotal Potable Water Costs, without Financing, current cost	$ 479.2
Less 3,400 EDUs constructed since 2007 at $9,818 per EDU for Potable Water	$-33.4
Adjusted Potable Water Project Cost	$445.8
Master Planned Potable Water Facilities, Funded Through Facilities Fees	$490.0

*With conservation, this amount could be reduced by $41 million. However, it is anticipated an equivalent amount would be used to develop local water resources and indirect potable water recycling and recharge projects

Source: BCVWD

In February 2018, BCVWD completed, and the District's Board adopted, a 10-year Capital Improvement Plan (based on the 2016 Potable Water Master Plan and Draft Non-potable Water Master Plan) that covered the period 2018 through 2027. The 2018 CIP identified projects totaling over $201 million for the 10-year period. Funding sources were also identified. Infrastructure and pipeline projects (potable and non-potable water) were over 95% of the CIP planned expenditures. Over 70% of the projects was planned to be funded through capacity charges and or other developer funding.

Pension Liability and Other Post-Employment Benefits Liability

California law requires an annual calculation of the Net Pension Liability and contribution for each participating agency. This calculation is utilized by the agency to budget for and make contributions to CALPERS toward its unfunded liability balance. In 2017, BCVWD contributed $103,103 toward the pension services. As of June 30, 2017, the District reported $1,148,140 for its proportionate share of the net pension liability. The 2016-17 CAFR contains a detailed description of the calculation of benefit and unfunded liability.

Status and Opportunities for Shared Facilities/Services

The District has demonstrated that it works cooperatively with a number of local and regional water agencies to provide water services. The District has entered into a number of interagency agreements with the City of Banning, South Mesa Water Company, YVWD, SGPWA and others for services.

BCVWD and the City of Beaumont worked cooperatively to install potable and non-potable water facilities to serve approved City developments. These were funded extensively through Mello-Roos Community Facilities District (CFD) Bonds. BCVWD and the City continue to work toward using treated effluent from the City's wastewater treatment plant in BCVWD's non-potable water distribution system. A draft MOU is under consideration by both parties.

San Gorgonio Pass Water Agency

In January of 1999, the District, San Gorgonio Pass Water Agency and the Riverside County Flood Control and Water Conservation District (RCFCD) entered into a cooperative agreement for joint use of the existing percolation ponds known as Little San Gorgonio Creek Spreading Grounds. The agreement allows recharge of both local and imported water to maximize public benefit while preserving existing rights of the District and RCFCD. This agreement had a 10-year term limit and was extended in 2009 for another 10 years.

South Mesa Water Company

The District and South Mesa Water Company entered into an agreement which gives the District the first right of refusal to purchase any unneeded portion of the South Mesa Water Company's temporary surplus in the Beaumont Basin as part of the adjudication. This purchase option terminated in 2014 when the Watermaster's "temporary surplus" ended. The agencies continue to discuss purchases of banked water whenever it is available.

City of Banning

In December 2003, the District entered into an agreement with the City of Banning to: (1) jointly fund the construction and operation of municipal production wells in the Beaumont Basin for the mutual benefit of both entities, and (2) to agree to jointly fund the construction and operation of a potable water treatment plant for imported water, if necessary in the future. Water is conveyed to the City of Banning from the District transmission mains at various locations along Highland Springs Avenue.

Yucaipa Valley Water District

In 2010, the District met with YVWD to discuss a recycled water interconnection and other water supply issues of mutual interest. Yucaipa agreed to amend their State SRF loan to extend their recycled water pipeline to the District, and the District would continue the pipeline to connect to the District's existing recycled water system. It was also discussed that the

District could provide potable water supply, on an interim basis, to some of the portions of Yucaipa's service area which can be served by BCVWD. Discussions on these issues are ongoing.

Riverside County Flood Control and Water Conservation District

BCVWD and Riverside County Flood Control and Water Conservation District (RCFCD) have been studying the feasibility of capturing storm water in Marshall and Noble Creeks including an interceptor storm drain in Grand Avenue in Cherry Valley. This storm drain will capture storm water ultimately tributary to San Timoteo Creek and divert it to the District's Groundwater Recharge Facilities for percolation. Funding sources include Santa Ana Watershed Project Authority's (SAWPA's) 2015 Integrated Watershed Protection Program SAWPA, RCFCD, and BCVWD. The project known as Beaumont MDP Line 16 is in design by RCFCD. BCVWD and RCFCD are working cooperatively on the design.

Regional Water Allocation Agreement

The seven major water producers within the SGPWA area developed a draft regional water allocation agreement (March 2012) for water imported by the SGPWA. The "allocation" was based on the proportion of the water producer's SOI area within SGPWA. The agreement describes a methodology to distribute any unused allocation. The agreement has yet to be adopted by SGPWA.

Beaumont Basin Watermaster

In 2004, the Beaumont Basin Watermaster was created to manage the groundwater extractions, replenishment thereof, and storage of supplemental water within the Beaumont Basin. The Watermaster consists of representatives from the Beaumont-Cherry Valley Water District, the City of Banning, the City of Beaumont, the South Mesa Water Company, and the Yucaipa Valley Water District. The District is a member agency of the Watermaster and contributes a varied annual amount to the Watermaster to fund its operations. For the year ended December 31, 2016, the District contributed $28,144 and $27,844, respectively.

Management Efficiencies

Management efficiencies often reflect the willingness and the ability to plan for future needs for services. As indicated above, the District has participated in a number of planning activities such as the Potable Water System Master Plan, which was adopted in 2016, and the 2015 Urban Water Management Plan. The District prepared and adopted a 10-year CIP in 2018. In addition, the District adopts an annual budget which in essence is a spending plan for the next fiscal year.

Beaumont-Cherry Valley Water District

Government Structure and Accountability

The District is governed by a five-member Board of Directors, elected by district to four- year staggered terms. Table 36 lists the current board. The Board meets on the second Wednesday of each month. Directors receive a stipend of $200 per diem for attending meetings. Meetings are publicly noticed according to the Brown Act. Residents are encouraged to attend.

The General Manager administers the day-to-day operations in accordance to policies established by the Board. The District has 36 employees.

The current SOI encompasses an area of approximately 37.5 square miles (14.3 square miles are in the City of Beaumont). This SOI, jointly established by the Riverside and San Bernardino County Local Agency Formation Commissions, is bounded on the west and north by the Yucaipa Valley Water District (YVWD) and on the east by the City of Banning. The northerly boundary of Eastern Municipal Water District (EMWD) is one mile south of the District's southerly SOI boundary. The area between EMWD and the District's SOI is not within any SOI and could be annexed to either the District or EMWD. The District's SOI in Little San Gorgonio Canyon follows Oak Glen Road. The area west of Oak Glen Road is within YVWD's SOI; east of Oak Glen Road is within the District's SOI.

Table 36 – BCVWD Board of Directors

Board Member		Term Expires
John Covington	Division 4	November 2022
Andy Ramirez	Division 1	November 2020
Lona Williams	Division 2	November 2020
Daniel Slawson	Division 3	November 2022
David Hoffman	Division 5	November 2022

Source: BCVWD

LAFCO Policies Affecting Service Delivery

The District has collected capacity fees since the mid-1980s - one of the first agencies to do so in the area. It is possible that anticipated development may encourage other projects in the sphere or outside the sphere. No change in the service area is in process now. LAFCO's sphere and annexation policies would help guide providing services to the new areas. The LAFCO sphere and annexation policies would affect service delivery.

Cabazon County Water District

Overview/History

Cabazon County Water District (CCWD) was formed in 1954 as a county water district under the authority of Division 12 of the California Water Code. The District is located in the eastern portion of Riverside County. The District encompasses 7,040 acres around and including the unincorporated town of Cabazon. The San Gorgonio Pass Water Agency overlaps CCWD (water service only). The District provides water service to approximately 1000 customers within its service area (Exhibit 5). The source of water is four groundwater wells.

Growth and Population Projections

The District includes the community of Cabazon, a census designated place (CDP). In 2010, the CDP which includes most of the District, had a population of 2,535. By 2016, the estimated population grew to 4,054. Table 37 shows population growth in the CDP between 2010 and 2016.

Table 37 – CCWD Population Growth, 2010-2016

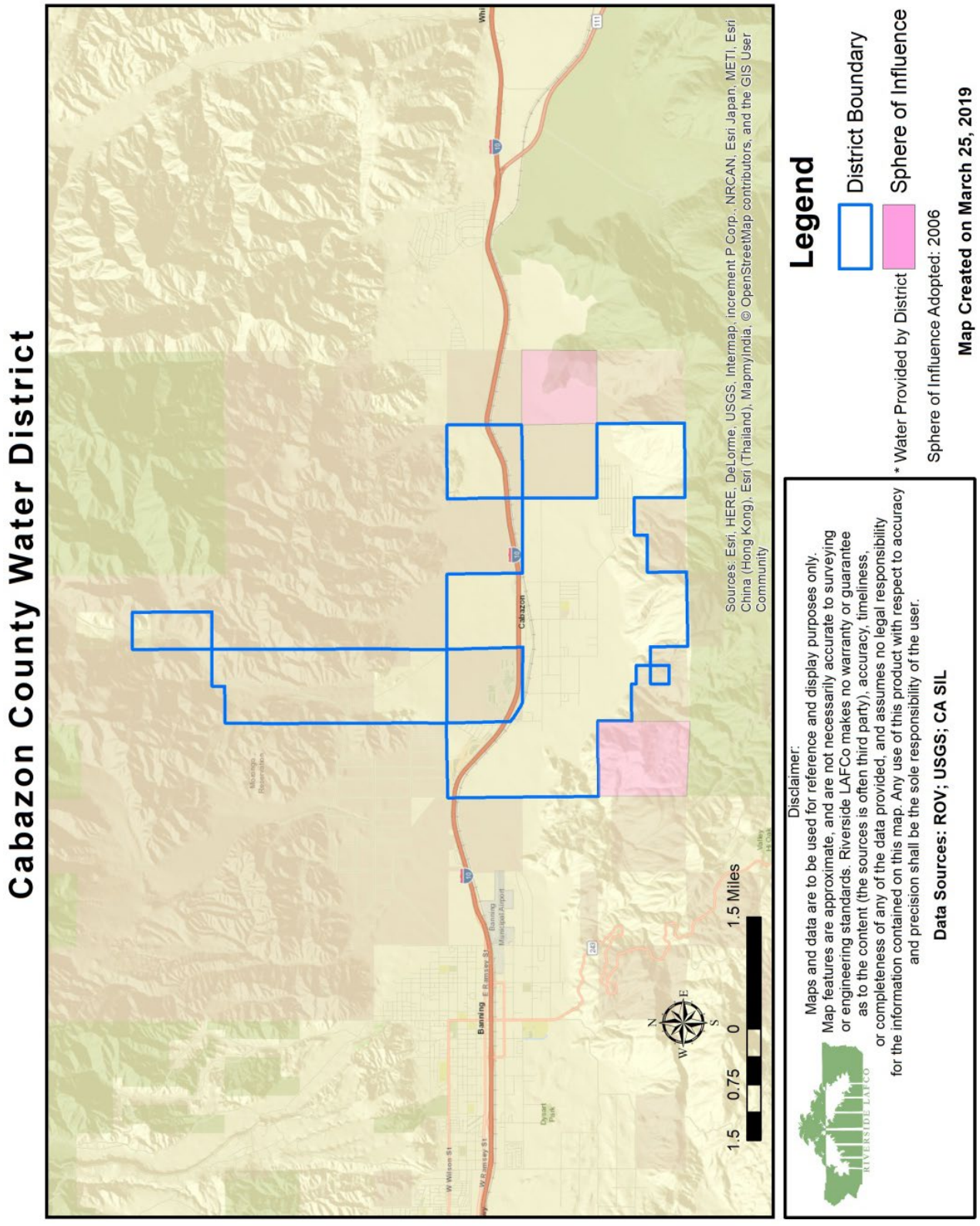
Year	Population	% Change	Housing Units	% Change
2010	1,931		789	
2011	1,729	-10.5%	750	-4.9%
2012	2,121	22.7%	751	0.1%
2013	2,699	27.3%	919	22.4%
2014	3,266	21.0%	935	1.7%
2015	3,633	11.2%	1043	11.6%
2016	4,054	11.6%	1042	-0.1%
Average		13.9%		5.1%

Source: US Census 2018

As shown in the Table 37, the area experienced significant growth in the last six years, most recently 11 percent. However, housing growth was much slower averaging five percent a year. If we assume an annual growth rate of 11 percent, the expected population in 2023 would be approximately 6300 and 1,300 housing units. The housing unit estimate indicates there will be a need for an additional 300 connections in the next five years.

Cabazon County Water District

Exhibit 5 – Cabazon County Water District



Cabazon County Water District Profile

General Information			
Agency Type	County Water District Act WC 30000 et seq.		
Date Formed	May 21, 1954		
Services	Water		
Service Area			
Location	Encompasses Cabazon between Banning and Palm Springs		
Square Miles/Acres	7,040 acres		
Total Water/Sewer Connections	882 connections: 832 single family, 42 other, 1 contract, 2 private fire (SRC rate study in 2017)		
Population Served	4,054		
Water Infrastructure			
Facilities	4 groundwater wells		
Storage Capacity	Production capacity of 3160 gal/min (2@800, 1@1060 1@300 =2960 GPM)		
Primary Source of Supply	4 groundwater wells		
Water Rates (single-family home)	Base $61.77; Tier 1 0-799 CF, $1.39 per hundred CF, Tier 2 800-1400 CF, $3.04 per hundred CF, Tier 3 above 1400 CF $4.42 per hundred CF		
Budget Information - FY 2017-2018 (Water Fund)			
	Revenues	Expenditures	Net Surplus/(Deficit)
Water Fund	$1,525,970	$1,520,338	$5,862
Capital Expenditures	FY 2017-2018 $26,888	Long-Term Planned Expenditures $132,000	
Water Fund Balance/Reserves	$642,592		
Agency Net Position	$7,443,523		
Governance			
Governing Body	5 member board of directors elected at large to 4 year terms		
Agency Contact	Calvin Louie information@cabazonwater.org 951-849-4442		

Source: Cabazon Water District. 2016, 2018

Disadvantaged Unincorporated Communities (DUCs)

Although there are DUCs within the District's boundaries, there are no DUCs identified within or adjacent to CCWD's SOI. The Census Data indicated the Cabazon CDP has a median household income $33,890 which would qualify the community as a DUC. CKH requires identification of water, sewer, and fire protection for DUCs. Water is provided by CCWD. There is no sewer service provider as all residences are on septic systems. Fire protection is provided by Riverside County Fire with assistance from the neighboring Morongo Tribe which has a fire department. Riverside County Fire operates Station 24 which is in Cabazon.

Present and Planned Capacity of Public Facilities

The District has nearly 1,000 water connections, 837 single family, 42 "other", one contract, and two private fire connections. The District water comes from four groundwater wells, two that pump 800 gallons/minute (GPM), one that pumps 1060 GPM and one at 300 GPM. The production capacity is 2,960 GPM. Annually, that equates to capacity of 1.556 million gallons or 4,765 acre-feet.

The District maintains four storage tanks of which three have a capacity of one million gallons and the fourth has a capacity of 500,000 gallons or a total of 3.5 million gallons. Between October 2015 and September 2016, according to the recent Rate Study, the District customers consumed 2.6 million gallons, or 74 percent of storage capacity. Therefore, the District can maintain in excess of one year of demand in storage. The District has adequate storage and pumping capability to supply enough water to the District.

Emergency Preparedness (Supply Interruption Capability)

Extended supply shortages are unlikely due to natural disasters or accidents which damage all water sources. However, CCWD's emergency response plan (ERP) includes provisions to provide water via its groundwater supply wells and reservoirs. CCWD has about one year of demand volume of storage. This is sufficient water to meet the minimum health and safety requirements of 50 gallons per day per capita for approximately 4,000 residents. This assumes reduction in uses and non-residential or landscape use.

Under emergency power outages or a catastrophic earthquake conditions, the existing storage is expected to provide a supply at minimum demand levels. CCWD also has emergency plans for well sites and pipelines in case of earthquake, including several portable back-up generators that can be used in the event of an area-wide power outage. These generators can be located on primary well sites to continue water delivery.

Cabazon County Water District

Financial Ability to Provide Services

The CCWD has an annual budget for FY 2018-2019 of $1.497 million, a slight decrease from the $1.52 million of the previous year. Table 38 shows the sources of operational and non-operational revenues for FY 16 and FY 17 and the budgeted amounts for FY 18. Water sales average nearly 80 percent of all revenues. Non-operational revenues include property tax, cell tower rental, and investment earnings.

Table 38 – CCWD Revenues and Expenses, FY 16-FY 1

	FY 2016	FY 2017	FY 2018
Revenues			
Operating revenues	$ 1,199,699	$ 1,133,218	$ 1,441,970
Non-operating revenues	101,047	89,421	84,000
Total revenues	$ 1,300,746	$ 1,222,639	$ 1,525.970
Expenses			
Operating expenses	$ 1,087,732	$ 1,016,514	$ 1,498,300
Non-operating expenses	25,345	28,300	22,038
Total expenses	$ 1,113,077	$ 1,044,814	$ 1,520,338
Depreciation	$ 328,920	$ 327,617	$ 266,300
Total income (loss)	$ -141,047	$ -149,311	$ 5,632

Sources: Cabazon County Water District

3 Year Revenue/Expenditure Budget Trends

Table 38 shows the District has been primarily operating at a loss in FY 16 and FY 17. The loss although due to depreciation has been over $100,000 a year.

The table indicates the need for a rate increase. Consequently, the District hired NBS to perform a rate study to recommend a rate structure that would make the District fiscally sound.

Ratio of Reserves or Fund Balance to Annual Expenditures

An indicator of the ability to absorb an unexpected loss of revenue in a given fiscal year is exhibited by the amount of unrestricted cash reserve or fund balance the service fund maintains in relation to the annual fund expenditures. Reserve funds provide a basis for a utility to cope with fiscal emergencies such as revenue shortfalls, asset failure, and natural disasters, among other events. Reserve policies provide guidelines for sound financial management, with an overall long-range perspective to maintain financial solvency and mitigate financial risks associated with revenue instability, volatile capital costs, and emergencies. The District plans to accumulate approximately $900,000 in reserves by the end of FY 2020/21. The reserve funds for the Utility are considered unrestricted reserves and consist of the following:

- The Operating Reserve should equal approximately 180 days of operating expenses (approximately $695,000 for FY 2020/21). An Operating Reserve is intended to

Cabazon County Water District

promote financial viability in the event of any short-term fluctuation in revenues and/or expenditures. Fluctuations in revenue can be caused by weather patterns, the natural inflow and outflow of cash during billing cycles, natural variability in demand-based revenue streams (such as volumetric charges), and – particularly in periods of economic distress – changes or trends in age of receivables.

- The Capital Rehabilitation and Replacement Reserve should equal 6 percent of net capital assets (approximately $316,000 by the end of for FY 2020/21), which is set aside to address long-term capital system replacement and rehabilitation needs.

Table 39 shows the reserve allocation for FY 16 and FY 17. The table shows the District has sufficient reserves.

Table 39 – CCWD Reserve Allocation, FY 16 and FY 17

Reserve Funds	2016	2017
Restricted:		
Total restricted	$ 62,577	$ 59,568
Unrestricted:		
Materials and supplies inventory	$ 87,158	80,438
Prepaid and other assets	10,355	$ 19,902
Total non-spendable unrestricted net position	$ 97,513	$ 100,340
Operating reserve	$ 722,235	$ 681,165
Total unrestricted net position	$ 819,748	$ 781,505
Total net position	$ 7,584,570	$ 7,443,523

Source: CCWD 2016

The table shows the District maintains several reserve funds. The operating reserve represents about six months of expenses.

Annual Debt Service Expenditures to Total Annual Expenditures

Table 40 shows long term debt payments and balance for the three-year period 2014-2016. With expenses of $1.5 million the debt payment represents less than 10 percent of expenses.

Table 40 – CCWD Long Term Debt, 2014-2016

	2014	2015	2016
Starting Balance	$ 1,511,115	$ 1,405,507	$ 1,297,119
Payments	105,608	108,388	111,323
Ending Balance	$ 1,405,507	$ 1,297,119	$ 1,185,796

Source: CCWD 2016

Capital Improvement Program/Plan

The District does have a capital improvement program. The FY 2018-2019 budget identifies four projects to be undertaken in the next fiscal year at a total cost of $132,000. There are essentially three projects: one is the purchase of a new vehicle; the second is for a survey and impact assessment for the Main Street Property; and the third project is for meter replacement.

Cabazon County Water District

Rate Structures

For FY 2016-2017 through FY 2020-2021, the projected net revenue requirement (that is, total annual expenses plus debt service and rate-funded capital costs, less non-rate revenues) for the District is approximately $1.2 million, annually. If no rate adjustments are implemented, the District is projected to average a $260,000 deficit each year.

On April 18, 2017 the CCWD Board approved a new two tier rate schedule where 70 percent of the rate is fixed and 30 percent is variable. The rate is scheduled for adjustment each December 1 through 2020. In FY 2016-2017 and FY 2017-2018, the rate adjustment was 15 percent followed by an increase of five percent in FY 2018-2019, FY 2019-2020, and FY 2020-2021. Table 41 shows the recently adopted rate structure.

Table 41 – Cabazon Single Family Water Rates, December 1, 2017

Tier	Cubic Fee Used	Rate
Base		$61.77
Tier 1	0-799	$1.39 per hundred cubic foot
Tier 2	800-1,400	$3.04 per hundred cubic foot
Tier 3	Over 1,400	$4.42 per hundred cubic foot

Source: CCWD 2018

Pension Liability and Other Post-Employment Benefits Liability

California law requires an annual calculation of the Net Pension Liability and contribution for each participating agency. The District contributed $52,127 toward the pension services. There are two participants in the District's pension system. As of June 30, 2017, the District has no unfunded liabilities.

Status and Opportunities for Shared Facilities/Services

The District is relatively small and has few opportunities for shared facilities. However, the District works with San Gorgornio Pass Water Agency and neighboring water districts on the Sustainable Groundwater Management Act (SGMA) and the sustainable groundwater management plan. The District also works with the neighboring Morongo Indian Tribe.

An example of management efficiency is whether the District has long term plans or engages in long term planning activities. In addition to SGMA, the District is working on an Integrated Regional Water Management Plan.

Government Structure and Accountability

The District is governed by a five-member board (Table 42) elected at large to four-year staggered terms. Directors receive an annual stipend of up to $100 a day, up to $600 a month. Meetings are held on the second Tuesday of the month at District headquarters located at 14618 Broadway St. in Cabazon.

Cabazon County Water District

The District has a Finance & Audit Committee (FAC) that also meets on the second Tuesday two hours ahead of the Board meeting. The FAC consists of two members who are responsible for reviewing expenses and signing checks. Meetings of both the Board and the FAC are held according to the Brown Act.

The District also maintains a website which allows for communications with the public and a place where residences can view and pay their bill as well as register comments about service. The website also provides the water quality reports, financial reports, and meeting agendas and minutes.

The District is not looking to expand its boundaries or provide services outside the District.

The District has allocated 13 positions plus legal counsel. However, the District operates with the six filled positions. The District does not expect to fill the vacant positions in the near term.

Table 42 – CCWD Board of Directors

Board Member	Term Expires
Robert Lynk - Chair	2021
Sarah Wargo	2021
Martin Sanderson	2021
Alan Davis	2019
Maxine Israel	2019

LAFCO Policies Affecting Service Delivery

The District does not intend to expand its boundaries or its sphere of influence. There are no other LAFCO policies that would affect service delivery.

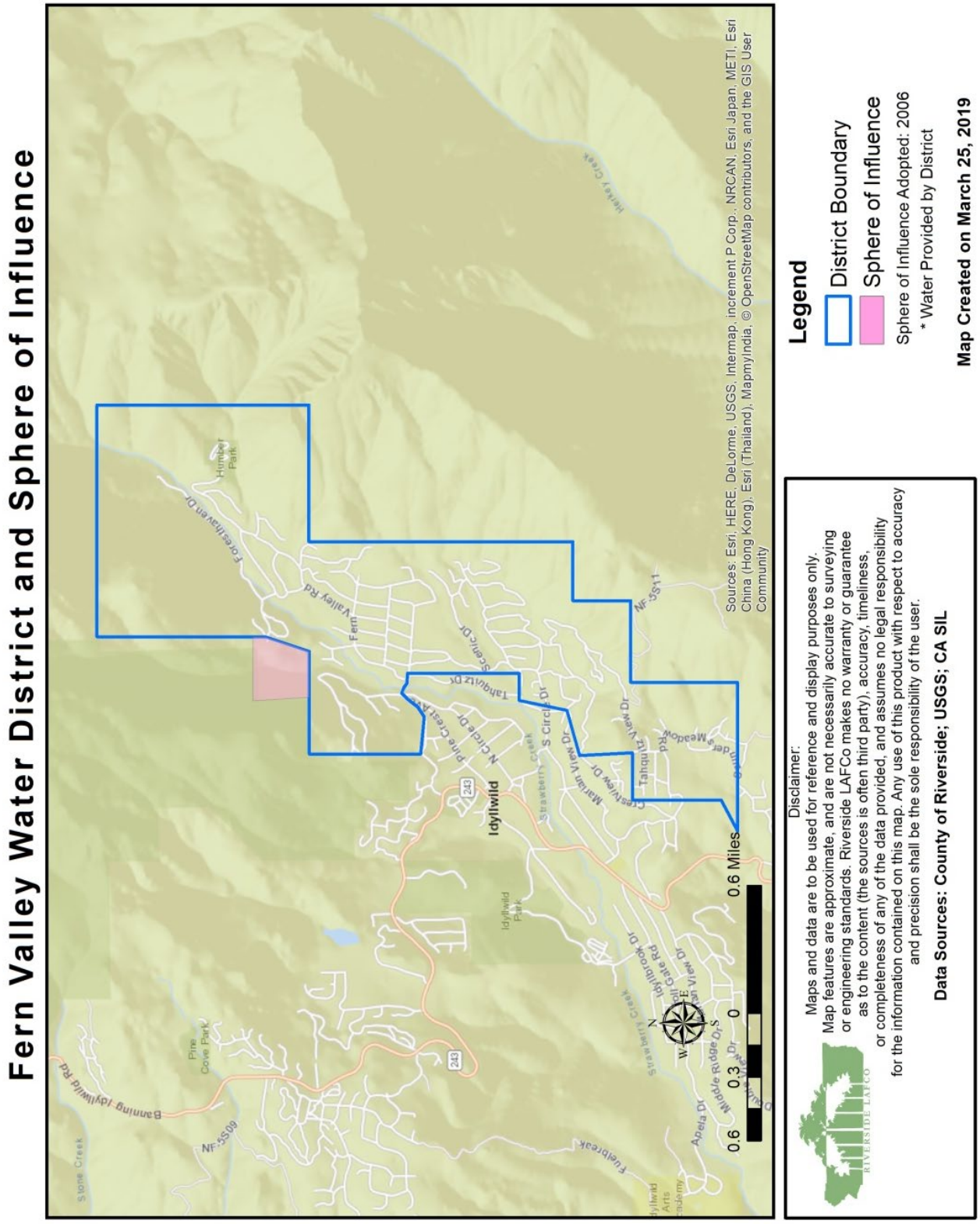
Fern Valley Water District

Overview/History

The Fern Valley Water District was formed on January 7, 1958 as a California Water District of the Water Code. The District lies northwest of Idyllwild and the Saunders Meadow Tract. The District provides water to approximately 2,000 residents through 1,185 connections. A boundary map with its SOI is shown in Exhibit 6.

Fern Valley Water District

Exhibit 6 – Fern Valley Water District



Fern Valley Water District

Fern Valley Water District Agency Profile

General Information			
Agency Type	California Water District WC 32000 et seq.		
Date Formed	January 7, 1958		
Services	Water		
Service Area			
Location	NE Idyllwild and the Saunders Meadow Tract		
Square Miles/Acres	Approximately 3 square miles		
Total Water Connections	1,180		
Population Served	2,000		
Water Infrastructure			
Facilities	Water treatment plant		
Storage Capacity	6.9 MG		
Primary Source of Supply	Groundwater 11 wells (35%) and surface water Tahquitz Creek (60%) and Strawberry Creek (5%)		
Water Rates (single-family home)	Service Charge – Annual First Tier – Bi-Monthly Second Tier – Bi-Monthly Third Tier – Bi-Monthly	Flat fee Up to 1,400 CF 1,401-3,000 CF Greater than 3,000 CF	$196.20 $4.35 $10.68 $16.74
Budget Information - FY 2017-2018 (Water Fund)			
	Revenues	Expenditures	Net Surplus/(Deficit)
Water Fund	$1,137,124	$947,766	$189,358
Capital Expenditures	FY 2017-2018 $435,000.00	Long-Term Planned Expenditures FY 2016-2027 CIP: $2,287,500 Total long term planned expenditures $5.2 million (approximately)	
Water Fund Balance/Reserves	$1,119,005		
Agency Net Position	$7,708,736		
Governance			
Governing Body	5 member board of directors		
Agency Contact	Victor Jimenez 951-659-2200 victor.fvwd@gmail.com		

Sources: Fern Valley Water District 2017, 2018

Fern Valley Water District

Growth and Population Projections

The District population is approximately 2,000. The District's service area is expected to be unchanged with minimal growth. The District is mostly built out, and since no annexations are anticipated, the population should remain at 2,000.

Disadvantaged Unincorporated Communities (DUCs)

There are no DUCs within the District's boundaries, and no DUCs have been identified within or adjacent to FVWD's SOI. No additional analysis is required in this report.

Present and Planned Capacity of Public Facilities

The Fern Valley Water District serves 1,185 primarily residential connections. The Fern Valley water system relies on surface water with groundwater backup. The District operates 11 groundwater wells with a total pumping capacity of 320 GPM. Four aeration plants treat the well water. In addition, the District maintains a 250 GPM surface water granular activated carbon adsorption system.

Water storage includes five reservoirs with a capacity of approximately 4.5 million gallons for finished water. In addition, there are three reservoirs with a capacity of 2.34 million gallons for raw or untreated water. Total storage capacity for treated and untreated water is 6.8 million gallons. The systems are characterized as gravity feed systems that can continue to provide service during a short term power outage.

On March 16, 2016, the District received a notice of violation from the State Water Resources Control Board (SWRCB) Division of Drinking Water. The notice stated that sampling of the District's water indicated a violation of synthetic organic chemicals in the groundwater supply from Wells 2, 3, 4, 4A, 6, 7, 8, 11 and 12.

The SWRCB has determined that this monitoring deficiency did not result in a risk to public health. Therefore, no additional enforcement action will be taken. This deficiency; however, is considered a monitoring and reporting violation. The District must provide consumers with notification regarding the monitoring deficiency within one year of learning of the violation. In lieu of providing individual notices, the notification requirement may be met with inclusion of the violation in the 2015 Consumer Confidence Report (CCR), which was due to customers by July 1, 2016.

Emergency Preparedness (Supply Interruption Capability)

Extended supply shortages are unlikely due to natural disasters or accidents which damage all water sources. However, FVWD's emergency response plan is to provide water via its groundwater storage and available wells. This is sufficient water to meet the minimum health and safety requirements of 50 gallons per day per capita for approximately 2,000 residents. This assumes reduction in uses and non-residential or landscape use.

Fern Valley Water District

Under emergency power outages or a catastrophic earthquake conditions, the existing storage is expected to provide a supply at minimum demand levels.

The District has access to portable back-up generators that can be used in the event of an area-wide power outage. These generators can be located on primary pump stations and well sites to continue water delivery.

Financial Ability to Provide Services

The District's annual budget is just under $1 million. Table 43 summarizes revenues and expenses for the three-year period of FY 2014-2015 – FY 2016-2017. The District revenues are split between property tax and water sales. Property taxes are identified as non-operating revenues and represent approximately 53 percent of total revenues, while water sales account for 45 percent. Property taxes fluctuate with property values. Property tax and water sales revenues balance water service and depreciation expenses.

Table 43 – Fern Valley WD 3 Year Revenue/Expenditure Budget Trends

	2014-15	2015-16	2016-17
Revenues			
Water Sales	$ 512,779	$ 472,601	$ 505,611
Water Services	17,370	5,790	11,580
Other Operating	8,892	2,933	3,002
Non-Operating	564,129	583,843	616,931
Total Revenues	$ 1,103,170	$ 1,065,167	$ 1,137,124
Expenses			
Water Services	$ 634,863	$ 690,109	$ 645,260
Depreciation	298,585	281,346	301,650
Non-Operating	59,310	1,220	856
Total Expenses	$ 992,758	$ 972,675	$ 947,766
Change in Net Position	$ 110,412	$ 92,492	$ 189,358
Adjustments	$ -268,485	–	–
Net Position, Beginning	$ 7,584,959	$ 7,426,886	$ 7,519,378
Net Position, Ending	$ 7,426,886	$ 7,519,378	$ 7,708,736

Sources: Fern Valley WD 2016, 2017

Ratio of Reserves or Fund Balance to Annual Expenditures

An indicator of the ability to absorb an unexpected loss of revenue in a given fiscal year is exhibited by the amount of unrestricted cash reserve or fund balance the service fund maintains in relation to the annual fund expenditures. During the current fiscal year, the District's unrestricted net position increased by $189,358. At the end of FY 2016-2017, the District retained $1,119,005 in unrestricted reserves. That represents approximately 1.1 years of total expenses. The District does not expect to appropriate unrestricted reserves for spending in the FY 2017-2018 fiscal year budget.

Fern Valley Water District

Annual Debt Service Expenditures to Total Annual Expenditures

The District acts as a pass through for Saunders Meadow community capital improvement bonds. The District initially acquired $343,789 in bond debt in 1996 to finance capital improvements in that community. Assessment District 96-1 was formed to collect assessments to make the bond payments. Interest is payable on the bond at 4.875 percent per year, in semi-annual installments. The principal is due in annual installments starting in September 1998, maturing in the year 2037. In FY 2015-2016, the District paid $7,248, reducing the total obligation to $248,048. The payment represents less than one percent of total expenses.

Rate Structures

Current rates have been in place since July 1, 2013. There is a service charge and a usage charge. The usage charge is based on the meter readings and has three tiers. The total charged is the sum of service charge plus usage charge. Table 44 shows the current rate structure for a single family home.

Table 44 – Fern Valley WD Rate Structure

Single Family Charges	Period	Cubic Feet	Charge
Service Charge	Annual	Flat Fee	$ 196.20
First Tier	Bimonthly	Up to 1,400	$ 4.35
Second Tier	Bimonthly	1,401 to 3,000	$ 10.68
Third Tier	Bimonthly	Greater than 3,000	$ 16.74

Source: FVWD 2018

Water sales are expected to remain stable in fiscal year 2018. The District has performed a rate analysis and anticipates implementing the rate increase in 2018 to meet increasing operating costs and the need to replace aging infrastructure.

Capital Improvement Program/Plan

The District's investment in capital asset activities as of June 30, 2017, amounts to $6,589,731 (net of accumulated depreciation) and includes land. In 2017, the District purchased two used 2016 Ford F250 diesel 4×4 trucks to replace aging service trucks. The trucks were fully outfitted to meet the needs of the operators. In addition, the District obtained drawings and permits for an office expansion project.

The District is planning a two-year system-wide meter upgrade beginning in 2016. Existing meters will be replaced with state-of-art smart meters with data logging capabilities. The new meters will be able to track usage, which will aid in leak detection. The new meters will also be automated and reduce the cost of meter reading.

The District is planning to upgrade fire hydrants from 4” to 6” to assist fire protection agencies in their ability to protect the community from fire hazards.

Fern Valley Water District

Pension Liability and Other Post-Employment Benefits Liability

California law requires an annual calculation of the net pension liability and contribution for each participating agency. This calculation is utilized by the agency to budget for and make contributions to CALPERS toward its unfunded liability balance. In 2017, the District contributed $84,417 toward the pension services. As of June 30, 2017, the District reported $148,411 net pension liability for its proportionate share of the net pension liability. The FY 2016-2017 annual financial report contains a detailed description of the calculation of benefit and unfunded liability.

Status and Opportunities for Shared Facilities/Services

The District has limited opportunities for sharing facilities and services but works cooperatively with Idyllwild Water District and Pine Cove Water District.

Government Structure and Accountability

The District is governed by a five-member board elected at large to four-year staggered terms. Board members receive a stipend of $50 per meeting. The directors and the date their terms expire are shown in Table 45.

Meetings are scheduled for the third Friday of the month at 9 am in the Board Room of the District Office at 55790 South Circle Drive in Fern Valley. Meeting agendas are posted according to the Brown Act. The District encourages public participation by making agenda available and providing an opportunity for resident to put items on the agenda.

The District is staffed by four full time employees. Staffing includes two office personnel and two field operators.

Table 45 – Fern Valley Water District Board of Directors

Board Member	Term Expires
Trischa Clark	2019
Robert Krieger	2021
James Rees	2021
George Rowell	2019
Richard Schnetzer	2019

Source: Fern Valley Water District 2018

The District maintains a website. It provides the public access to agendas and the annual District newsletter as well as the Consumer Confidence Report.

The District is nearly built out with no anticipated increases in population or needs to expand its service territory.

The District had begun discussion with Pine Cove Water District and Idyllwild Water District on consolidation of the three agencies. The Fern Valley Water District, as of June 20, 2018, has

Fern Valley Water District

indicated it has no interest in consolidation but will continue to work with other agencies for opportunities to increase efficiency or achieve economies of scale.

LAFCO Policies Affecting Service Delivery

The District is nearly built out, and has expressed no interest in expanding its sphere or changing boundaries. No LAFCO policies would affect service delivery at this time.

High Valleys Water District

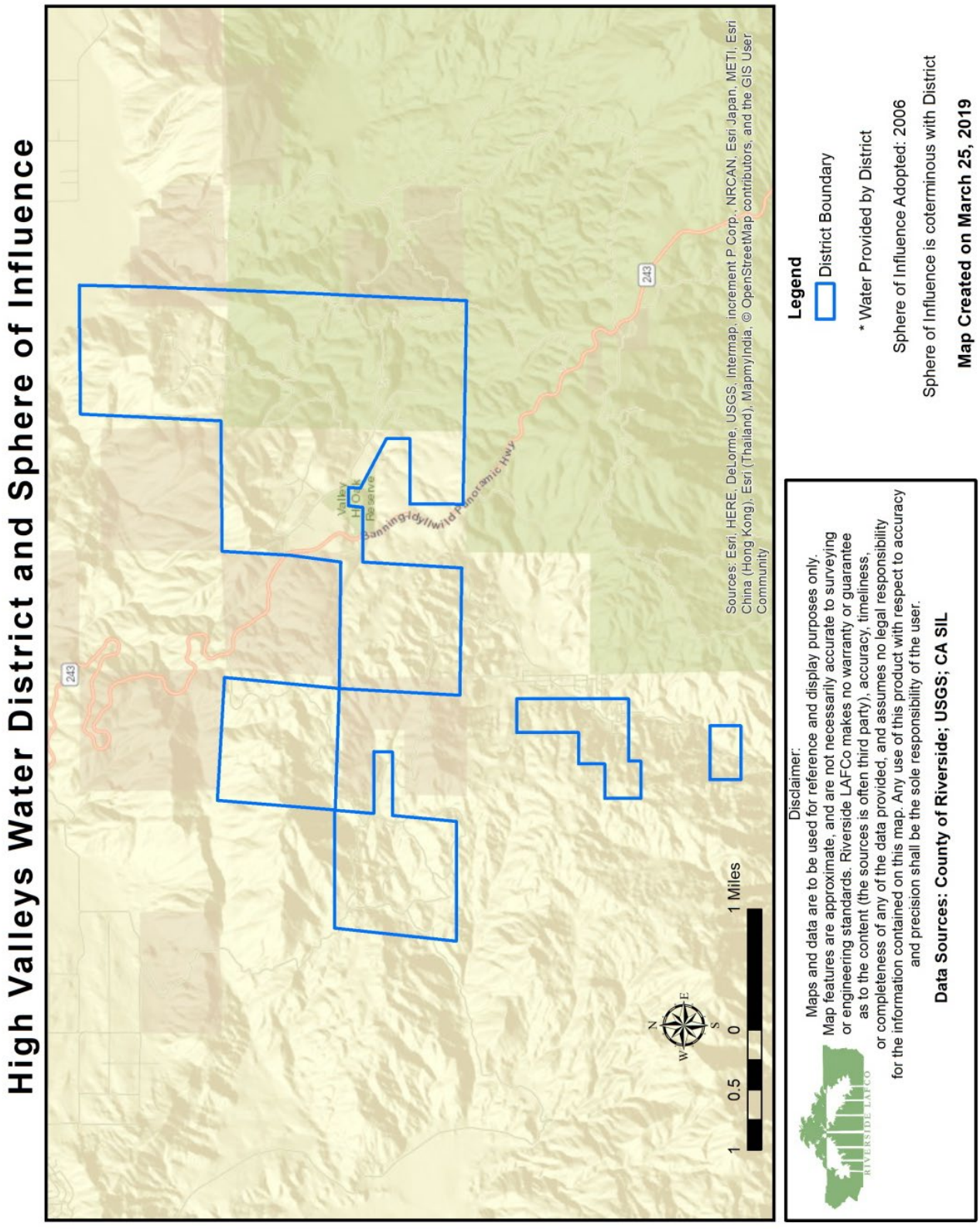
Overview/History

The High Valleys Water District (HVWD) is located in the mountainous area south of Banning, 44 miles east of Riverside between Riverside and Palm Springs. The High Valleys Water District was founded in 1972 in the Poppet Flats, Twin Pines, and Mt. Edna areas. These areas were owned by three individuals who wanted to divide and sell the property. This was not possible due to the “no water” issue. Together, they financed construction of a mainline to Banning, which at the time was Mountain Water Agency, and is now the City of Banning Water Department.

The High Valleys Water District (HVWD) provides potable water to approximately eight square miles with 227 connections. The San Gorgonio Pass Water Agency overlaps the HVWD (water service only). The District has no natural water resource and receives treated water from the City of Banning. Exhibit 7 shows the District’s boundaries.

High Valleys Water District

Exhibit 7 – High Valleys Water District



High Valleys Water District Agency Profile

General Information			
Agency Type	California Water District Act of 1911 Water Code 34000 et seq		
Date Formed	1969		
Services	Pumps water purchased from City of Banning to customers		
Service Area			
Location	Located in the mountainous area south of Banning 44 miles east of Riverside between Riverside and Palm Springs. Serves Twin Pines and Poppet Flats		
Square Miles/Acres	5		
Total Water Connections	227		
Population Served	500 (2010 Census)		
Water Infrastructure			
Facilities	3 booster stations, 3 storage tanks, 40 miles of pipe, no WTP		
Storage Capacity	Twin Pines at 210,000 gal, Poppet Flats at 210,000 and one at 500,000 gal tank for reserves at Twin Pines		
Primary Source of Supply	No natural water resources, pumps water from Banning		
Water Rates (single-family home)	The High Valleys Water District charges residential customers a monthly service fee of $56, which includes the first 1,000 cubic feet of water. After 1,000 cubic feet, the District charges $0.0464 for each additional cubic foot over 1,000 cubic feet.		
Budget Information - FY 2017-2018 (Water Fund)			
	Revenues	Expenditures	Net Surplus/(Deficit)
Water Fund	$536.518	$495,123	$41,395
Capital Expenditures	FY 2017-2018 $8,080.00	Long-Term Planned Expenditures $34,180.00 (FY 2018-2019)	
Water Fund Balance/Reserves	$343,741		
Agency Net Position	$795,421		
Governance			
Governing Body	5 member board		
Agency Contact	Luella Thornton, 951-675-8200		

Source: High Valleys Water District, 2014, 2018

Growth and Population Projections

The population from the 2010 Census was estimated at 500. There had been no increase since 2005 when the population was estimated also at 500. The District anticipates growth in population to 714 in 2023, to 748 in 2028, and to 816 in 2038, an annual growth rate of approximately three percent.

High Valleys Water District is primarily residential. Development in the Twin Pines/Poppet Flats area is 95 percent residential and five percent commercial, which limits the sales and property tax base. Agriculture and recreation facilities around the High Valleys Water District are the main source of commerce. The largest employer is Silent Valley Club (a member-owned RV Resort) that operates a part-time convenience store, restaurant and bar that are open to the public. Silent Valley Club has approximately 50 employees. There are no public fueling stations or other retailers within the Twin Pines/Poppet Flats area.

Disadvantaged Unincorporated Communities (DUCs)

There are no DUCs within the District's boundaries. The HVWD provides water, Riverside County Fire provides fire protection, and the area residents are on septic systems as no municipal sewer service is available to this area. No additional analysis is required for this report.

Present and Planned Capacity of Public Facilities

The High Valleys Water District provides potable water to approximately eight square miles with 227 connections. The District purchases treated water from the City of Banning. Banning's water comes from 21 wells located throughout the City. The City also receives water from three wells located in the Beaumont storage unit operated by the Beaumont Cherry-Valley Water District and the City of Beaumont. The District then distributes it to its customers. Since the water it purchases has already been treated, the District has no water treatment facility.

The District's infrastructure consists of an 8" pipe and three boosters pumps that transfer the water to a 210,000 gallon main storage tank at 2,100 feet elevation. From the main tank, the gravity of water feeds down to the Twin Pines area. In 1978, the District took out a bond to finance a mainline from the main tank down toward the Poppet Flats area which fills another 210,000 gallon tank. This tank is a reservoir for the Poppet Flats area. Later, a 500,000 gallon storage tank was added next to the first tank to provide sufficient reserves for the District.

The District reported the total available supply as 70,956,000 gallons over the next 20 years, through 2038. The District estimates demand will increase from 23,815,658 in 2023 to 28,650,771 gallons in 2038. The District estimates agriculture will require from 409,792 CF in 2023 to 521,551 CF in 2038. Thus, it appears there is sufficient water available over the next 20 years. As a small water supplier, the District is not required to prepare an UWMP.

High Valleys Water District

Emergency Preparedness (Supply or Treatment Interruption Capability)

Extended supply shortages are unlikely due to natural disasters or accidents which damage all water sources. However, HVWD's emergency response plan includes provisions to provide water via its imported water supply connection from the City of Banning and three water tanks on site. This is sufficient water to meet the minimum health and safety requirements of 50 gallons per day per capita for approximately 500 residents for up to 30 days. This assumes reduction in uses and zero non-residential or landscape use.

Under emergency power outages or a catastrophic earthquake conditions, the existing storage is expected to provide a supply at minimum demand levels. HVWD has access to several portable back-up generators under a service contract that can be used in the event of an area-wide power outage. These generators can be located on primary pump stations and reservoir sites to continue water delivery.

Financial Ability to Provide Services

The District has an annual budget of approximately $500,000. Table 46 summarizes revenues and expenses for FY 2014-2015 through FY 2016-2017. In the table, operating revenues include water sales, and non-operating revenues are property tax and standby charges. Non-operating revenues represent about twice the amount of revenue generated by water sales. Even with modest depreciation, the net income ranged from $30,000 to $60,000 for this period.

Table 46 – High Valleys Water District Budget Information

	FY 2014-15	FY 2015-16	FY 2016-17
Revenues			
Operating revenues	$ 178,102	$ 198,480	$ 190,067
Non-operating revenues	374,612	338,327	346,451
Total revenues	$ 552,714	$ 536,807	$ 536,518
Expenses			
Operating expenses	$ 446,155	$ 460,947	$ 453,495
Non-operating expenses	6,461	4,991	3,218
Depreciation	38,472	38,918	38,410
Total expenses	$ 492,257	$ 504,856	$ 495,123
Revenues minus Expenditures	$ 60,457	$ 31,951	$ 41,395

Sources: State Controller's Office District Financial Data, 2018

Ratios of Revenue Sources

The primary sources of revenues are water sales, property tax, and standby charges. Table 47 shows budget values for the most recent three fiscal years. As shown in the table, standby charges represent approximately 44 percent of revenues, water sales 37 percent, and property tax 17 percent.

High Valleys Water District

Table 47 – HVWD Revenue Allocation, FY 16 to FY 18

	FY 2016	FY 2017	FY 2018	Average
Water Sales	$178,900	$184,100	$193,125	$185,375
Property Tax	$82,000	$82,000	$100,000	$88,000
Standby Charges	$230,000	$250,000	$180,000	$220,000

Source: High Valleys Water District, 2018

Ratio of Reserves or Fund Balance to Annual Expenditures

An indicator of the ability to absorb an unexpected loss of revenue in a given fiscal year is exhibited by the amount of unrestricted cash reserve or fund balance the service fund maintains in relation to the annual fund expenditures.

Table 48 shows investment in capital assess as well as restricted and unrestricted reserves. The data for 2015 are extrapolated from ratios in 2016 and 2017, and the net position reported in the State Controller report. In the last three years, expenses averaged approximately $500,000, and unrestricted reserves averaged $300,000. The ratio of reserves to annual expenditures averages approximately 0.6.

Table 48 – HVWD Net Position, 2015-2017

	2015*	2016	2017
Net investment in capital assets	$ 404,794	$ 441,502	$ 426,084
Restricted	24,446	26,791	25,596
Unrestricted	292,835	285,733	343,741
Total net position	$ 722,075	$ 754,026	$ 795,421

*Estimated
Source: State Controller's Office District Financial Data, 2018

The District's Water Fund balance ratio is approximately 60 percent of annual expenditures. This Fund ratio represents a positive ratio position, and the reserve has been increased over time. One can think of the District's net position (the difference between assets and deferred outflows of resources, and liabilities and deferred inflows of resources) as one way to measure the District's financial health, or financial position. Over time, increases or decreases in the District's net position is one indicator of whether its financial health is improving or deteriorating. Based on the most recent data, it appears the District is financially healthy.

Annual Debt Service Expenditures to Total Annual Expenditures

Table 49 shows the long-term debt payments from the District. The total debt in 2017 was less than ten percent of annual expenses. The table shows the District has been making its annual debt payments.

High Valleys Water District

Table 49 – HVWD Debt Service, 2015-2017

Long-Term Debt	2015 Balance	2016 Balance	2017 Balance
Capital lease payable	$ 8,258	$ 14,300	$ 10,142
Loan payable	22,152	15,840	9,092
Bond payable	69,000	47,000	24,000
Total long-term debt	$ 109,410	$ 77,140	$ 43,234

Source: HVWD

Capital Improvement Program/Plan

The District approved expenses of $8,080 in FY 2017-2018 and expects to spend $34,180 in FY 2018-2019. This investment in capital assets includes land, transmission and distribution systems, buildings and structures, equipment, and vehicles, etc. Major capital assets additions during the year included the purchase of the District's water transmission and distribution system.

Rate Structures

The High Valleys Water District charges residential customers a monthly service fee of $56, which includes the first 1,000 cubic feet of water. After 1,000 cubic feet, the District charges $0.0464 for each additional cubic foot over 1,000 cubic feet. In May 2018, the Board approved a commercial rate increase due to the high use of water during the summer months. The approved rate follows the residential rate in that there is a base fee of $56 for the first 1,000 CF. Use of more than 1000 cubic feet will be charged at $0.0764 per cubic foot with a deposit of $500 per ¾" meter and $800 per 1" meter.

Pension Liability and Other Post-Employment Benefits Liability

The District does not have its own pension plan nor is it affiliated with PERS or a county program. They do contribute to an employee's 401K program. In 2017, the District contributed $7,077 toward retirement of its employees. The District has no retired employees that receive a pension and therefore no unfunded liability.

Status and Opportunities for Shared Facilities/Services

The District works with the City of Banning for its sources of water. Since it purchases treated water, it has no need for a water treatment facility which represents a savings for rate payers.

In 2014, the District developed a Local Hazard Mitigation Plan (LHMP). It was developed for use in an emergency situation so that FEMA funds would be readily available to agencies needing assistance to combat emergencies. In the past, if the District were to have a fire or flood, the District would have to exhaust its own finances and resources to deal with the emergency at hand. The administrative staff for the District would then have to request reimbursement from FEMA for the expenditures. The LHMP works as a pre-approval for

emergency funds. This will allow for monies to be made available much sooner, and the District will not be placed in a potential financial hardship.

The District also prepares an annual budget and capital improvement plan.

Government Structure and Accountability

The District is governed by a five-member Board of Directors elected at large to four-year staggered terms. Board members receive a stipend of $150/month. Board members are shown in Table 50 along with their terms. None of the terms expire until 2019.

Table 50 – High Valleys Water District Board Members

Board Member		Term Expires
Ernest Wright	President	12/2021
Robert Hughes	Vice-President	12/2019
Robert Hughes	Director	12/2021
Clarence Haaland	Director	12/2019
Mona Van Sickle	Director	12/2019

The Board meets the third Wednesday of the month at 3:00 p.m. at the High Valleys Water District Office, located at 47781 Twin Pines Road in Banning. All meetings are open to the public, and notice is published according to the Brown Act, on the Poppet Flats and Twin Pines Community Boards, as well as the District office.

The District has a website that makes for efficient communication with residents. The website contains general information about the District, water rates, and board agendas and meeting minutes. The District employs a board secretary, general manager, office administrator and field technicians.

The District purchases all of its potable water from the City of Banning and is separated from the City boundary by several miles. There have been no discussions of an annexation or change of organization to bring the community into a different relationship with the City. No change from the current contractual relationship is proposed as a result of this MSR study.

LAFCO Policies Affecting Service Delivery

The District has no interest in expanding its sphere or changing its boundaries. As a result, there are no LAFCO policies that would affect service delivery.

Idyllwild County Water District

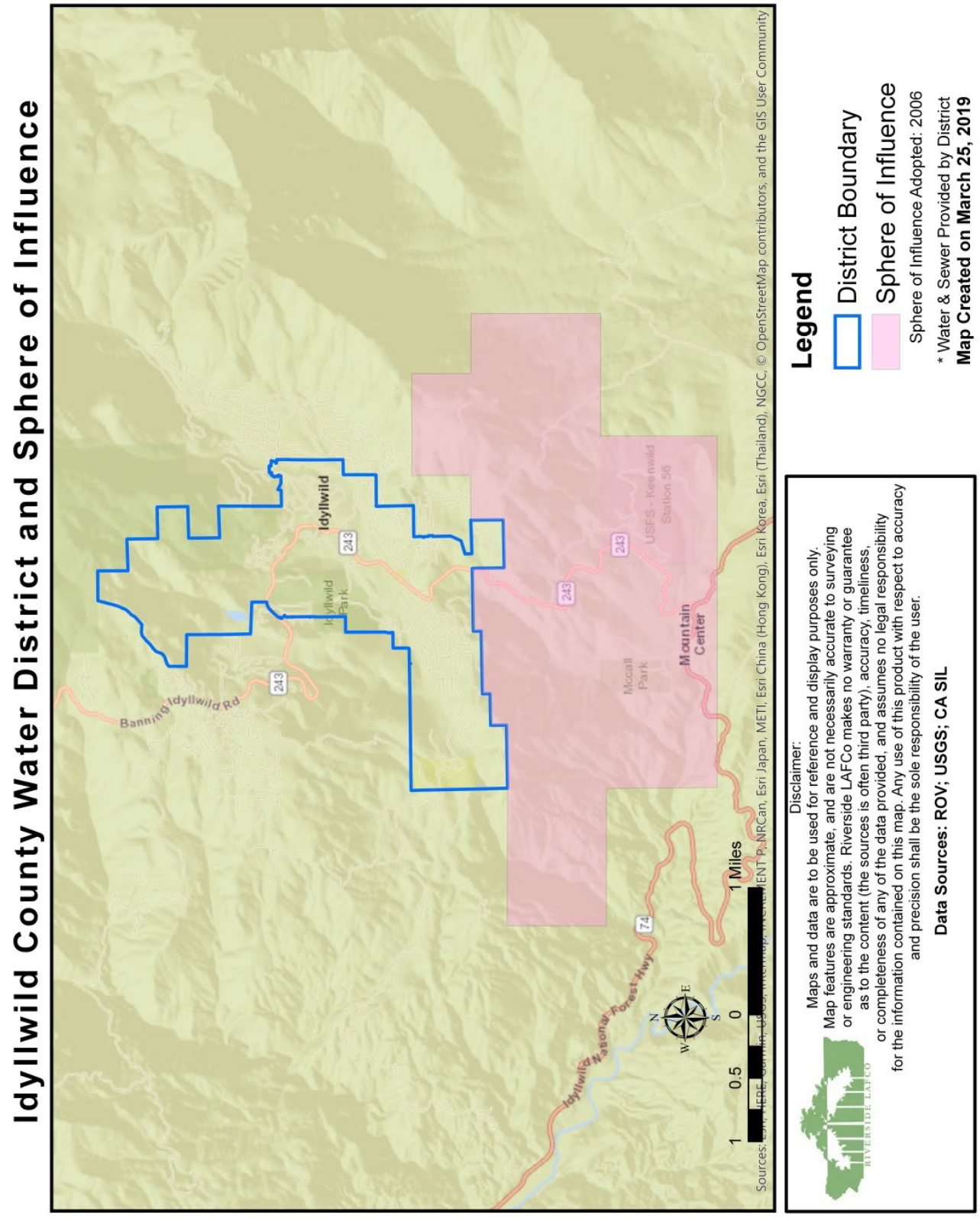
Overview/History

The Idyllwild County Water District (ICWD) consists of approximately 2,500 acres located 14 miles east of Hemet and 11 miles southwest of Palm Springs on the western facing slope of the San Jacinto Mountains. The Idyllwild County Water District was formed on March 21, 1955 for the purpose of providing a domestic water supply to the community of Idyllwild under Section 30000 of the California Water Code. The District provides water to some 1,650 customers.

Improvement District No. 1 was established by action of the Board on March 10, 1966 to provide wastewater services. There are 587 sewer connections in Improvement District No. 1. Exhibit 8 shows the Idyllwild County Water District Boundary Map.

Idyllwild County Water District

Exhibit 8 – Idyllwild County Water District



Idyllwild County Water District Agency Profile

General Information			
Agency Type	County Water District Law Water Code 30000 et seq		
Date Formed	March 21, 1955 water; March 10, 1966 sewer		
Services	Water and sewer		
Service Area			
Location	Idyllwild is located 14 miles east of Hemet and 11 miles southwest of Palm Springs o the wester facing slope of the San Jacinto Mountains		
Square Miles/Acres	2,500 acres		
Total Water/Sewer Connections	1,650 water 587 sewer		
Population Served	2,600 full time 7,000+ summer		
Water Infrastructure/Capacity			
Facilities	7 pressure zones, 28 wells, 5 water treatment systems, 11 storage tanks, 25 miles water lines, 42KW solar generating system, Foster Lake Dam 18 million gallon Foster Lake Reservoir- up to 40 AF diverted from Lilly Creek and 150 AF from Strawberry Creek		
Storage Capacity	15 AF treated water 56 AF raw water		
Primary Source of Supply	Surface stream diversions and local groundwater		
Water Rates (single-family home)	Tier Base Tier 1 Tier 2 Tier 3	Consumption (CF) – 0-450 451-900 901+	Rate $28.13 $0.0192 $0.1307 per CF $0.1598 per CF
Sewer Infrastructure/Capacity			
Facilities	12 miles of sewer lines, 1 wastewater treatment facility		
Current and Projected Treatment Capacity	250,000 gal/day		
Primary Disposal Method	Percolation ponds		
Sewer Rates (single-family home)	$40.00 per EDU		
Budget Information - FY 2017-2018 (Water & Sewer Funds)			
	Revenues	Expenditures	Net Surplus/(Deficit)
Water Fund	$1,590,470	$1,203,061	$387,409
Sewer Fund	$756.768	$563,480	$193,288
Combined Funds	$2,347,238	$1,760,541	$586,697
Capital Expenditures	FY 2017-2018 $747,000 water $170,000 sewer $917,000 total	Long-Term Planned Expenditures $ 4.65 million through 2028	
Water Fund Balance	$1,936,846		
Sewer Fund Balance	$1,486,352		
Agency Net Position	$10,509,769		
Governance			
Governing Body	5 member board		
Agency Contact	General Manager, 951-659-2143, or Hosny Shouman, hosny@idyllwildwater.com		

Sources: Idyllwild County Water District

Idyllwild County Water District

Growth and Population Projections

The District estimates a year round population of 2,600 and 7,000+ in summer. However, the District currently has 1,650 water customers and 400 vacant lots. Reasonable expectations are that approximately 250 lots could be developed. Using the average persons per household estimate for Riverside County of 2.83 results in a population estimate of 4,674. The District anticipates customer growth to be 0.5 percent annually or approximately eight new connections per year. In total, the District anticipates a 708 population increase in the next 30 years with the development of those 250 parcels.

Disadvantaged Unincorporated Communities (DUCs)

There are no DUCs within the District's boundaries, and no DUCs have been identified within or adjacent to the ICWD's SOI. No additional analysis is required in this report.

Present and Planned Capacity of Public Facilities

Water

The District relies on groundwater as its source of water supply. In FY 2016-2017, the District pumped and sold 10,139,022 cubic feet of water (75,845,151 gallons). The District currently has 1,650 water customers and 400 vacant lots. Reasonable expectations are that 250 of the 400 vacant lots could be developed. Based on an average of eight per year, the District would have 250 additional customers in 30 years.

In addition, the District has pre-1914 water rights to Strawberry Creek and a license diversion on Lilly Creek. The water rights entitle the District to divert up to 200+ AF. Since both surface water sources are seasonal, the water is not a reliable annual source. The District water demand is less than 300 AFY or 0.27 MGD.

Groundwater Pumping

The main sources of water are the 24 groundwater wells operated by the District. At present, there are 18 that can be operated, but not all 18 are in production at the same time. The number of wells that are in production varies from month to month.

Five of the wells are at Foster Lake. They produce between 7 GPM and 96 GPM for a total of 191 GPM. The Foster Lake wells are of lower quality compared to the other District wells in that they contain elevated levels of iron and manganese which required the District to build and operate an iron and manganese removal plant, the Foster Lake Treatment Plant (FLTP). The plant, which has a capacity of 200 GPM, treats water from a blend of five active wells

In the second quarter of 2018, values for trihalomethanes (THMs) and haloacetic acids (HAAs), both of which are regulated disinfection byproducts (DBPs), exceeded their respective maximum allowable limits of 80 µg/L and 60 µg/L, respectively. The primary cause was an elevated concentration of naturally-occurring total organic carbon (TOC) in the groundwater

Idyllwild County Water District

produced by the Foster Lake Wells. In accordance with the requirements of the State Water Resources Control Board's Division of Drinking Water (SWRCBDDW), the District issued a public notice to its customers, with a commitment to identify and implement the treatment system/approach necessary to bring the system into compliance.

It was determined that the Foster Lake wells were the source of the problem. There were two proposed solutions that could be applied at the Foster Lake Treatment Plant. One was to convert from chlorine to chloramine disinfectant and the other to use a granular activated carbon filter. The installation of a granular activated carbon filtration system is currently in process.

Storage

The District maintains 13 storage tanks which can hold up to 4.025 million gallons. The capacities of the tanks are shown in Table 51. The four million gallons represent about two weeks of consumption.

Table 51 – ICWD Storage Tanks and Capacity

No	Description	Maximum Height (feet)	Total Gallons
1	Southridge Tank (1)	24	210,000
2	Southridge Tank (2)	24	420,000
3	Golden Rod Tank	24	200,000
4	Wildwood Tank	16	110,000
5	Rockdale Tank	30	610,000
6	Foster Lake Tank (1)	24	210,000
7	Foster Lake Tank (2)	24	210,000
8	Foster Lake Tank (3)	24	420,000
9	Foster Lake Tank (4)	24	420,000
10	Foster Lake Tank (5)	24	420,000
11	Foster Lake Tank (6)	24	420,000
12	Toll Gate Tank	30	300,000
13	Fern Valley (2)	12	75,000
		Total	4,025,000

Source: GM Hoagland 2018

Water Quality Violations

The District received a notice of violation of the disinfection by-products standards of its distribution system. The areas out of compliance were localized to the northwestern portions of the system. In response, the Board voted to spend $200,000 to install a granular activated carbon filter system at the Foster Lake treatment Plant for disinfection by-product precursor removal. The Board acted at its the August 15, 2018 meeting; however, the local newspaper disputably identified a potential Brown Act violation. The action of the Board of Directors was ratified at its September 19, 2018 meeting in an abundance of caution.

Idyllwild County Water District

Wastewater (Reclamation)

IWD has 587 sewer connections and 130 vacant lots within Improvement District No. 1. The service population is dependent on seasonality. Approximately 40 percent of sewer customers are second homes with minimal discharge. The collection system is approximately 50-years old and in good shape based on a complete cleaning and video logging of the system in 2017. The treatment plant needs replacement but continues to meet the discharge requirements established by the RWQCB. The infiltration ponds/spray fields are adequate and functional (located by permit on USFS property). The effluent and sludge lines from the plant to the ponds and sludge drying basins were replaced in 2015

In 2017, the District contracted with West Yost Associates to evaluate the wastewater treatment plant (WWTP). The WWTP was built in 1967, and the facility consists of headworks, which include a grinder and diversion for peak flows to the equalization tank; an equalization tank with surface aerators and pumped return; a single treatment unit that combines a reactor with anoxic and aerobic zones; a clarifier and an aerobic digester; pumps for return activated sludge and waste activated sludge; centrifugal blowers for aeration of the aerobic reactor and aerobic digester; and, an emergency backup generator.

Non-disinfected treated secondary effluent from the WWTP is discharged to ponds, and through a spray irrigation system located within the National Forrest. Biosolids are discharged to sludge drying ponds. The dried sludge is periodically hauled to the composting facility operated by a third party.

The WWTP was not designed to have redundant treatment processes so cannot be shut down for major maintenance. In addition, some of the facilities that are below water level in the treatment basin cannot be accessed because the District cannot completely drain the basin. However, based on its age, the WWTP is considered beyond the end of its design useful life. The consultant recommends replacement of the main treatment unit at the WWTP.

Between January 2014 and February 2017, the average flow rate into the WWTP was 88,300 gpd while the peak day flow rate is estimated at 239,000 gpd. Peak hour wet weather flowrate is estimated at 325,000 gpd. The new WWTP would need to be designed to handle those flowrates. The estimated cost of the new facility is $3.9 million. The project would be eligible for grant funding from the Small Community Grant Fund. In order to maintain operations, the District requested the new facility be built next to the existing facility and then connected when completed.

The Board directed staff to continue to research options for improving the WWTP and funding options for a new WWTP.

With adoption of the FY 2017-2018 budget, the Board agreed to proceed with steps to cancel a proposed recycled water project and return allocated funds to the State California Water Board.

Idyllwild County Water District

Emergency Preparedness (Supply or Treatment Interruption Capability)

Extended supply shortages are unlikely due to natural disasters or accidents which damage all water sources. However, ICWD's emergency response plan (ERP) includes provisions to provide water via its groundwater supply wells and reservoirs. ICWD has over three months of demand volume of storage and draws water from several wells. This is sufficient water to meet the minimum health and safety requirements of 50 gallons per day per capita for approximately average 4,000 residents. This assumes reduction in uses and non-residential or landscape use.

Under emergency power outages or a catastrophic earthquake conditions, the existing storage is expected to provide a supply at minimum demand levels. ICWD also has emergency plans for well sites and pipelines in case of earthquake including several portable back-up generators that can be used in the event of an area-wide power outage. These generators can be located on primary well sites to continue water delivery. An emergency generator is also available for operations of the wastewater treatment plant.

Financial Ability to Provide Services

The total district budget for FY 18 was $1.76 million with most, $1.2 million, accredited to the water fund. Table 52 shows three years of revenues and expenses for the period FY 16 to FY 18. There appears to be no discernable trend.

Table 52 – ICWD Budget Information Revenues and Expenses

	FY 2015-16	FY 2016-17	FY 2017-18 Budget
District			
Total district revenues	$ 2.644,879	$ 2,445,507	$ 2,347,238
Total district expenditures	-1,829,169	-2.651,600	-1,760,541
Revenues minus expenditures	$ 815,710	$ -206,093	$ 586,697
Net Position	$ 9,583,868	$ 9,377,775	$ 9,964,472
Water Fund			
Water fund revenues	$ 1,561,426	$ 1,682,232	$ 1,590,470
Water fund expenditures	-1,310,883	-1,335,928	-1,203,061
Revenues minus expenditures	$ 250,540	$ 346,304	$ 387,409
Ending Net Position	$ 6,650,037	$ 6,975,721	$ 763,130
Sewer Fund			
Sewer fund revenues	$ 751,011	$ 763,275	$ 756,768
Sewer fund expenditures	-517,424	-670,004	-563,480
Revenues minus expenditures	$ 233,587	$ 93,271	$ 193,288
Ending Net Position	$ 2,610,955	$ 2,402,054	$ 2,595,342

Sources: Idyllwild County Water District

Idyllwild County Water District

Ratios of Revenue Sources

Table 53 shows the allocation of revenues and expenses for FY 2014-2015 through FY 2016-2017 for both water and wastewater services. As shown, water sales make up half of all revenues, wastewater charges are half of water services and property taxes are less than wastewater services. As to expenditures, administration accounts for the largest expenses followed by water operations and wastewater operations. In FY 2016-2017, there was a dramatic increase in other non-operating expenses due to the payback of grant funds of $302,172 and the disposal of the recycled water construction in progress of $286,706. From the recent data, the District determined it needed a rate increase in both water and sewer to keep up with current costs, provide for a capital improvement program and to be sure there are sufficient revenues for reserves.

Table 53 – IWD Revenues and Expenses, FY 15-FY 17

	FY 2015	FY 2016	FY 2017
Revenues			
Water Sales	$ 1,294,428	$ 1,224,876	$ 1,244,743
Wastewater Services	562,685	624,203	636,578
Service Fees and Other	20,184	18,108	16,603
Investment Income	11,534	12,974	19,688
Property Taxes	415,645	391,614	415,658
Standby Charge	25,000	27,725	26,902
Capacity Fee	–	12,130	–
Other Income	1,856	333,249	85,335
Total Revenues	$ 2,331,332	$ 2,644,879	$ 2,445,507
Expenses			
Water Operations	$ 592,321	$ 593,932	$ 545,938
Wastewater Operations	266,084	237,112	274,443
Administration	713,941	735,936	794,483
Other Operating	139,591	261,327	411,068
Other Non-Operating	1,018	862	323,496
Special Item	–	–	302,172
Total Expenses	$ 1,712,955	$ 1,829,169	$ 2,651,600

Sources: Idyllwild County Water District

Ratio of Reserves or Fund Balance to Annual Expenditures

An indicator of the ability to absorb an unexpected loss of revenue in a given fiscal year is exhibited by the amount of unrestricted cash reserve or fund balance the service fund maintains in relation to the annual fund expenditures. In FY 2016-2017, the unrestricted fund balance for the water fund was $1,936,846, and $1,486,552 for the sewer fund or a total of $3,423,398. These numbers, when compared to expenses of $1,335,928 for water, $670,004 for sewer and $2,651,600 for the District, indicate a healthy fund balance.

Idyllwild County Water District

Annual Debt Service Expenditures to Total Annual Expenditures

The District has no long-term debt.

Capital Improvement Program/Plan - Water

The District has developed and implemented a comprehensive CIP for water and sewer facility infrastructure improvements. For water operations, District staff has identified $732,000 in capital expenditures in 2018 and $400,000 annually for 2019 through 2028. Table 54 shows anticipated capital improvements in 2018 and projected capital improvement funds through 2028.

Table 54 – ICWD Water Capital Improvement Program, 2017-2028

Project Description	2017	2019-28
Source of Supply (G/L #1321)		
Well Rehabilitation - #8, 9 and 11 including road improvements	$75,000	–
Well Drilling (New well carry over from last year)	$100,000	–
Storage Tanks: (G/L #1324) Storage Tank Repairs	$50,000	–
Transmission and Distributing: (G/L #1324) Water Line Piping Replacement	$465,000	–
Water Treatment Plant (G/L #1325) pH Monitoring Sensors for Well and Aeration Plant	$7,000	–
General Plant Structures, Power and Other Equipment		
Various Fire Hydrant Improvements	$15,000	-
Skid Steer Tractor with Attachments (50% Water)	$20,000	-
Future Year Capital Projects	-	$400,000 annually
Total: CIP Program Costs	$732,000	$4,000,000

Source: NBS 2018

Capital Improvement Program/Plan – Sewer

Table 55 shows the CIP scheduled for 2018. The District anticipates spending $170,000 on three wastewater projects shown in the Table in 2018. The District anticipates allocating $635,000 for CIP's between 2019 and 2027.

Table 55 – Sewer CIP Projects, 2017

Project Description	2017
Wastewater Treatment Plant (G/L #1316)	
Manual Bar Screen to Headworks	$15,000
Sub-Surface Lines (G/L #1315) Clean and Video collection System	$135,000
General Plant - Structures, Power and Other Equipment Skid Steer Tractor with attachments (50% sewer)	$20,000
Total CIP Program Costs	$170,000

Source: NBS 2018

Idyllwild County Water District

Rate Structures

Current water rates are shown in Table 56. Water rate revenue adjustments of five percent from FY 2018/19 through 2022/23 will be needed in order to fully fund all operating expenses, planned capital projects, and build reserves to the recommended targets by FY 2022/23.

Table 56 – ICWD Single Family Water Rates

Tier	Consumption (CF)	Rate
Base		$ 8.13
Tier 1	0-450	$0.0192 per CF
Tier 2	451 -900	$0.1307 per CF
Tier 3	901+	$0.1000 per CF

Source: NBS 2018

The sewer rate structure is adequate for operating expenses and to maintain adequate reserves, but a study recommended a small increase over time to fund projects. The current sewer rate is a flat rate of $38.25 per EDU per month. Based on the recommendation from the rate study, the Board approved an increase of five percent in FY 2018-2019 to $40.00 per EDU, and an increase of 2.5 percent in the succeeding four years. The increase will provide sustainable revenue for the District over the next five years.

Pension Liability and Other Post-Employment Benefits Liability

The District does not participate in CALPERS but has a generous defined contribution pension plan in addition to Social Security. As a result, the District has no pension liability. In 2017, the District contributed $89,173, $66,881 for water and $22,292 for sewer toward the OPEB services (post-retirement medical coverage). As of June 30, 2017, the District reported $692,158 for water and $230,719 for sewer for a total of $922,877. The 2016-2017 audit contains a detailed description of the calculation of benefit and unfunded liability.

Status and Opportunities for Shared Facilities/Services

The District works with state agencies to provide water and wastewater services. The District also works with neighboring water districts of Fern Valley and Pine Cove on issues of mutual concern. Some of the District's water wells are at Foster Lake. Other neighboring agencies share in the Foster Lake aquifer.

The District does studies to plan for capital improvements and its annual budget. Examples are the water and sewer rate study and the wastewater treatment plant evaluation. The District does financial planning through its annual budget and its capital improvement plans.

Idyllwild County Water District

Government Structure and Accountability

The District is governed by a five-member board elected to four-year terms. Board members are compensated at $50 per meeting up to ten meetings per month. Table 57 shows the current board of directors.

Board meetings are held at the District headquarters on the third Wednesday of the month at 6:00 p.m. Meetings are noticed according to the Brown Act. Board meetings are also recorded and available in MP3 format.

Table 57 – ICWD Board of Directors Members

Board Member	Term Expires
Charles Schelly President	2020
Peter Szabadi Vice President	2020
Les Gin	2020
David Hunt	2020
Steve Kunkle	2020

Source: Idyllwild County Water District

The District maintains a website. The District's website is user-friendly and has easy access to Board of Directors agendas, minutes, public notices, budgets, audits and other key District documents.

The District is staffed by a full-time General Manager and ten professional staff. The operation of the WWTP is provided by contract.

The District has considered consolidation opportunities with the neighboring water districts of Fern Valley and Pine Cove. A consolidation committee was formed by the Board of Directors and has been meeting to take public comment on a possible consolidation. However, the neighboring districts have elected not to participate in the process. The IWD is still pursuing cooperation with Fern Valley and Pine Cove. Instead of a consolidation committee, the IWD formed a Committee to Improve Cooperation Among the Water Districts of the Hill. To date, Fern Valley acknowledged receiving the invitation, but there has been no response from Pine Cove.

LAFCO Policies Affecting Service Delivery

Should the District decide to propose consolidation with Fern Valley and/or Pine Cove Water Districts, LAFCO' s sphere and change of organization policies would need to be considered in determining service delivery.

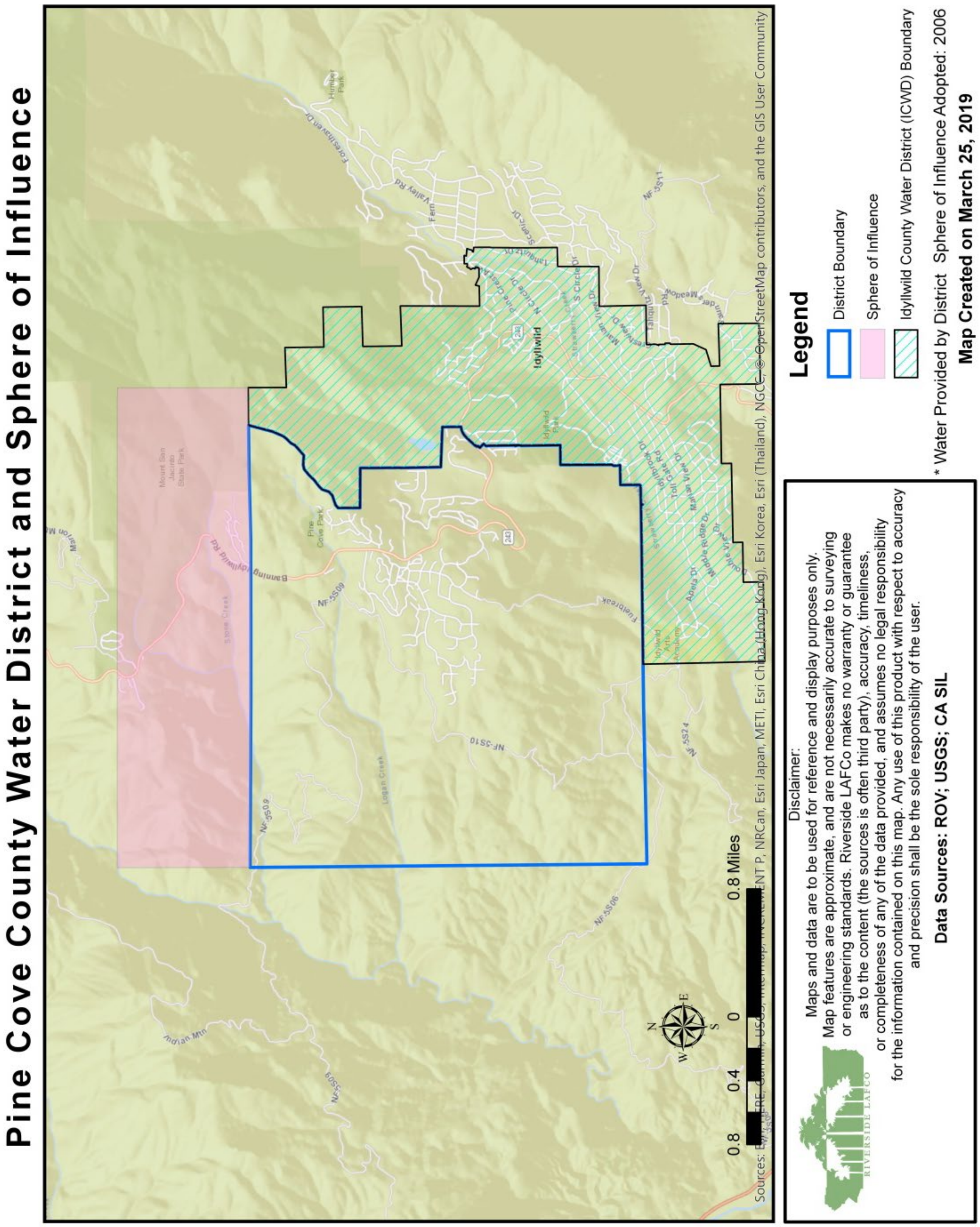
Pine Cove County Water District

Overview/History

The Pine Cove County Water District (PCWD) was formed on August 2, 1956 under Division 1 of the Water Code as a County Water District. The District provides retail water to 1,108 connections of primarily single and multi-family customers in the Pine Cove area. The Pine Cove area is located in the San Jacinto Mountains contiguous to the Idyllwild community. Exhibit 9 shows the Pine Cove Water District boundary map.

Pine Cove County Water District

Exhibit 9 – Pine Cove Water District



Pine Cove County Water District

Pine Cove Water District Agency Profile

General Information			
Agency Type	County Water District Act WC 30000 et seq		
Date Formed	August 2, 1956		
Services	Retail water		
Service Area			
Location	The Pine Cove area is located in the San Jacinto Mountains adjacent to the Idyllwild community, located 30 miles east of Hemet and 56 miles southwest of Palm Springs.		
Square Miles/Acres	6.4 square miles		
Total Water Connections	1,106 water customers		
Population Served	Approximately 1,500 to 3,000		
Water Infrastructure/Capacity			
Facilities	15 wells produce 150-200 GPM or 32-43 mg annually; 2 treatment facilities		
Storage Capacity	1- 67,000 gal, 1- 105,000 gal, 3- 420,000 gal; Total 1,432,000 gallons		
Primary Source of Supply	Groundwater		
Water Rates (single-family home)	Tier Base Tier 1 Tier 2 Tier 3	Consumption (CF) – 0-7,500 7,500-15,000 over 15,000	Rate $65 $3 per 1,000 gal $5 per 1,000 gal $7 per 1,000 gal
Budget Information - FY 2017-2018 (Water Fund)			
	Revenues	Expenditures	Net Surplus/(Deficit)
Water Fund	$917,444	$784,291	$133,153
Capital Expenditures	FY 2017-2018 $158,000	Long-Term Planned Expenditures $800,000-$1.6 million over a 3-year period	
Water Fund Balance	$300,000		
Agency Net Position	$2,921,153		
Governance			
Governing Body	5 member board		
Agency Contact	Jerry Holldber, jerry@pcwd.org 951-659-2675		

Sources: Source: Pine Cove Water District, Jerry Holldber 2018

Pine Cove County Water District

Growth and Population Projections

The population of the PCWD can be estimated by knowing the number of connections and the persons per household. The estimated population of the District is 3,585. Almost all connections are residential connections (with a few business connections). In the last three fiscal years, the number of connections has increased by 5 or 0.16 percent per year. In other words, there is essentially little or no growth in the District, and anticipated growth in a five-year period would be less than one percent. Based on the recent data, the population in five years is estimated to be approximately 3,600.

Disadvantaged Unincorporated Communities (DUCs)

There are no DUCs within the District's boundaries, and no DUCs have been identified within or adjacent to PCCWD's SOI. The District has contracted with CRWA to study the median household income of the Pine Cove District. Preliminary estimates show the District would be considered a low-income area.

Present and Planned Capacity of Public Facilities

The District's water source is groundwater. PCWD receives no State or imported water and has no surface water rights. The District serves its 1,103 customers through 18 wells located throughout the service area. Groundwater is treated at one of its two treatment facilities before being distributed to customers.

Flows and demand range from 31 to 43 million gallons a year. Between 2015 and 2017 production ranged from 31 million gallons to 36 million gallons. In 2017, the District produced 36.6 million gallons of which demand amounted to 30.7 million gallons. Losses were 16 percent, but six percent of the losses were attributed to stolen or unmetered water loss.

The District has the capacity to pump 150 to 200 GPM (79 to 105 million gallons a year). Therefore, the District has sufficient capacity to meet demand.

The PCWD has two treatment facilities for groundwater. Treatment is primarily by aeration. The Rocky Point Treatment Plant was constructed in 1997 to reduce carbon dioxide to raise the pH to reduce the acidity of the water. The District completed a second treatment plant in the Dutch Flats area to treat water for the same purpose and for iron and manganese removal. Water from the Dutch Flats Treatment Plant is conveyed to the Highway Tanks.

District water storage totals 3.1 million gallons with 2.9 million gallons at the Rocky Point Site and 200,000 gallons at the Highway Site. Storage should equal to use of one maximum day (200,000 gallons), plus fire flow (540,000 gallons), plus emergency storage (420,000 gallons), totaling 1.16 million gallons on a peak day. With storage for 2.9 million gallons already constructed, the District has more than adequate amount of supply and storage.

Pine Cove County Water District

Emergency Preparedness (Supply or Treatment Interruption Capability)

Extended supply shortages are unlikely due to natural disasters or accidents which damage all water sources. However, PCWD's emergency response plan (ERP) includes provisions to provide water via its groundwater supply wells and reservoirs. PCWD has approximately two weeks of average demand volume of storage. This is sufficient water to meet the minimum health and safety requirements of 50 gallons per day per capita for approximately 2,000 residents. This assumes reduction in uses and no non-residential or landscape use.

Under emergency power outages or a catastrophic earthquake conditions, the existing storage is expected to provide a supply at minimum demand levels. PCWD also has emergency plans for well sites and pipelines in case of earthquake including several portable back-up generators that can be used in the event of an area-wide power outage. These generators can be located on primary well sites to continue water delivery.

Financial Ability to Provide Services

The PCWD FY 2017-2018 budget is $950,000. Table 58 shows revenues and expenses for the last three fiscal years. The District has experienced a net positive income in all three years. However, operating revenues, primarily water sales, alone are insufficient to meet expenses.

Table 58 – Pine Cove Water District Revenues and Expenses, 2015-2017

	FY 2015	FY 2016	FY 2017
Revenues			
Operating Revenues			
Water Sales	$ 444,182	$ 467,117	$ 493,019
Meters and Connections	7,544	–	45,514
Other	11,701	22,056	35,200
Total Operating Revenues	$ 463,427	$ 489,173	$ 573,733
Non-Operating Revenues			
Interest Income	280	375	954
Taxes and Assessments	152,517	155,076	159,551
Franchise and Lease Payments	182,109	167,145	198,117
Total Revenues	$ 798,333	$ 811,769	$ 932,355
Expenses			
Operating Expenses			
Administration/All Labor	$ 464,881	$ 538,124	$ 500,996
Maintenance, General Plant - Auto	11,817	77,925	6,485
Maintenance, General Plant - Other	41,846	–	84,322
Professional Services	56,831	36,735	47,570
Other Operating			
Depreciation	140,401	140,644	114,918
Total Operating Expenses	$ 715,776	$ 793,428	$ 784,291
Non-Operating Expenses			
Interest on Long-Term Debt	$ 12,789	$ 12,238	$ 11,662
Miscellaneous Expense	640	1,998	3,249
Total Non-Operating Expenses	$ 13,429	$ 14,236	$ 14,911
Total Expenses	$ 729,205	$ 807,664	$ 799,202
Change in Net Position	$ 69,128	$ 4,105	$ 133,153

Sources: Pine Cove Water District 2015, 2016, 2017

Pine Cove County Water District

Nearly half of all expenses are for administration and labor to operate all functions, including installation of new facilities. The table also indicates that water sales increased steadily from FY 2014-2015. The net position at the end of FY 2016-2017 was $2,744,719, up $133,153 from the previous year.

Ratios of Revenue Sources

Table 58 also shows both operating revenues and non-operating revenues. Over half the revenues are derived from water sales. Other major sources are property tax and franchise fees. Property taxes are less than franchise fees but account for roughly 50 percent of the remaining revenues.

Ratio of Reserves or Fund Balance to Annual Expenditures

An indicator of the ability to absorb an unexpected loss of revenue in a given fiscal year is exhibited by the amount of unrestricted cash reserve or fund balance the service fund maintains in relation to the annual fund expenditures. The PCWD maintains three reserve accounts: Loan R, Contingencies, and General Reserve. In FY 2017-2018, the Loan Reserve was funded at $80,000, Contingencies at $20,000 and the General Reserve at $180,000, for a total of $280,000. Over the next five years, the District anticipates a Source Development Reserve, Storage Tank Reserve and Water Meter Reserve for a total in FY 2018-2019 of $375,044. In the following years, the reserves are expected to increase to $696,000, including addition of a main line reserve of $100,000. The FY 2017-2018 reserve represents 35 percent of current expenses while the reserve in year five of the program would represent about one year of total expenses.

Annual Debt Service Expenditures to Total Annual Expenditures

On October 5, 2012, PCWD entered into a loan agreement with the U.S. Department of Agriculture for $292,000 with a fixed interest rate of 2.75 percent. The purpose of the loan was to provide for the purchase of vehicles and two miles of pipeline materials. Payments on the principal and interest amounted to $12,240 annually. The loan is due to be paid off in FY 2052-2053.

On December 1, 2013, PCWD entered into an installment agreement with the Municipal Finance Corporation in the amount of $100,000 with a fixed interest rate of 5.25 percent. The purpose of the agreement was to finance the acquisition of land currently being used by the District to provide water services to its customers. Payments of principal and interest amounted to $12,918. The Note is due to be paid off in 2024.

At the start of FY 2016-2017, PCWD was obligated to pay on three long term obligations including those described above. During FY 2016-2017, the District was able to pay off one obligation and the remaining two outstanding balances amount to $25,158 which is approximately 3 percent of operating expenses - a low debt payment to revenue ratio.

Pine Cove County Water District

Capital Improvement Program/Plan

The PCWD has an aggressive main line replacement program. In the period from 2014 to 2017, District personnel have replaced over two miles of main lines. The District's total assets at the end of FY 2016-2017 were $3,626,899.

Table 59 shows anticipated projects for FY 2017-2018. Planned improvements focus on maintenance programs, so there is no deferred maintenance. In the next three years, the PCWD plans to replace 8,000 feet of old lines on Nestwa Trail, Laurel Trail, Pine Ridge Road, Meadow and Oak Knoll. It is estimated the cost of contracting out to replace water lines will be $200 per lineal foot, or as low as $100 per lineal foot if done in-house. The cost of replacing 8,000 feet could range from $800,000 to $1,600,000.

Table 59 – PCWD Scheduled Capital Improvements, FY 2018

Improvements	Costs
Well Upgrades and Replacement	$ 10,000
Main Line Replacement/Mapping	86,000
Rocky Pt. Tanks & Repeater Sites	10,000
Structures	30,000
Meter Replacement Program	2,000
Conservation & Rebates	5,000
Water Shed/Backflow Program	5,000
Storage Tank Upgrades	10,000
Total	$ 158,000

Source: PCWD

Rate Structures

Table 60 shows the current residential rate structure. The rate is established as a base rate plus a tiered rate based on usage. The rate structure is typical of many water agencies in the area and provides 53 percent of revenues for the District.

Table 60 – Pine Cove Water District Residential Rate Structure

Tier	Gallons Used	Rate
Base		$65*
Tier 1	0-7,500	$3 per 1000 Gal
Tier 2	7,500—15,000	$5 per 1000 Gal
Tier 3	Over 15,000	$7 per 1000 Gal

*2 month advance billing
Source: PCWD

Pension Liability and Other Post-Employment Benefits Liability

California law requires an annual calculation of the Net Pension Liability and contribution for each participating agency. This calculation is utilized by the agency to budget for and make contributions to CALPERS toward its unfunded liability balance. In 2017, the District

Pine Cove County Water District

contributed $7,656 toward the pension services. As of June 30, 2017, the District had an unfunded liability of $10,646. The FY 2016-2017 audit contains a detailed description of the calculation of benefit and unfunded liability.

Status and Opportunities for Shared Facilities/Services

The District works cooperatively with neighboring water districts in the Idyllwild and Fern Valley area and has developed a close working relationship with CAL Fire. The District exhibits management efficiencies through its 10-year capital improvement plan and annual budgets, utilizing all in-house labor.

Government Structure and Accountability

PCWD is governed by a five member board of directors elected at large to four year staggered terms. The Board meets at 10:00 a.m. on the second Wednesday of the month at District headquarters. The current Board is listed in Table 61. Meetings are noticed and conducted according to the Brown Act.

Table 61 – Pine Cove County Water District Board of Directors

Board Member	Term Expires
Robert Hewitt-President	2021
Lou Padula	2021
Steven KIng	2021
Diane Luther	2019
Vicki Jakubac	2019

Source: PCWD 2018

The District maintains a website that provides residents access to the meeting agendas, and operations reports. The website also shows the rate structure and allows customers to pay their water bill. The PCWD has been recognized for its efforts of transparency.

The nearby Idyllwild Water District has shown interest to consolidate with other districts. After considering its options, the PCWD, as of June 20, 2018, has indicated it has no further interest in discussing consolidation but will continue to work with other agencies in time of need. Also, there is an MOU for cooperation with other agencies during times of emergency.

LAFCO Policies Affecting Service Delivery

The District has no plans to expand services into new areas, out of area services, or to enter into a reorganization of the District. Therefore, there are no LAFCO policies that would affect service delivery.

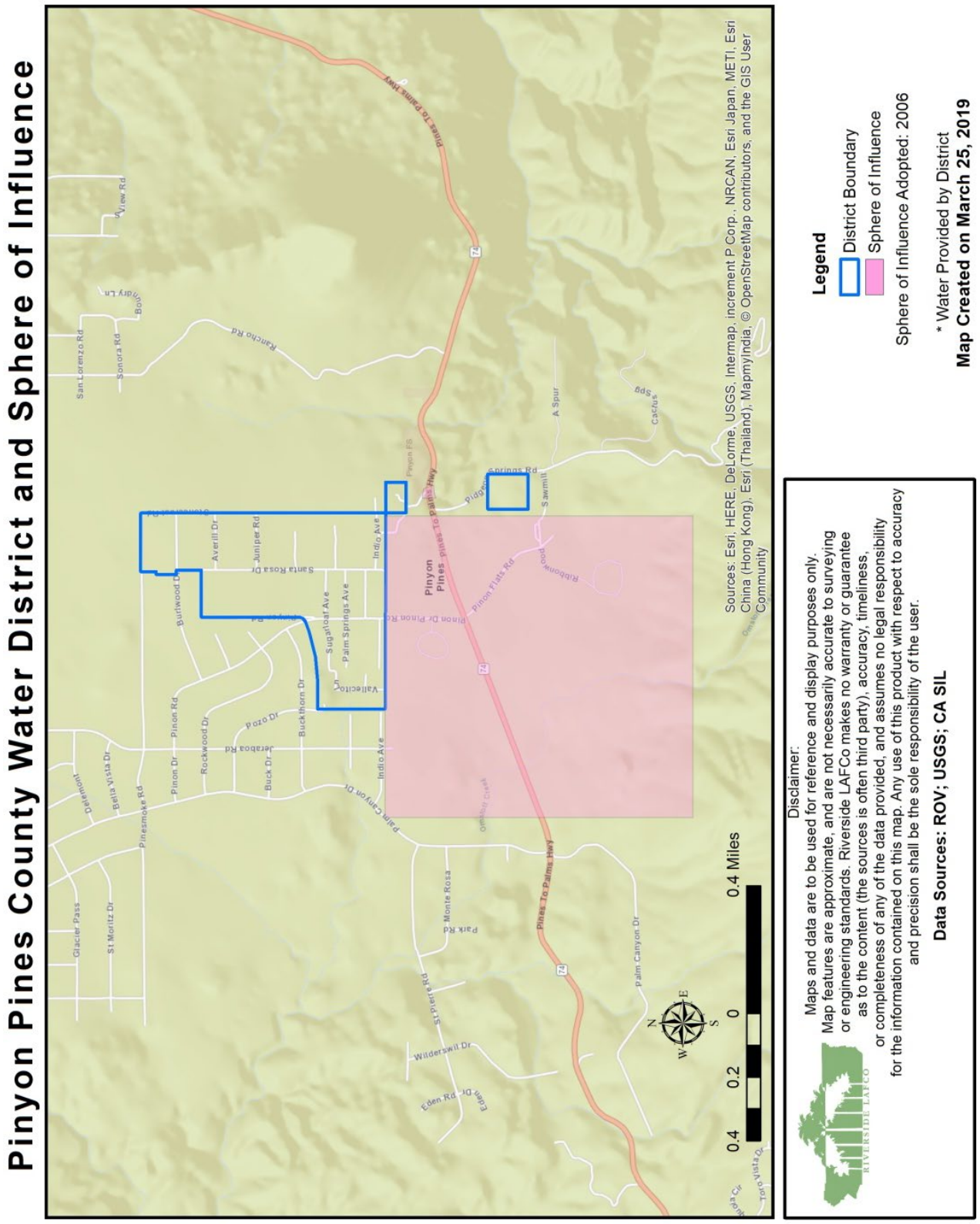
Pinyon Pines County Water District

Overview/History

The Pinyon Pines County Water District (PPCWD) was formed on April 22, 1969 to provide domestic water to the Pinyon Pines area near Mountain Center in Southern California. PPCWD serves potable to water to approximately 80 connections covering approximately 320 acres. It also provides water to two U.S. Forest Service campgrounds (Pinyon Flats and Ribbonwood Equestrian Campgrounds) and to Riverside County Fire Department Station #30. The water source is groundwater. Exhibit 10 shows the Pinyon Pines boundary map.

Pinyon Pines County Water District

Exhibit 10 – Pinyon Pines County Water District



Pinyon Pines County Water District

Pinyon Pines County Water District Agency Profile

General Information			
Agency Type	County Water District Act WC 30000 et seq.		
Date Formed	April 22, 1969		
Services	Domestic water		
Service Area			
Location	Pinyon Pines area near Mountain Center		
Square Miles/Acres	320 acres		
Total Water Connections	82 water connections		
Population Served	Approximately 250		
Water Infrastructure/Capacity			
Facilities	1 well, 85 feet deep		
Storage Capacity	None		
Primary Source of Supply	Groundwater		
Water Rates (single-family home)	Tier Base Tier 1 Tier 2 Tier 3	Consumption (CF) 0-500 501-800 800-1,000 Over 1,000	Rate $45.00 $0.02 per CF $0.15 per CF $0.30 per CF
Budget Information - FY 2017-2018 (Water Fund)			
	Revenues	Expenditures	Net Surplus/(Deficit)
Water Fund	$46,400	$66,585	$-20,185
Capital Expenditures	FY 2017-2018 As needed	Long-Term Planned Expenditures No long term plans	
Water Fund Balance	$35,312		
Agency Net Position	$54,021		
Governance			
Governing Body	5 member board		
Agency Contact	Thomas E. Huss 760-349-3261 thuss@pinyonpinescwd.ca.gov		

Sources: PPCWD

Pinyon Pines County Water District

Growth and Population Projections

There is very little information on population of the District. The population can be estimated by the number of single family connections and the average persons per household of Riverside County of 3.2. With 82 connections, the current estimated population is 253. There have been no new connections since 1976 due to lack of water. There are no known plans for expansion of the District or new developments within its bounds, so the projected population will remain at approximately 250 residents.

Disadvantaged Unincorporated Communities (DUCs)

There are no DUCs within the District's boundaries, and no DUCs have been identified within or adjacent to PPCWD's SOI. No additional analysis is required in this report.

Present and Planned Capacity of Public Facilities

The PPCWD provides water from a single well drilled to 85 feet into the aquifer located south of Pinyon Pines at the 6,200 foot elevation in the Santa Rosa Mountains. The USFS owns the land around the well and restricts activity that could cause contamination. Table 62 shows water use by single-family homes, the campground and the fire station on a monthly average and annual basis.

Table 62 – Pinyon Pines County Water District Annual Water Demand

Use	Meters	Cubic Feet per Month	Gallons per Month	Gallons per Year
Single Family	79	39,500	304,436	3,653,232
Campgrounds	2	400	3,082	36,984
County Fire Station #30	1	800	6,160	73,920

Source: PPCWD

In a separate communication, annual consumption within the District was estimated at 5.7 million gallons. Since the District has not added any new connections since 1976 due to lack of water, it can be assumed the District only has sufficient capacity to serve current customers.

Emergency Preparedness (Supply or Treatment Interruption Capability)

Extended supply shortages are unlikely due to natural disasters or accidents which damage all water sources. However, agencies such as PPCWD that are dependent upon well supplies have capabilities to provide emergency power via generators to pump water. This is sufficient water to meet the minimum health and safety requirements of 50 gallons per day per capita for approximately 250 residents. As the District has no storage capacity, this assumes reduction in uses and zero non-residential or landscape use.

Pinyon Pines County Water District

Financial Ability to Provide Services

Table 63 shows revenues and expenses for FY 2016 – FY 2018. The FY 2018 data is from the budget while the other two years is from the audit. The FY 2017-2018 budget for PPCWD is $66,585. Nearly 95 percent of those expenses are for administration. Revenues are primarily derived by water sales and a small amount, approximately 15 percent, from standby charges. The District anticipated $40,000 in water sales and $6,400 in standby charges for total revenues of $46,400. The remainder of expenses is covered by transfers from the fund balance. The District has no debt service or long-term financial obligations.

The District's net position increased from $59,082 on June 30, 2016 to $59,995 on June 30, 2017. This represents an increase of $912. The increase reflected the basic rate increase which was effective October 27, 2016.

The FY 2017-2018 budget shows a shortfall of approximately $20,000. The District intends to use transfer money from its checking account to cover the shortfall. The shortfall is represented in the table by a decrease in net position.

Table 63 – PPCWD Revenues and Expenses, FY 16-FY 18

	FY 2016 Audit	FY 2017 Audit	FY 2018 Budget
Total operating revenues (Water Sales)	$ 35,012	$ 44,483	$ 40,000
Source of Supply and Water Treatment	1,188	1,486	1,500
Salaries and Benefits	31,996	33,196	34,260
Insurance	6,098	4,727	7,000
Other	10,007	6,410	58,086
Total operating expenses before depreciation	$ -49,077	$ -45,819	$ -66,086
Operating loss before depreciation	-14,065	-1,333	-26,086
Depreciation	-3,601	-3,197	-3,000
Operating loss	-17,666	-4,533	-29,086
Non-operating Revenues/Expenses			
Assessments	6,271	6,154	6,400
Assessment Costs	-222	-709	-500
Non-operating Revenues, Net	$ 6,049	$ 5,445	$ 5,900
Increase/decrease in net position	-11,617	912	-22,686
Beginning net position	$ 70,700	$ 59,083	$ 59,995
Ending net position	$ 59,083	$ 59,995	$ 37,310

Sources: Pinyon Pines County Water District

Ratio of Reserves or Fund Balance to Annual Expenditures

An indicator of the ability to absorb an unexpected loss of revenue in a given fiscal year is exhibited by the amount of unrestricted cash reserve or fund balance the service fund maintains in relation to the annual fund expenditures. The unrestricted fund balance as of June 30, 2017 was $35,312. In FY 2016-2017, operating expenses before depreciation were $45,819. The ratio of fund balance to operating expense is 0.77. The District, in the FY 2017-

Pinyon Pines County Water District

2018 budget used the fund balance to balance the budget. In the FY 2017-2018 budget, expenses exceeded revenues by $20,000. The small amount of fund balance is of concern and should be increased over time for possible infrastructure repair or replacement.

Rate Structures

On October 2, 2016, the Board approved a new rate structure that became effective October 27, 2016. The rate consists of a base rate per month and three tiers based on usage as shown in Table 64.

Table 64 – Pinyon Pines County Water District Rate Structure

Tier	Cubic Feet Used	Rate
Base		$45.00
Tier 1	0-500	$0.02 per CF
Tier 2	800-1,000	$0.15 per CF
Tier 3	Over 1,000	$0.30 per CF

Source: Pinyon Pines County Water District

Pension Liability and Other Post-Employment Benefits Liability

The Pinyon Pines County Water District does not provide any post-employment benefits or pension plans for its employees.

Capital Improvement Program/Plan

The District adopted a CIP for the period 2010 to 2018. The report states that the Board of Directors has determined which improvements are needed. In FY2017-2018, no improvements were made due to lack of resources. In fact, no improvements have been made since 2010, and there are no plans for future projects due to lack of financial resources.

Other Issues

The District has had issues with the County regarding its charges for administration fees for LAFCO assessments. At times, the County's Administration fee was 20 times the LAFCO fee of $7. The LAFCO Commission recently eliminated the administrative fee for small agency apportionments; however, the County continues to charge an administrative fee to process the District's assessment.

Status and Opportunities for Shared Facilities/Services

Pinyon Pines County Water District is fairly isolated, so there is little opportunity for shared facilities. The District does work with Riverside County Fire Station #30 which is adjacent to the District. The District also works with the U.S. Forest Service to provide water to neighboring campgrounds. The District participates in the Association of California Water

Agencies/Joint Powers Insurance Authority. The JPIA provides the insurance needs of the District.

The District has a 10-year Master Plan which was completed in 2010 and reviewed and revised as recently as March of 2018. The Master Plan establishes goals and objectives for services provided to customers and sets standards for its Board of Directors. The District also establishes an annual budget or spending plan for the year.

Government Structure and Accountability

The PPCWD is governed by a five-member Board of Directors elected to four-year staggered terms. Board members receive no compensation. The Pinyon Pines County Water District Board of Directors meets the first Sunday of the month at 9:00 am at 96735 Indio Ave. in Pinyon Pines. Meetings are noticed in accordance with the Brown Act. Table 65 lists the directors and when their terms expire.

Table 65 – Pinyon Pines County Water District Board of Directors

Board Member	Term Expires
Jeffrey Harold Crowe - President	December 2021
David Jon Pickard – Vice President	December 2021
Ramone Deely	December 2019
Robert Flynn	December 2019
Gary Dunkin	December 2019

Source: PPCWD website

The District also maintains a website which allows communication with customers. It provides meeting agendas, water quality, and financial reports for the District.

The District has three paid staff members, a general manager, secretary-treasurer, and assistant general manager.

LAFCO Policies Affecting Service Delivery

The District has no plans for expansion of its sphere or territory in the foreseeable future. There have been no new connections since 1976 due to lack of water. Therefore, there are no LAFCO policies affecting service delivery.

San Gorgonio Pass Water Agency

Overview/History

The San Gorgonio Pass Water Agency (SGPWA) was established by special legislation on April 19, 1961. The District is located about 75 miles east of Los Angeles along I-10 and includes approximately 228 square miles in Riverside and San Bernardino Counties and the cities of Calimesa, Beaumont, and Banning. The San Gorgonio Pass lies between the San Bernardino Mountains on the north and the San Jacinto Mountains on the south. It connects the San Bernardino Valley on the west to the Coachella Valley on the east. The District serves over 39,000 connections.

The SGPWA contracts with the State of California to import water through the State Water Project. The Agency has a contract with the California Department of Water Resources (DWR) to receive an annual allotment of 17,300 acre-feet from the State Water Project.

The purpose in creating the agency through SB 8 was to provide for planning, conservation, development, distribution, control and use of an adequate water supply for the public good for the protection of life and property. SB 8 gave SGPWA taxing authority similar to taxing power of other local agencies.

There are nine retail purveyors that provide water service within the SGPWA service area. Exhibit 11 shows the boundaries of the SGPWA and the nine agencies within its service area. The agencies include the City of Banning, Beaumont-Cherry Valley Water District, Yucaipa Valley Water District, Cabazon Water District, High Valleys Water District, Mission Springs Water District, the Morongo Band of Mission Indians service area, Banning Heights Mutual Water Company, and South Mesa Water Company.

The City of Banning supplies water and wastewater services within its City limits. The City currently comprises a total land area of approximately 23 square miles in northern Riverside County. The City's water system is currently part of the City of Banning Public Works Department and Water Division.

The Beaumont-Cherry Valley Water District's service area covers approximately 28 square miles in Riverside and San Bernardino Counties and includes the City of Beaumont and the community of Cherry Valley. The District purchases imported water from the SWP through the SGPWA for recharge of the Beaumont Groundwater Basin. The District also jointly owns and operates three groundwater wells with the City of Banning.

The Yucaipa Valley Water District provides drinking water, recycled water, sewer collection, sewer treatment, and brine disposal services to the City of Yucaipa and the City of Calimesa in both San Bernardino and Riverside Counties. Yucaipa's service area encompasses

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approximately 40 square miles. YVWD also receives water from the San Bernardino Valley Municipal Water District (SBVMWD). The South Mesa Water Company's service area includes parts of both the City of Calimesa and the City of Yucaipa.

The Cabazon Water District's service area includes the unincorporated community of Cabazon in the eastern portion of SGPWA's service area. The High Valleys Water District provides service to residents of the Twin Pines and Poppet Flats communities. HVWD receives all of its water from the City of Banning. The South Mesa Water Company's service area includes parts of both the City of Calimesa and the City of Yucaipa.

The Mission Springs Water District's service area includes Desert Hot Springs and surrounding areas. The review of this District is included in Volume 3 of the Countywide Water and Wastewater Municipal Service Review.

The Morongo Band of Mission Indians service area is approximately 35,000 acres northeast of the City of Banning. The Banning Heights Mutual Water Company's service area is the unincorporated community of Banning Bench, north of the City of Banning.

While only the City of Banning, Beaumont-Cherry Valley Water District (BCVWD), and Yucaipa Valley Water District (YVWD) currently receive SWP water directly from the SGPWA, all nine retailers supply water to their customers from local groundwater, which is replenished by SWP water imported by SGPWA. In addition, the YVWD serves water to its customers through direct deliveries from its surface water filtration plant.

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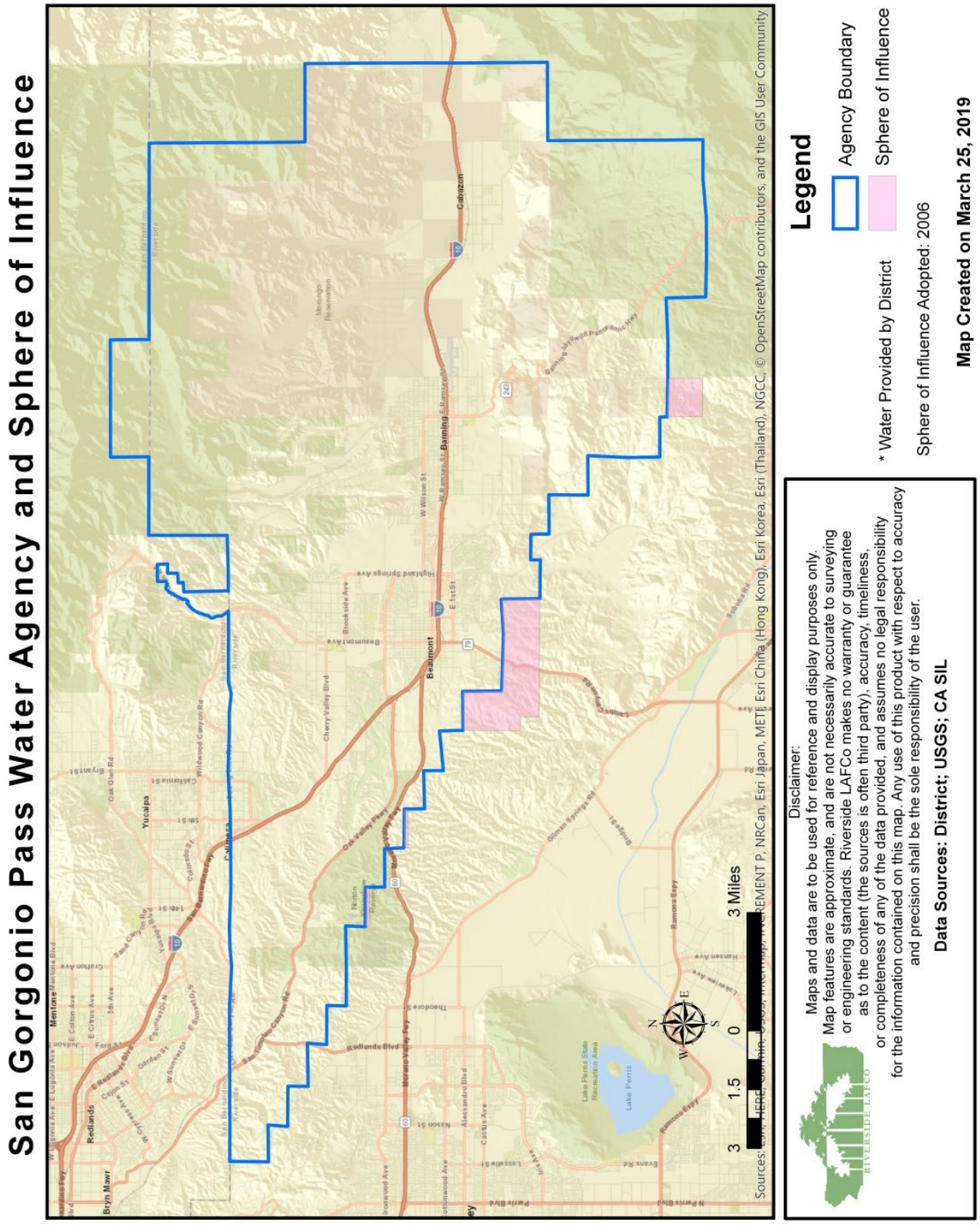
Exhibit 11 – San Gorgonio Pass Water Agency



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San Gorgonio Pass Water Agency - Agency Profile

General Information			
Agency Type	County Water District Act WC 30000 et seq		
Date Formed	July 1961		
Services	Wholesale purveyor of SWP water to BCVWD, Banning, YVWD		
Service Area			
Location	Approximately 75 miles east of Los Angeles along Interstate 10.		
Square Miles/Acres	228 square miles		
Total Water/Sewer Connections	39,753 – water only		
Population Served	87,192		
Water Infrastructure			
Facilities	East Branch Extension of the SWP, Beaumont Avenue Recharge Facility		
Storage Capacity	48 CFs plans to increase to 64 CFs		
Primary Source of Supply	State Water Project from Central California		
Water Rates (single-family home)	Wholesale rate structure of $317 per acre-foot.		
Budget Information - FY 2017-2018 (Water Fund)			
	Revenues	Expenditures	Net Surplus/(Deficit)
Water Fund	$28,010,000	$21,340,000	$667,000
Capital Expenditures	FY 2017-2018 $424,432	Long-Term Planned Expenditures $3.439 million	
Water Fund Balance	$13.5 million		
Agency Net Position	$173.67 million		
Governance			
Governing Body	7 member board		
Agency Contact	Jeff Davis jdavis@sgpwa.com 951-845-2577 General Manager		

Sources: San Gorgonio Pass Water Agency

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Growth and Population Projections

The population of SGPWA is currently estimated at 87,192. The UWMP estimates 2.2 percent annual growth for the agency. At that rate, the estimated population would reach 96,954 in 2020 and 107,809 in 2025.

Disadvantaged Unincorporated Communities (DUCs)

Although there are DUCs within the District's boundaries, there are no DUCs identified within or adjacent to SGPWA's SOI. The San Gorgonio Integrated Regional Water Management Plan has indicated there are areas within the SGPWA service area that can be considered DUCs. They are primarily east of Beaumont. In those areas, the City of Banning, the YVWD, and HVWD provides water, Riverside County Fire provides fire protection and the area residents are on septic systems as no municipal sewer service is available to that area.

Present and Planned Capacity of Public Facilities

The main source of water for SGPWA is the State Water Project (SWP). The water in the SWP originates from Oroville Dam and the Feather River and is transferred south via the California Aqueduct. The California Aqueduct conveys water along the west side of the San Joaquin Valley to Edmonston Pumping Plant, where water is pumped over the Tehachapi Mountains. The California Aqueduct then divides into the east and west branches. SGPWA delivers its SWP supplies through the East Branch to use within the local groundwater basins through extensive transmission pipeline systems and direct releases from Silverwood Lake, a SWP regulating reservoir.

In the early 1960s, DWR began entering into individual SWP water supply contracts with urban and agricultural public water supply agencies located throughout northern, central, and southern California for SWP water supplies. SGPWA is one of 29 water agencies (commonly referred to as "contractors") that have a SWP water supply contract with DWR.

The SWP contracts entered into in the 1960s had initial 75-year terms, and are set to begin expiring in 2035. While the SWP contracts provide for continued water service to the contractors beyond the initial term, efforts are currently underway to extend the SWP contracts to improve financing for the SWP. The goal is to extend the contracts another 50 years to 2085.

Supply

The total planned annual delivery capability of the SWP was originally 4.23 million acre-feet (AF). The initial SWP storage facilities were designed to meet contractors' water demands in the early years of the SWP, with the construction of additional storage facilities planned as demands increased. After the permanent retirement of some amount by two agricultural contractors in 1996, the maximum amount of all SWP contractors now totals about 4.17 million AF.

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According to the water supply contract between DWR and the SGPWA, SGPWA's maximum annual entitlement from the SWP is 17,300 AFY. Table 66 presents historical SWP deliveries to SGPWA.

Table 66 – Historical SWP Deliveries to SGPWA

Year	Deliveries (acre-feet per year)
2003	116
2004	814
2005	687
2006	4,420
2007	4,815
2008	4,905
2009	6,609
2010	8,403
2011	10,730
2012	10,974
2013	9,695
2014	5,131
2015	3,930

Source: SGPWA 2015.

In addition, the SWP contracts provide for additional types of water that may periodically be available, including "Article 21" water and Turnback Pool water. Article 21 water (which refers to the SWP contract provision defining this supply) is water that may be made available by DWR when excess flows are available in the Delta. The availability of Article 21 water and Turnback Pool water is uncertain. When available, these supplies provide additional water that SGPWA may be able to use, either directly to meet demands, or for later use after storage in its groundwater banking programs.

While not specifically provided for in the SWP contracts, DWR has in critically dry years created Dry Year Water Purchase Programs for contractors needing additional supplies. Through these programs, water is purchased by DWR from willing sellers in areas that have available supplies and is then sold by DWR to agencies willing to purchase those supplies. The availability of these supplies is generally uncertain.

Primary factors affecting SWP supply availability include: the availability of water at the source of supply in northern California, the ability to transport that water from the source to the primary SWP diversion point in the southern Delta, and the magnitude of total contractor demand for that water, as summarized below.

The reliability of SWP supplies is affected by the total amount of water requested and used by SWP contractors, and the ability to supply water through the Delta facilities, since an increase in total requests increases the competition for limited SWP supplies. Consistent with other urban SWP contractors, SWP deliveries to SGPWA have increased as its requests for SWP water have increased from 116 AF in 2003 and varied year to year to 3,930 AF in 2015. The

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highest to date occurred in 2012 at 10,974 AF. Table 67 below summarizes the reliability of SWP water out to 2040.

There are three other sources of water for SGPWA. There is the Yuba Accord Water, the Multi-Year Pool Demonstration Project, and a recently acquired source, Nickel Water. SGPWA entered into the Yuba Accord Agreement which allows for the purchase of water from the Yuba County Water Agency through DWR to 21 SWP contractors (including SGPWA) and the San Luis and Delta- Mendota Water Authority. Yuba Accord water comes from north of the Delta, and the water purchased under this agreement is subject to losses associated with transporting it through the Delta. While the amount of this water varies each year depending on hydrologic conditions, the average amount that the Agency has received has been approximately 300 AFY. The Agency recently signed an extension to this agreement allowing it to purchase this water well into the future.

The Nickel Water, so-called because it originally belonged to Nickel Farms LLC, was leased from the Antelope Valley-East Kern Water Agency (AVEK) in 2017 and includes 1,700 acre-feet of water per year for 20 years. SGPWA has the right of first refusal to extend this for an additional 20 years. This water, since it originates south of the Delta, is 100 percent reliable in all water year types.

Table 67 – SWP Supply Reliability Projections [(a)]

SWP Supply	2020 (acre-ft/year)	2025 (acre-ft/year)	2030 (acre-ft/year)	2035 (acre-ft/year)	2040 (acre-ft/year)
Average Water Year[(b)]					
Table A Supply	10,700	10,700	10,700	10,700	10,700
% of Table A Amount[(c)]	62%	62%	62%	62%	62%
Single Dry Year[(d)]					
Table A Supply	1,900	1,900	1,900	1,900	1,900
% of Table A Amount[(c)]	11%	11%	11%	11%	11%
Worst-Case Single Dry Year[(e)]					
Table A Supply	900	900	900	900	900
% of Table A Amount[(c)]	5%	5%	5%	5%	5%
Multi-Dry Year[(f)]					
Table A Supply	5,700	5,700	5,700	5,700	5,700
% of Table A Amount[(c)]	33%	33%	33%	33%	33%

Notes: Values rounded to nearest hundred.

(a) Projected SWP supplies to SGPWA based on analyses presented in DWR's "2015 Delivery Capability Report (DCR)."
(b) Based on average deliveries over the DCR's historic hydrologic period of 1921 through 2003.
(c) Supply as a percentage of SGPWA's Table A Amount of 17,300 AF.
(d) Based on a repeat of the worst case historic single dry year of 1977 (from DWR 2015 DCR).
(e) Based on the worst-case actual allocation of 2014 of 5%.
(f) Supplies are annual averages over four consecutive dry years, based on the historic four-year dry period of 1931-1934.

Source: SGPWD 2017

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SGPWA SWP Supply Facilities

Conveyance

SGPWA receives SWP supplies via the East Branch Extension of the SWP. The East Branch Extension begins at Devil Canyon Power Plant in San Bernardino and ends in Cherry Valley. Efforts to increase the conveyance capacity of the East Branch Extension to 48 cubic feet per second (CFS) were completed in 2017. This East Branch Extension, Phase 2, will provide the additional capacity necessary to convey the full allocation of SWP supplies, as available.

SGPWA plans to purchase an additional 16 CFS of capacity from the East Branch Extension Phase 2 expansion from SBVMWD, bringing the conveyance capacity to 64 CFS or approximately 35,000 AFY at a 75 percent frequency of operation, sufficient to meet regional demand through 2035, assuming SGPWA obtains supplemental sources of imported water.

Treatment

SWP supplies delivered to the SGPWA service area are treated at the Yucaipa Valley Regional Water Filtration Facility (YVRWFF), with a capacity of 12 million gallons per day (MGD). Treated water from the YVRWFF is used to meet demands in both the SBVMWD and SGPWA service areas.

Demand

SGPWA is a State Water Project Contractor and provides imported SWP water to the retail water purveyors within its service area. Purveyor demands on SGPWA generally showed a significant decrease between 2010 and 2015, primarily as a result of severe drought conditions and implementation of effective conservation measures. Table 68 summarizes historical demand from the three largest customers of SGPWA.

Table 68 – Recent Historical Water Demands on SGPWA [(a)]

Agency Name	2010	2015
BCVWD[(b)(c)]	5,727	2,773
City of Banning[(c)]	1338	694
YVWD[(c)]	713	454
Total Demands	7,778	3,921

Notes: (a) Volumes shown are actual deliveries.
(b) 2010 Data provided by BCVWD; 2015 data from BCVWD 2015 UWMP.
(c) Data from retailer 2015 UWMPs.

Source: SGPWA 2017

The District's UWMP requires an estimate of supply and demand for three scenarios based on rainfall, normal years, single dry year, multiple dry years. Table 69 summarizes supply and demand for three scenarios and five years, from 2020 to 2040. Sources are SWP water and an agreement with the Yuba County Water Agency for water from north of the Delta. The agreement for Yuba water averages 300 AFY for normal, single dry and multiple dry years.

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The maximum demands refer to the projected imported water demands on SGPWA through the planning period, based on the potential maximum that can be expected in each of the three agencies that receive SGPWA water, BCVWD, City of Banning, and YVWD. These maximum demands also include additional water required by YVWD for each new home constructed in its service area (a 20-year supply of water for each home). These demands are in addition to annual water demands. YVWD plans to bank this additional supply prior to the homes being constructed. Since this water is in addition to annual water demands, it is listed in the SGPWA UWMP as "maximum demands." See below for more details.

Table 69 – Supply/Demand Normal, Single Dry, Multiple Dry Years Projections, 2020-2040

Scenario	2020 (acre-feet)	2025 (acre-feet)	2030 (acre-feet)	2035 (acre-feet)	2040 (acre-feet)
Normal Year					
Total Existing and Planned Supplies	14,500	16,800	20,700	24,700	28,000
Total Demands	13,200	16,500	20,400	24,400	27,700
Total Maximum Demands	18,800	22,200	25,800	29,700	31,600
Single Dry					
Total Existing and Planned Supplies	2,600	2,800	3,300	3,700	4,100
Total Demands	1,600	3,300	5,500	7,500	9,200
Total Maximum Demands	4,300	5,500	6,800	8,000	9,200
Multiple Dry					
Total Existing and Planned Supplies	7,200	7,900	9,200	10,500	11,600
Total Demands	3,200	5,000	7,300	9,600	11,500
Total Maximum Demands	5,900	7,200	8,700	10,100	11,500

Source: San Gorgonio Pass Water Agency

BCVWD, in its 2015 UWMP, shows projections for SGPWA supplies needing to meet municipal demands, raw water demands to supplement non-potable water, and demands to meet groundwater banking needs. The demands are based on the District's 2015 Potable Water Master Plan Update. BVCWD intends to use imported SGPWA supplies to supplement groundwater recharge to build-up or maintain BCVWD's Beaumont Basin groundwater storage account. If imported water from SGPWA is not available in a given year, the District says no groundwater recharge would occur. But when imported water is available, any deficiencies from previous years would be "carried over" and made up according to the BCVWD's UWMP.

The City of Banning, in its 2015 UWMP, shows projections for SGPWA supplies based on a draft "Regional Water Allocation Agreement for Water Imported by SGPWA." The draft allocation agreement states that the City of Banning would receive 27.3 percent of the SGPWA Annual Table A Amount allocation, assuming 58 percent SWP delivery reliability. The draft allocation agreement was never adopted.

YVWD demand projections in its 2015 UWMP are based on various potential needs, including drinking water demands, conjunctive use demands for local water banking, and demands by new development projects as part of the District's "New Development Supply Sustainability

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Program." The sustainability program requires developers to purchase a 20-year water supply for each new house built, in order to ensure that long-term supplies will be available for new developments prior to construction. These sustainability demands would be contingent upon availability of supplies and the timing of such supplies.

The table shows that SGPWA can meet demands in normal and multiple dry years but would fall short in a single dry year. There are several sources the SGWPA can use if SGPWA is short on demand.

- **Table A Transfers:** this entails the purchase of Table A allocations from other agencies with excess allocations. Reliability is rated at 60 percent.
- **Kern River Exchanges:** agencies that have diversion rights from the Kern River can exchange SWP water. Reliability is rated at 100 percent.
- **Banked Groundwater Exchanges:** SGPWA can purchase banked groundwater from unused SWP deliveries. Reliability is rated as 100 percent on a short-term basis.
- **Banked Groundwater Pumpback**: this involves the purchase of banked groundwater delivered via pumpback to the California aqueduct. Reliability is rated as 100 percent on a short term basis.
- **Excess SWP Purchases:** SGPWA can purchase excess SWP water form SWP or water agencies with a surplus. Reliability is rated as 100 percent on a short-term basis.
- **Dry Year Water Purchases or Transfer Programs:** SGPWA can purchase or transfer unused water from water agencies with a surplus. Reliability is rated as 100 percent in dry years on a short-term basis.

The Agency recently completed the East Branch Extension Phase 2 project. The East Branch Extension is the portion of the State Water Project that conveys water to the San Gorgonio Pass area. Phase 1 was completed in 2003 and Phase 2 in 2017. Phase 2 consists of six miles of 66-inch pipe under the Santa Ana River and through Mentone to Yucaipa, the new Citrus Pump Station and reservoir in Mentone, and additional pumps for Crafton Hills and Cherry Valley Pump Stations. With Phase 2, the Agency is able to import its full allotment of 17,300 AF in a year. Since the completion of this project, the Agency is not currently at or near capacity in their conveyance facility.

Emergency Preparedness (Supply or Treatment Interruption Capability)

Extended supply shortages are unlikely due to natural disasters or accidents which damage all water sources. However, District's emergency response plan (ERP) includes provisions to provide water via its SWP pipelines and groundwater supply wells, the Yucaipa Treatment Plant and reservoirs. The District is a wholesale supply agency and coordinates deliveries with the retail agencies.

Under emergency power outages or a catastrophic earthquake conditions, the existing storage is expected to provide a supply at minimum demand levels. The District also has emergency plans for pipelines and pump stations in case of an earthquake including several portable

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back-up generators that can be used in the event of an area-wide power outage. These generators can be located at primary locations to continue water delivery.

Financial Ability to Provide Services

Table 70 shows revenues and expenses for FY 2014-2015 through FY 2016-2017. Revenues are derived from water sales and property taxes. Water sales make up an approximately ten percent and property taxes are approximately 90 percent of revenues. The table shows a large increase in water sales in FY 2016-2017, due to increased rainfall, and a steady increase in property taxes during the period.

On the expense side, depreciation and amortization account for most of the administration costs. Almost all the purchased water and utility expenses are due to maintenance. Operating losses are balanced by non-operating revenues such as property tax. In FY 2017-2018, the Board approved a budget of $29.5 million.

Table 70 – SGPWA Revenues and Expenses, FY 2015-FY 2017

	FY 2015	FY 2016	FY 2017
Operating revenues			
Water sales	$ 1,480,339	$ 1,859,344	$ 4,751,979
Operating expenses			
Source of Supply – maintenance	5,304,357	$ 5,168,558	$ 4,883,703
Source of Supply- water purchases	1,284,030	1,197,421	3,517,989
Total source of supply	$ 588,387	$ 6,365,979	$ 8,401,692
Total transmission and distribution (utilities & maintenance)	$ 45,208	$ 33,942	$ 35,955
General and administration	1,494,151	1,344,999	1,538,349
Administration - Depreciation	634,346	648,643	645,978
Administration - Amortization	2,415,510	3,122,834	10,467,763
Total general and administrative	$ 4,544,007	$ 5,116,476	$ 12,652,090
Total operating expenses	$ 11,177,602	$ 11,516,397	$ 21,089,737
Operating loss	**$ -9,697,263**	**$ -9,657,053**	**$ -16,337,758**
Non-operating revenues (expenses)			
Property taxes - general purpose	1,905,088	2,136,273	2,267,676
Property taxes - debt service	17,482,812	18,506,495	20,511,507
Investment income	136,359	306,338	484,731
Unrealized gain (loss) on investments	-2,043	152,539	-282,523
Other	35,562	24,720	112,265
County collection charge	-47,238	-66,351	75,374
Total non-operating revenues (expenses)	$ 19,510,540	$ 21,060,014	$ 23,018,282
Income before capital contributions	$ 9,813,277	$ 11,402,961	$ 6,680,524
Capital contributions - government	–	85,086	16,000
Change in net position	$ 9,813,277	$ 11,488,047	$ 6,696,524
Beginning of year, as previously reported	$146,372,903	$ 55,359,898	$166,970,738
Less: cumulative effect of change in accounting principle	-826,282	–	–
Beginning of year, as restated	$145,546,621	$155,359,898	$166,970,738
Net position, end of year	$ 55,359,898	$166,970,738	$173,667,262

Sources: SGPWA

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Net Income Trends

Table 70 also shows net income for SGPWA for the three-year period of 2015-2017. The table shows an increase in net income in FY 2014-2015 and FY 2015-2016 but a decrease for FY 2016-2017. The decrease is due to increase costs for purchased water (the Nickel water) and a large increase in amortization of State Water Rights. Nevertheless, the net income for 2017 was $6.7 million.

Ratio of Reserves or Fund Balance to Annual Expenditures

The Board has adopted a reserve policy for restricted and unrestricted reserves. The restricted reserves are for the State Water Contract Fund. These funds consist of property tax to pay for the State Water Contract. These funds may only be used to pay the financial obligations on the State Water Contract.

There are several unrestricted reserve accounts and policies. They include operations, new infrastructure, additional water, rate stabilization, replacements, and unexpected legal expense. The reserve for operations can be used to pay unanticipated costs of operations. It should be kept at a level to pay for six months of normal operations. In FY 2016-2017, the Agency had unrestricted assets of $13.54 million which consisted primarily of water sales, general purpose tax proceeds, investment income and administrative expenses. Compared to operating expenses of $21.08 million, this represents 64 percent of annual expenses.

Annual Debt Service Expenditures to Total Annual Expenditures

The District has no long-term outstanding debt.

Rate Structures

The Agency has a simple wholesale rate structure of $317 per acre-foot. The rate was adopted in February 2009 and was last adjusted in July 2009. As indicated above, water sales only account for 11 percent of annual revenues. The Agency relies on property tax for its main source of revenue.

Capital Improvement Program/Plan

The Agency recently completed two projects, the East Branch Extension Phase 2 and the Beaumont Avenue Recharge Facility. The East Branch Extension is the portion of the State Water Project that conveys water to the San Gorgonio Pass area. Phase 1 was completed in 2003 and Phase 2 in 2016. Phase 2 consists of six miles of 66-inch pipe under the Santa Anna River and through Mentone to Yucaipa, the new Citrus Pump Station and reservoir in Mentone, and additional pumps for Crafton Hills and Cherry Valley Pump Stations. With Phase 2 the Agency will be able to import its full allotment of 17,300 AF in a year. The cost of Phase 2 was approximately $200 million.

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The Beaumont Avenue Recharge Facility is a new groundwater recharge facility that will allow the Agency to import more water in wet years when it is available and store it in the local groundwater basin. The facility consists of five large ponds, and a pipeline connecting the ponds to the East Branch Extension. The estimated cost is $8 million.

Current CIP projects include the Noble Turnout Expansion. The California WaterFix and Sites Reservoir are two projects that the Agency is invested in and will pay for its share of their expenses should they be constructed.

Pension Liability and Other Post-Employment Benefits Liability

California law requires an annual calculation of the Net Pension Liability and contribution for each participating agency. This calculation is utilized by the agency to budget for and make contributions to CALPERS toward its unfunded liability balance. In 2017, the District contributed $47,711 toward the pension services. As of June 30, 2017, the District reported $692,158 for water and $230,719 for sewer for a total of $84,795 for both. The FY 2016-2017 audit contains a detailed description of the calculation of benefit and unfunded liability.

Status and Opportunities for Shared Facilities/Services

The Agency works cooperatively with the DWR and a number of local water agencies. They provide SWP water to the City of Banning, the Beaumont-Cherry Valley Water District, and the Yucaipa Water District. They also work with the Yuba County Water Agency and the City of Calimesa.

One measure of management efficiencies is the planning done by the agency. The SGPWA does an UWMP every five years and has participated in two IRWMP's, one on its east end and one on its west end, which describe the ability to provide services out to 2040. The District adopts an annual budget or spending plan with CIP each year.

Government Structure and Accountability

The SGPWA is governed by a seven member Board of Directors; five are elected by division and two are elected at large. Directors are elected to four-year staggered terms. The current directors and their terms are shown in Table 71.

Directors may be compensated for up to five days service in any calendar month. Board members receive a stipend of $252.93 for each water- related meeting they attend up to a maximum of five meetings per month or a maximum monthly stipend of $1,264.65. Each Board member also receives a budget of up to $5,000 per year for education and travel that can be used to attend water-related conferences, tours, seminars meetings, etc. Each Board member also receives a reimbursement for up to $2,000 per year for medical expenses not otherwise covered by insurance or Medicare. The FY 2017-2018 budget allowed for $108,000 in Directors fees, $15,000 for travel expenses, and $23,000 for medical expenses.

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The Board meets on the first and third Monday of the month at 1:30 p.m. in the boardroom at the Agency's administration building. The Board holds a number of specific subject area workshops through the month. The Engineering Workshop is typically held the second Monday of the month at 1:30 p.m. The Finance and Budget Workshop is held the fourth Monday of the month at 1:30 p.m. Water conservation and Education, Legal Issues, and Employee Guide Workshops, as well as other special workshops are held as needed. Meetings are noticed according to the Brown Act.

Table 71 – San Gorgonio Pass Water Agency Board of Directors

Council Member		Term Expires
David Fenn President	At Large	2022
Ron Duncan Vice President	Division 1	2020
Leonard Stephenson Treasurer	Division 5	2020
Dr. Blair Ball	Division 4	2022
David Castaldo	At Large	2020
Steve Lehtonen	Division 3	2022
Mike Thompson	Division 2	2020

Source: SGPWA

The Agency's website is user-friendly and has easy access to agendas, minutes, public notices, budgets, audits and other key documents. The Agency operates with a staff of four employees. All engineering, construction, planning, public relations, and auditing functions are performed by independent contractors.

LAFCO Policies Affecting Service Delivery

The agency does not anticipate expanding its boundaries or its sphere. Therefore, there are no LAFCO policies that will affect service delivery.

Yucaipa Valley Water District

Overview/History

The Yucaipa Valley Water District (YVWD) is responsible for water supply treatment and distribution, recycled water supply and distribution, and wastewater collection and treatment to the Yucaipa Valley. The San Gorgonio Pass Water Agency (SGPWA) overlaps YVWD (water service only), and the SGPWA sells water to YVWP.

The YVWD was formed as a County Water District in 1971 under the Reorganization Act of 1965, Division I of Title 6 of the Government Code. The reorganization consisted of the formation of the District, dissolution of the Calimesa Water District, formation of Improvement District No. 1 of the District as successor of Improvement District "A" of the San Bernardino Valley Municipal Water District and the formation of Improvement District "A" of the District as successor agency. Over the years, YVWD acquired many of the private water companies serving the Yucaipa Valley such as the Harry V. Slack Water Company in 1987 and the Wildwood Canyon Mutual Water Company in 1992.

The District is located about 20 miles southeast of San Bernardino in the foothills of the San Bernardino Mountains. The altitude of the District rises from about 2,000 feet above sea level at the western end of the valley to about 5,000 feet at the eastern end, with average elevation of roughly 2,650 feet. The topography of the area is characterized by rolling hills separated by deeply entrenched stream beds, namely, the Yucaipa and Wilson Creeks.

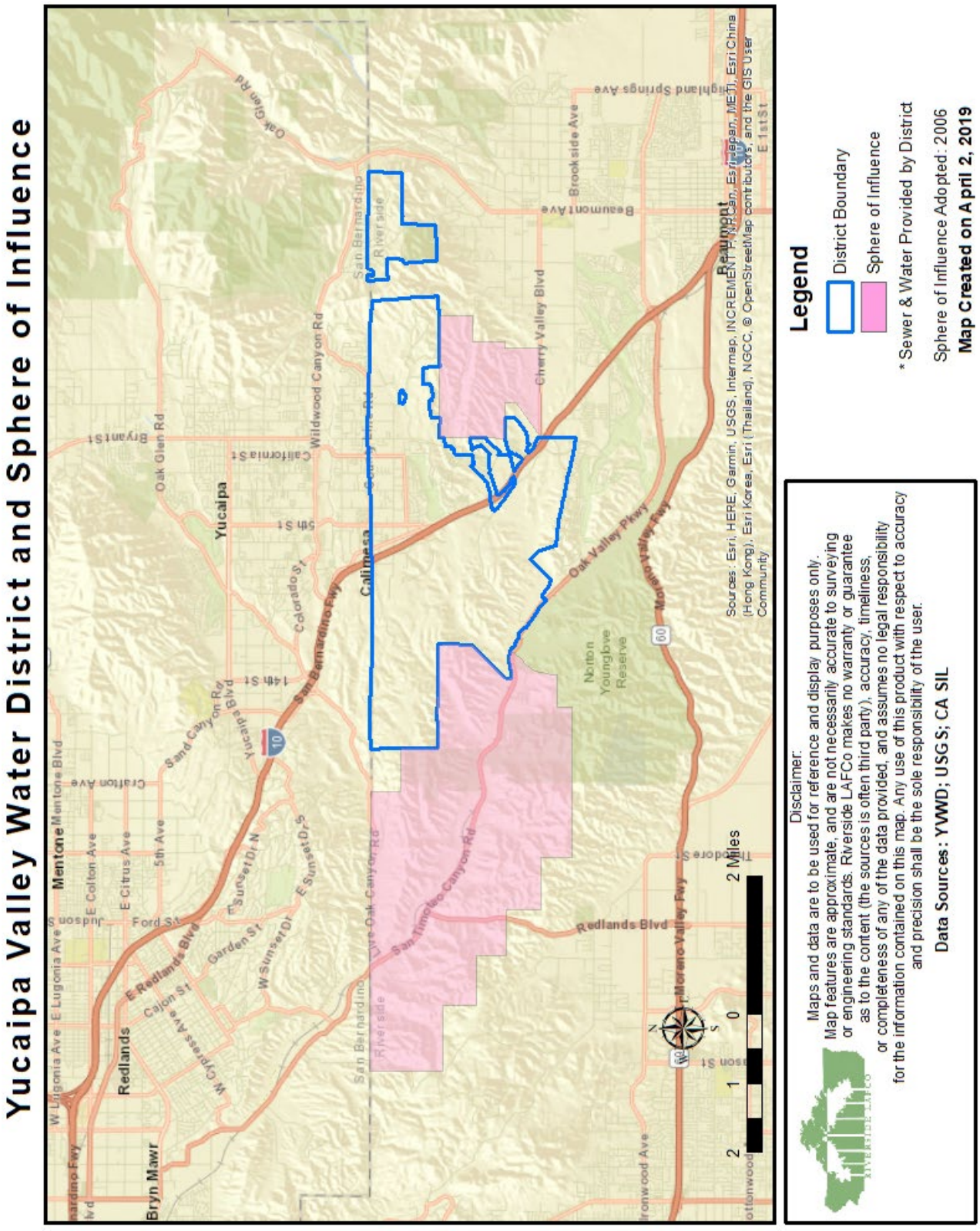
YVWD's current service area encompasses approximately 25,742 acres, or 40 square miles, which include the incorporated cities of Yucaipa and Calimesa which are in San Bernardino and Riverside Counties, respectively. Neighboring cities include Redlands and Beaumont. Exhibit 12 shows the District's boundaries and SOI. YVWD's sphere expands the acreage to 43,525, or 68 square miles.

The YVWD service area includes two mutual water companies, the Western Heights Water Company, which is in San Bernardino County, and the South Mesa Water Company in Riverside County. The service area of the Western Heights Mutual Water Company is 2,902 acres or 4.53 square miles. The service area of the South Mesa Mutual Water Company is 2,561 acres or 4 square miles. It is anticipated that both mutual water companies will have limited growth in the future.

Owing to the distribution of assessed value, San Bernardino LAFCO is the principal LAFCO since the greater assessed value is in the City of Yucaipa which is in San Bernardino County. However, Riverside LAFCO can process SOI updates for the Riverside County portion.

Yucaipa Valley Water District

Exhibit 12 – Yucaipa Valley Water District



Yucaipa Valley Water District

Yucaipa Valley Water District - Agency Profile

General Information			
Agency Type	County Water District WC 30000 et seq.		
Date Formed	September 14, 1971		
Services	Potable water, recycled water, sewer collection and treatment, brine disposal to City of Yucaipa and City of Calimesa		
Service Area			
Location	40 miles west of Palm Springs 70 miles east of Los Angeles		
Square Miles/Acres	40 square miles		
Total Water/Sewer Connections	12,770 water connections, 13,964 sewer connections, 64 recycled		
Population Served	44,426 in 2017		
Water Infrastructure/Capacity			
Facilities	27 reservoirs, 2 water filtrations facilities, Oak Glen Surface Water Filtration Facility and Yucaipa Valley Regional Water Filtration Facility		
Storage Capacity	34 million gallons storage capacity		
Primary Source of Supply	Imported water (45.6%), groundwater (36.1%), state water		
Water Rates (single-family home)	$14 monthly water service charge plus $1.429 per thousand gallons		
Sewer Infrastructure/Capacity			
Facilities	205 miles of sewer mainlines, 5 lift stations, 4,500 ac-ft annual recycled		
Current and Projected Treatment Capacity	8 million gallon treatment capacity with flow of 4 MGD		
Primary Disposal Method	Waste concentrate (brine) is discharged to the Inland Empire Brine Line (IEBL) operated by Santa Ana Watershed Project Authority.		
Sewer Rates (single-family home)	The sewer charge is a flat rate of $42.43 per month. The recycled water charge is $1.429 per thousand gallons.		
Budget Information - FY 2017-2018 (Water & Sewer Funds)			
	Revenues	Expenditures	Net Surplus/(Deficit)
Water Fund	$13,924,171	$13,924,171	0
Sewer Fund	$12,132,940	$12,132,940	0
Recycled Water	$796,425	$796,425	0
Combined Funds	$26,853,536	$26,853,536	0
Capital Expenditures	FY 2017-2018 $12.475 million	Long-Term Planned Expenditures $25-30 million in next 10 years	
Water Fund Balance/Reserves	$79,057,106		
Sewer Fund Balance/Reserves	$89,047,508		
Agency Net Position	$195,051,590		
Governance			
Governing Body	5 member board		
Agency Contact	Joseph Zoba jzoba@yvwd.us 909-797-5119 X2		

Sources: Yucaipa Water District, Zoba 2018, Water Systems Consulting, Inc. 2016

Yucaipa Valley Water District

Growth and Population Projections

In 2017, the population of the District was estimated at approximately 44,426. The District is situated in both San Bernardino and Riverside County. The District projects that the undeveloped land within its boundaries will continue to be developed so that the projected population at build out of the cities of Calimesa and Yucaipa in 2060 is expected to reach 94,800.

Table 72 below shows estimated population of the District. The estimates are based on Census data for 1990, 2000, and 2010. Population for non-census years was estimated using projected growth rates based upon anticipated future development. The population in 2015 was based on water connections in 2010 and 2015. The population estimates for Western Heights Mutual Water Company and South Mesa Mutual Water Company are not considered in the table.

Table 72 – YVWD Population Estimates, 2015-2045

2015	2020	2025	2030	2035	2040
44,745	47,809	51,676	55,976	60,558	69,207

Source: Water Systems Consulting, Inc. 2016

Disadvantaged Unincorporated Communities (DUCs)

Although there are DUC's within the District's boundaries, there are no DUCs identified within or adjacent to YVWD's SOI. No further analysis is required for this report.

Of the two cities with SOI's, the MHI for Yucaipa in 2016 was $55,700 and for Calimesa $46,070. Of the two, the Calimesa area qualifies as a DUC. Calimesa receives water and sewer from YVWD. The City of Calimesa and County areas have been receiving fire services from the Riverside County Fire Department. Beginning January 1, 2018, Calimesa is served by its own fire department.

Present and Planned Capacity of Public Facilities

YVWD was formed to provide water services but now also provides water treatment, recycled water, sewer collection and salinity elimination. As of 2017, there were 12,770 water connections and 13,964 sewer connections.

The District participated in the 2015 Regional Urban Water Management Plan (RUWMP). It receives water from the San Bernardino Water Agency which has a surplus of supply and a limited amount from SGPWA. Water from SGPWA is in limited supply.

Table 73 shows the number of water, sewer, and recycled water connections as of FY 17. It shows that 90 percent of potable water connections go to single family residences.

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Table 73 – YVWD Water Sewer and Recycled Water Connections, FY 17

Customer Type	Water Connections	Units	Sewer Connections	Units	Recycled Connections	Water Use 2016 (%)*
Single Family	11632	11632	13005	13005		91.84
Multi Family	510	5292	650	7827		4.00
Commercial	265	265	259	259		1.79
Institutional	103	103	47	56		0.56
Industrial	12	12	3	3		0.07
Irrigation	119	119			91	0.88
Fire Detectors	104	104				0.13
Construction	25	25			12	0.17
Total	12770	17552	13964	21150	103	

*SBV Regional UWMP 2016
Source: YVWD 2016

Water Demand

Table 74 shows the allocation of demand for drinking water by sector and water demand for 2015 through 2040. The table shows an increase in potable demand of about 32 percent but a steady increase in demand for recycled water.

Table 74 – YVWD Water Demand by Customer Class Projections, 2015-2040

Customer Type	Water Connections	Water Use 2016 (%)*	2015 (acre-feet)	2020 (acre-feet)	2025 (acre-feet)	2030 (acre-feet)	2035 (acre-feet)	2040 (acre-feet)
Single Family	11,632	91.84	6548.60	7,510	7,737	7,986	8,248	8,522
Multi Family	510	4.00	1050.34	1,161	1,196	1,234	1,275	1,317
Commercial	265	1.79	298.00	315	325	335	346	358
Construction	25	0.17	30.03	30	31	32	33	34
Fire Detectors	104	0.13	0.31	70	72	74	77	79
Industrial	12	0.07	50.05	187	192	198	205	212
Institutional	103	0.56	149.61	589	607	626	647	668
Irrigation	119	0.88	456.88	200	200	200	200	200
Non-revenue	–	–	1010.97	1,178	1,214	1,253	1,294	1,337
Total	12,770	–	9,595	11,240	11,574	11,938	12,325	12,727
Recycled Water	–		1,213	1,651	2,177	2,792	3,490	4,282
Total Water Demand	–	–	10,808	12,891	13,751	14,730	15,815	17,009

Source: YVWD 2016

Conservation SB X7-7

The Water Conservation Bill of 2009 (SBX7-7) requires each agency to establish a baseline and target reduction to meet the goal of 20 percent reduction by 2020. The District established a baseline of 276 gallons per capita per day (GPCD) an interim 2015 target of 248 GPCD and 220 GPCD in 2020. As a result of the recent drought, those targets have been met.

Supply and Estimated Demand

Table 75 shows imported water supplies for both the San Bernardo Valley Municipal Water District (SBVMWD) and the San Gorgonio Pass Water Agency (SGPWA). SBVMWD has an

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entitlement of 102,500 of SWP water available to YVWD. SGPA has an entitlement of 17,300 AFY that can be used by YVWD. The table shows that approximately two-thirds of the total demand will be met by SBVMWD and one-third by SGPWA.

Table 75 – YVWD Normal Year Supply Source Projections

Source	2015	2020	2025	2030	2035	2040
SBVMWD	4,133	10,587	10,868	10,738	10,982	10,338
SGPWA	454	4,313	5,007	5,758	6,735	6,051
Total	4,587	14,900	15,875	16,496	17,717	16,389

Source: Water Systems Consulting, Inc., 2016

Table 76 shows estimated demand of State Water Project water for a single dry year and multiple dry years. The table shows increasing demand out to 2040.

Table 76 – YVWD Estimated Demand of SWP Water Single Dry and Multiple Dry Years Projections

Source	2015	2020	2025	2030	2035	2040
Single Dry Year	5,525	5,780	6,060	6,370	6,700	7,040
Multiple Dry Year	5,850	6,120	6,410	6,740	7,095	7,455

Source: Water Systems Consulting, Inc., 2016

Groundwater Pumping

The District pumps drinking water from the Yucaipa Groundwater Basin and the Beaumont Groundwater Basin. Groundwater supplied about 50 percent of the drinking water in 2015 or 4,900 AF. The Yucaipa Groundwater Basin is subdivided into several sub-basins including the Calimesa, Chicken Hill, Gateway, Oak Glen, Singleton, Triple Falls Creek, Wester Heights, Wildwood and Wilson Sub-basin. Calimesa and Wilson Creek Sub-basins are the two largest with a total capacity of 175,000 AF and a safe yield of 4,600 AFY. The water table is generally between 225 and 350 feet. Groundwater recharge adds between 7,000 and 14,000 AFY to the Yucaipa Basin. Table 77 shows groundwater sources and the number of wells in each subbasin.

Table 77 – YVWD Groundwater Sources

Subbasin	Active Wells	Monitoring Wells	Inactive/Standby	Abandoned Wells
Chicken Hill	5			
Gateway	0	1		3
Oak Glen	5	4	1	
Singleton		1		
Triple Falls Creek	1		2	2
Western Heights	0			
Wildwood	11		3/4	2
Total	22	6	6/4	7

Source: Water Systems Consulting, Inc., 2016

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The other main groundwater source is the San Timoteo Basin which is not adjudicated so there are no reliable estimates of groundwater pumping. One additional source is the Beaumont Basin, where the water table is between 700 and 1000 ft. It is estimated the Beaumont Basin has a storage capacity of 1M AF.

Surface Water

In 2015, local surface water was used from creeks that drain into the Santa Ana River. The District has maintained surface water resources from the Oak Glen area since 1900. The District's Oak Glen Surface Water Filtration Facility continues to produce drinking water for the Yucaipa Valley. Local surface water supplies provided 2 to 3 percent of the total water demand, 350 AF in normal years, and 175 AF in single and multiple dry years.

Recycled Water

The District began treating wastewater in 1986. The collection system has been expanded steadily so that in 2010 YVWD delivered 2,000 AF of recycled water. The Wocholz Regional Water Recycling Facility was expanded to an 8 MGD treatment facility. Further expansion is anticipated to a capacity of 11 MGD. In 2015, YVWD produced 1,213 AF of recycled water.

Recycled water is used for irrigation of landscaping, including parks and golf courses, and groundwater recharge. YVWD began operations of the current system in 2002. The District will be constructing a Regional Recycled Water Conveyance System to the District's southernmost service area. The extension would involve the construction of a 24 inch recycled water pipeline of approximately 3.5 miles through the City of Calimesa. The pipeline not only would allow service to existing customers but also could provide surplus recycled water to neighboring water agencies.

Table 78 shows current and projected supply of recycled water from 2015 to 2040. It also identifies where and how much will be used for landscape irrigation and groundwater recharge. All the water will be treated by advanced tertiary treatment with salinity control.

Table 78 – YVWD Projected Supply and Uses of Recycled Water Projections, 2015-2040

Use	2015	2020	2025	2030	2035	2040
Landscape Irrigation	1,213	1,651	2,177	2,792	3,490	4,282
Groundwater Recharge	0	2,828	2,861	2,806	2,668	2,436

Source: Water Systems Consulting, Inc., 2016

Current and Projected Supply

Table 79 shows supply sources for 2015 and projections through 2040. The table shows that the District anticipates the need to purchase more imported water and further use of recycled water.

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Table 79 – YVWD Sources of Water Supply and Projections, 2015-2040

Source Type	Source	Quality	Acre-Feet per Year					
			2015	2020	2025	2030	2035	2040
Groundwater	Groundwater Supplies	Potable	9,000	9,000	9,000	9,000	9,000	9,000
Surface Water	Oak Glen Surface Water Filtration Facility	Potable	500	500	500	500	500	500
Purchased / Imported Water	Yucaipa Valley Regional Water Filtration Facility	Potable	4,587	14,900	15,875	16,500	17,700	16,390
Recycled Water	Wochholx Regional Water Recycling Facility	Advanced Tertiary	1,213	4,479	5,038	5,598	6,158	6,718
Total			15,300	28,879	30,413	31,598	33,358	32,608

Source: Water Systems Consulting, Inc., 2016

Table 80 shows the various scenarios required by DWR. It is important to note that supply exceeds demand in all scenarios.

Table 80 – YVWD Supply/Demand Normal, Dry Year, Multi Dry Year Scenarios, 2020-2040

Scenario	2020 (acre-feet)	2025 (acre-feet)	2030 (acre-feet)	2035 (acre-feet)	2040 (acre-feet)
Normal Year					
Supply Totals	28,879	30,413	31,598	33,358	32,608
Demand Totals	-12,891	-13,751	-14,730	-15,815	-17,007
Difference	15,988	16,662	16,868	17,543	15,601
Single Dry Year					
Supply Totals	22,379	23,913	25,098	26,858	26,108
Demand Totals	11,992	12,825	13,775	14,829	15,991
Difference	10,387	11,088	11,323	12,029	10,117
Multiple Dry Year					
First Year					
Supply Totals	24,617	26,304	27,608	29,544	28,719
Demand Totals	12,441	13,288	14,252	15,322	16,500
Difference	12,176	13,016	13,356	14,222	12,219
Second Year					
Supply Totals	24,617	26,304	27,608	29,544	28,719
Demand Totals	12,441	13,288	14,252	15,322	16,500
Difference	12,176	13,016	13,356	14,222	12,219
Third Year					
Supply Totals	24,617	26,304	27,608	29,544	28,719
Demand Totals	12,441	13,288	14,252	15,322	16,500
Difference	12,176	13,016	13,356	14,222	12,219

Source: Water Systems Consulting, Inc., 2016

Wastewater (Reclamation)

The District owns and operates the Wochholz Regional Water Recycling Facility (WRWRF) located at 880 West County Line Road in the City of Yucaipa. The facility has a permitted flow of eight million gallons per day (MGD), and currently the average daily flow is approximately 3.72 MGD. The facility produces partial reverse osmosis (RO) treated and fully disinfected

tertiary recycled water for reuse in the District service area. The WRWRF operates in compliance with the requirements set forth in Order No. R8-2015-0027 (NPDES No. CA0105619) adopted by the Santa Ana Regional Water Quality Control Board (RWQCB) on October 30, 2015 (RWQCB, 2015). Recycled water production complies with Title 22 Water Recycling Criteria (CCR, 2015) and was approved by Division of Drinking Water DDW for non-potable uses.

Tertiary Treatment

Tertiary treatment at the WRWRF consists of a Pall Microfiltration (MF) System that has six units (5 duty and 1 standby). Secondary effluent flows by gravity from the secondary equalization basin to an MF feed wetwell. Six vertical turbine can pumps convey secondary effluent from the wetwell to each MF unit. The pumps provide approximately 52 psi of pressure required for the operation of the Pall system. The system has a 6.7 MGD AADF and 9.2 MGD peak capacity.

Advanced Treatment

Advanced treatment at the WRWRF consists of an existing reverse osmosis (RO) system that removes dissolved salts and reduces the salinity of the recycled water. Waste RO concentrate (brine) is discharged to the Inland Empire Brine Line (IEBL) operated by Santa Ana Watershed Project Authority. The RO system consists of one train with two stages and a nominal capacity of 1,750 GPM (2.5 MGD) permeate flow.

Ultraviolet Disinfection

MF filtrate from the filtrate clearwell and RO permeate from the side-stream RO system combine and flow over a weir to the UV supply basin, which feeds the UV disinfection channels.

For the WRWRF, a low pressure, high output in-channel UV system manufactured by Trojan Technologies was selected and installed. Acceptance was granted for the Trojan UV 3000 Plus unit under the May 2003 NWRI/AWWARF guidelines.

Brine Disposal

The District is required by the Santa Ana RWQCB under order No. R8-2004-0001 to meet TDS and nitrate objectives in the Yucaipa and San Timoteo Basins. The order requires the District to meet TDS limits in the WRWRF effluent, the non-potable water system, and raw SWP water used for groundwater recharge. To comply with this requirement, the District constructed RO treatment facilities for side stream treatment of up to 2.5 MGD of tertiary effluent. The brine discharge from the WRWRF RO system is conveyed via the 15-mile Yucaipa Valley Regional Brine line to the 73-mile IEBL brine line in San Bernardino that carries brine to the Orange County Sanitation District (OCSD) Wastewater Treatment Plant No. 2 in Huntington Beach for treatment and disposal of salts via the OCSD ocean outfall.

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The Yucaipa Valley Regional Brine Line (YVRBL) was completed in 2013 and is permitted for operation. As of April 2016, the District owns 1.608 MGD of pipeline capacity in the IEBL and 0.595 MGD of brine treatment and disposal capacity via facilities owned and operated by OCSD. This is more than sufficient to manage the approximately 0.44 MGD of brine produced by the WRWRF RO system (assuming 85 percent recovery at the design production rate of 2.5 MGD).

Emergency Preparedness (Supply or Treatment Interruption Capability)

Extended supply shortages are unlikely due to natural disasters or accidents which damage all water sources. However, YVWD's emergency response plan (ERP) includes plans to provide water via its imported and groundwater supply wells and reservoirs. YVWD has about three weeks of average demand volume of storage. This is sufficient water to meet the minimum health and safety requirements of 50 gallons per day per capita for approximately 45,000 residents. This assumes reduction in uses and non-residential or landscape use.

Under emergency power outages or a catastrophic earthquake conditions, the existing storage is expected to provide a supply at minimum demand levels. YVWD also has emergency plans for the WTP, well sites and pipelines in case of earthquake including several portable back-up generators that can be used in the event of an area-wide power outage. These generators can be located on primary well and pump station sites to continue water delivery.

The Wastewater Reclamation Facility has emergency generator supply capability on-site.

Financial Ability to Provide Services

The FY 2017-2018 operating budget totals $26,853,536 for three enterprise funds: water, sewer, and recycled water divisions. The operating budgets for water and sewer are split fairly evenly with water at $13,924,171 and sewer at $12,132,940. The third fund, recycled water, was budgeted for $796,425.

Revenue/Expenditure Budget Trends

Table 81 summarizes the District's financial picture for FY 2014-2015 - FY 2016-2017. The table identifies the three enterprise activities of the District - water, sewer and recycled water. Revenue sources are primarily service charges and property tax. Property taxes are approximately 10 percent of sales. The table shows water revenues increased in FY 2016-2017 primarily due to increased rainfall.

The table also shows that water and recycled water have shown a loss before contributions for the three-year period. With contributions, water has shown in an increase in net position for FY 2014-2015 and FY 2015-2016. Sewer services, with contributions, have shown an increase in all three years. Recycled water has shown a loss even with contributions. Over the three-year period, losses have increased. Indications are the District should review its recycled water program and determine if a rate increase would be appropriate. The change in net position for the District for the period from FY 2014-2015 through FY 2016-2017 has increased in FY 2014-2015 and FY 2015-2016 but decreased in FY 2016-2017.

Yucaipa Valley Water District

Ratios of Revenue Sources

The primary source of revenues is charges for water, sewer and recycled water. Table 81 shows average of revenues sources for the period FY 2014-2015 through FY 2016-2017. The exhibit shows that while the District does receive property tax, it only represents 12 percent of total operating and non-operating revenues. According to the table, sewer service charges are the largest revenue source.

Table 81 – YVWD Revenues and Expenses, FY 15-FY 17

	FY 2015	FY 2016	FY 2017
Operating Revenues			
Water Services	$ 9,502,880	$ 8,646,298	$ 9,650,242
Sewer Services	11,316,511	11,196,247	11,446,746
Recycled Services	443,652	398,567	541,078
Inter-fund Services Provided	153,500	160,000	160,000
Other Revenue	3,420	1,905	1,080
Total Operating Revenues	$ 21,419,963	$ 20,403,017	$ 21,799,146
Non-Operating Revenues			
Interest Income	$ 52,375	$ 90,695	$ 109,528
Property Taxes	2,791,142	2,934,543	3,113,201
Other Income	129,905	88,905	108,832
Total Non-Operating Revenues	$ 2,973,422	$ 3,114,143	$ 3,331,561
Total Revenues	$ 24,393,385	$ 23,517,160	$ 25,130,707
Operating Expenses			
Salaries & Benefits - W	$ 3,662,236	$ 3,499,728	$ 4,169,048
Salaries & Benefits - S	2,818,855	2,624,212	3,050,467
Salaries & Benefits - R	120,819	261,717	442,479
Operating Expenses - W	4,766,899	4,548,256	4,803,011
Operating Expenses - S	3,398,750	3,608,871	4,159,237
Operating Expenses - R	277,540	453,089	614,295
Water Purchases - W	509,584	920,056	1,637,696
Depreciation & Amortization - W	3,287,958	3,312,043	3,320,698
Depreciation & Amortization - S	4,084,540	4,086,215	4,110,293
Depreciation & Amortization - R	777,079	784,075	797,844
Total Operating Expenses	$ 23,704,260	$ 24,098,262	$ 27,105,068
Non-Operating Expenses			
(Gain)/Loss on Asset Disposal	$ –	$ 12,116	$ 16,244
Bond Issuance cost - W	244,101	–	–
Interest Expense - W	1,572,938	1,121,714	1,084,998
Interest Expense - S	1,147,495	1,111,539	1,044,832
Total Non-Operating Expenses	$ 2,964,534	$ 2,245,369	$ 2,146,074
Total Expenses	$ 26,668,794	$ 26,343,631	$ 29,251,142
Income (Loss) Before Contributions - W	$ -1,624,707	$ -1,709,210	$ -2,207,500
Income (Loss) Before Contributions – S	56,248	-42,615	-628,275
Income (Loss) Before Contributions - R	-706,950	-1,074,646	-1,284,660
Total Income (Loss) Before Contributions	$ -2,275,409	$ -2,826,471	$ -4,120,435

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	FY 2015	FY 2016	FY 2017
Contributions			
Capital Contributions - W	$ 10,622,515	$ 3,108,944	$ 1,072,451
Capital Contributions - S	1,531,760	2,132,714	989,177
Capital Contributions - R	93,624	195,886	194,304
Total Capital Contributions	$ 12,247,899	$ 5,437,544	$ 2,255,932
Change in Net Position - W	$ 8,997,808	$ 1,399,734	$ -1,135,049
Change in Net Position - S	1,588,008	2,090,099	360,902
Change in Net Position - R	-613,326	-878,760	-1,090,356
Beginning Net Position	$ 184,332,530	$ 194,305,020	$ 196,916,093
Ending Net Position	$ 194,305,020	$ 196,916,093	$ 195,051,590

Sources: Yucaipa Valley Water District 2016, 2017

Ratio of Reserves or Fund Balance to Annual Expenditures

An indicator of the ability to absorb an unexpected loss of revenue in a given fiscal year is exhibited by the amount of unrestricted cash reserve or fund balance the service fund maintains in relation to the annual fund expenditures. From the period of FY 2012-2013 through FY 2016-2017, the unrestricted net position for the water division was $6,075,384, for sewer $4,648,920, and for the recycled division $504,149. That represents 44 percent of FY 2017-2018 water division budget, 38 percent of the FY 18 sewer division budget, and 63 percent of the FY 2017-2018 recycled division budget. Each division has nearly six months unrestricted reserves in case of an emergency.

Annual Debt Service Expenditures to Total Annual Expenditures

The ratio of annual debt service to total fund annual expenditures is an indicator of the agency's ability to meet debt obligations in relation to service provision expenditures. Ideally, a ratio of ten percent or less would reflect a very stable ratio.

Both water and sewer have outstanding long-term debt. In 2004, the District formed the Yucaipa Valley Water District Financing Corporation to issue revenue bonds for capital improvements to the water system. Shortly after formation, the $45.73 million of revenue bonds were issued by the corporation. The bonds were refinanced in 2015 at a lower interest rate. The YCWD bond payment for water service bonds is $1.03 million in principal and $1.265 million in interest, or $2.39 million, which represents 17 percent of FY 2017-20 18 water division expenditures. If ten percent represents a stable debt ratio to expenditures, the water division debt is a little high.

The sewer debt service expenses are associated with the State Revolving Fund Loan used for the expansion and upgrade of the Wocholz Regional Water Recycling facility and other recycled water facilities. The associated principal and interest with the long-term debt is shown in Table 82. Total payments for principal and interest in the FY 2017-2018 budget are $3.9 million which represents 32 percent of total sewer service expenditures.

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Table 82 – YVWD Sewer Services Long Term Debt and FY 18 Payments

Debt	Due	Amount Borrowed	Principal	Interest	Total
Wochholz Regional Water Recycling Expansion	2028	$44.78M	$2.199,524	$775,696	$2.930,000
Yucaipa Valley Regional Brineline	2032	$9.75M	$423,936	$236,483	$649,274
Wocholz Improved Salinity Effluent Project (W.I.S.E)	2033	$2.988M	$130,782	$57,285	$185,251
Recycled Water Reservoir R-10-3	2033	$871,570	$38,318	$16,784	$54,277
Crow Street Recycled Water Pipeline and Booster b=12.1	2035	$310,179	$13,014	$5,459	$19,254

Source: Yucaipa Valley Water District, 2018

Rate Structures

The District charges a $14 monthly water service charge plus $1.429 per thousand gallons. The sewer charge is a flat rate of $42.43 per month. The recycled water charge is the same, $1.429 per thousand gallons.

Capital Improvement Program/Plan

The District has identified three major capital improvement projects for its water and recycled water enterprise activities. The water projects are classified as important while the recycled water project is considered critical. The water projects are slated for FY 2017-2018 while the recycled project is scheduled for FY 2018-2019. Key features of the projects are summarized in Table 83. The District has plans to spend another $25 to $30 million on capital improvements over the next ten years.

Table 83 – YVWD Major Capital Improvement Projects, FY 2018

Division	Category	Title	Cost	Funding Source		Year
Water	Source & Supply	Salinity Concentrate Reduction	$5.3 M	Reserves Dev Fees Other	$ 1.8 M $ 1.5 M $2 M	2018
Water	Well Construction	Redrilling Well No. 35	$2.5 M	Reserves Dev Fees Local Match	$0.5 M $1 M $1 M	2019
Recycled Water	System Improvements	Calimesa Recycled Water Conveyance Pipeline	$4.675 M	Reserves Other	$2.375 M $2.3 M	2018

Source: Yucaipa Valley Water District, 2017

Pension Liability and Other Post-Employment Benefits Liability

California law requires an annual calculation of the Net Pension Liability and contribution for each participating agency. This calculation is utilized by the agency to budget for and make contributions to CALPERS toward its unfunded liability balance. In 2017, the District contributed $697,729 toward the pension services. As of June 30, 2017, the District reported a

liability of $5,665,085 for both water and sewer services. The FY 2016-2017 audit contains a detailed description of the calculation of benefit and unfunded liability.

Status and Opportunities for Shared Facilities

The District lies in the Yucaipa sub-basin which can be used for groundwater recharge. The District is working with other local agencies (Valley District, Redlands, San Gorgonio Pass Water Agency, South Mesa Water Company, Western Heights Water Company, and the City of Yucaipa) to develop a basin wide conjunctive use program in the Yucaipa basin to meet normal annual demands and demands during drought years.

The District is also working with 15 other water purveyors in the San Bernardino Valley on the Integrated Regional Water Management Plan.

In the Yucaipa Basin, there is the potential for a salt imbalance and potential nitrate imbalance in the ground water. The District worked on a Salinity Management Plan to identify potential long-term options to address the need for additional salt removal.

In 2008, the Board adopted the Strategic Plan for a Sustainable Future – the Integration and Preservation of Resources. The plan looked at the steps the District has taken to improve the social, economic and environmental sustainability of the community.

One measure of management efficiency is whether the agency engages in planning activities. The District had produced a number of planning documents including the YVWD Brine Line Master Plan, the YVWD Water Master Plan and the YVWD Wastewater Master Plan.

Government Accountability

The District is governed by a five-member Board of Directors elected by district to four-year staggered terms (Table 84). The Directors receive $147.56 per meeting with a maximum of 10 meetings per month. They receive a health benefit of $1,286 per month. If they do not use this benefit for health services, they have the option to roll it over to Deferred Compensation or be paid.

Table 84 – YVWD Board of Directors

Board Member		Term Expires
Chris Mann	Division 1	2020
Bruce Granlund, Vice President	Division 2	2022
Jay Bogh, President	Division 3	2022
Lonni Granlund	Division 4	2020
Joyce McIntire	Division 5	2022

Source: Yucaipa Valley Water District, 2018

Meetings are held on the first and third Tuesday of the month at 6 pm at the District offices at 12770 Second Street in Yucaipa. Meetings are noticed on the website and held according to

the Brown Act. The District's website is user-friendly and has easy access to the Board of Director's agendas, minutes, public notices, budgets, audits and other key documents.

Staffing

The Yucaipa Valley Water District contracts with private companies for professional engineering tasks and does not rely upon private companies or joint powers authorities for administrative, management and/or operational functions. The District uses a matrix management approach whereby staff works in a series of cross-functional teams that allow for maximization of efficiency and effectiveness. There are four functioning workgroups, management, public works, water resources, engineering, administration, and integrated water, sewer and recycled water operations. There are 75 positions with 15 vacancies as of May 2018.

Boundary and SOI Issues

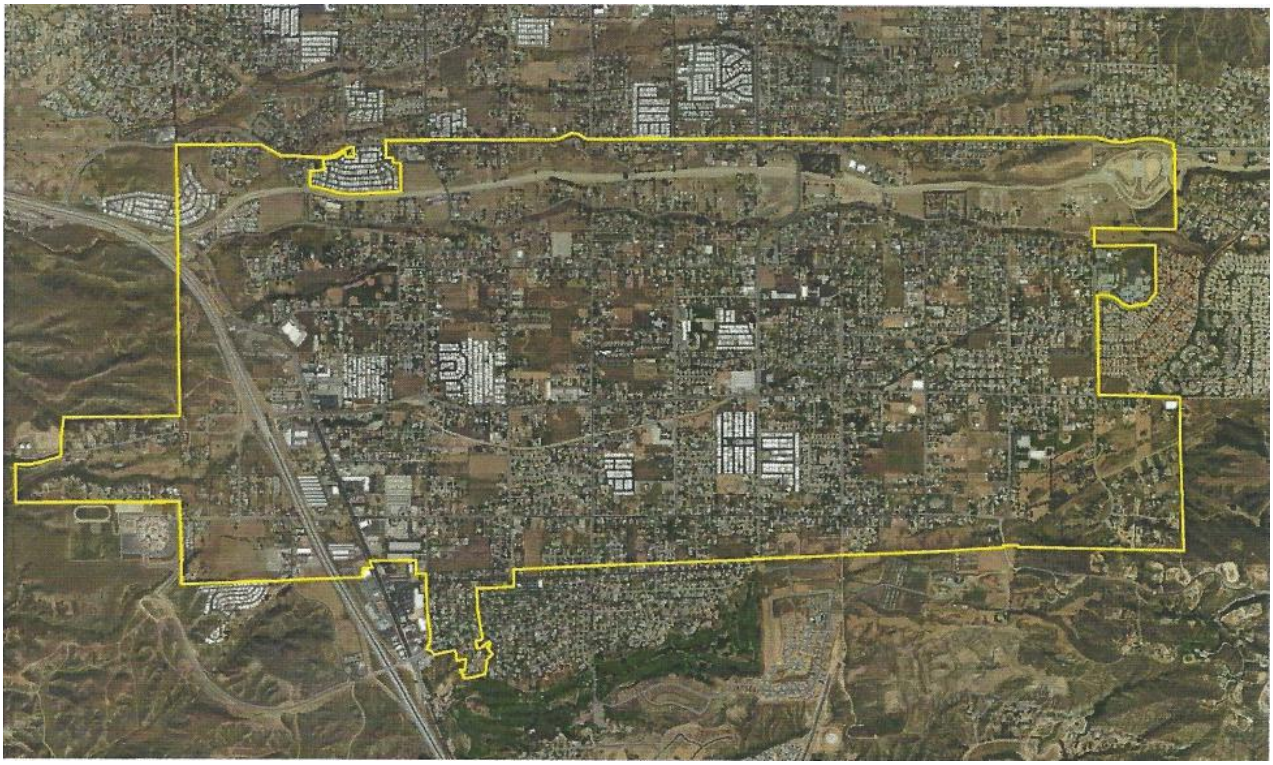
On February 8, 2018, the YVWD sent copies of correspondence directed to the South Mesa Mutual Water Company to resolve an alleged boundary discrepancy. This correspondence included a map delineating the area whereby drinking water service is provided by South Mesa Mutual Water Company within the service area of the YVWD. The District has suggested the boundary shown in Exhibit 13 as the area in YVWD that receives water from SMMWC.

YVWD would like LAFCO to consider modifications to the District's Sphere of Influence in the undesignated sphere area as shown in Exhibit 13 below.

YVWD suggested a Sphere of Influence modification to this area to provide for proper planning for development between the Yucaipa Valley Water District and the Beaumont-Cherry Valley Water District. YVWD provided this suggestion in previous Municipal Service Reviews due to the fact that the area can easily be provided drinking water, recycled water, and sewer services by the YVWD.

Yucaipa Valley Water District

Exhibit 13 – Area in the South Mesa Water Company Service Area in Question



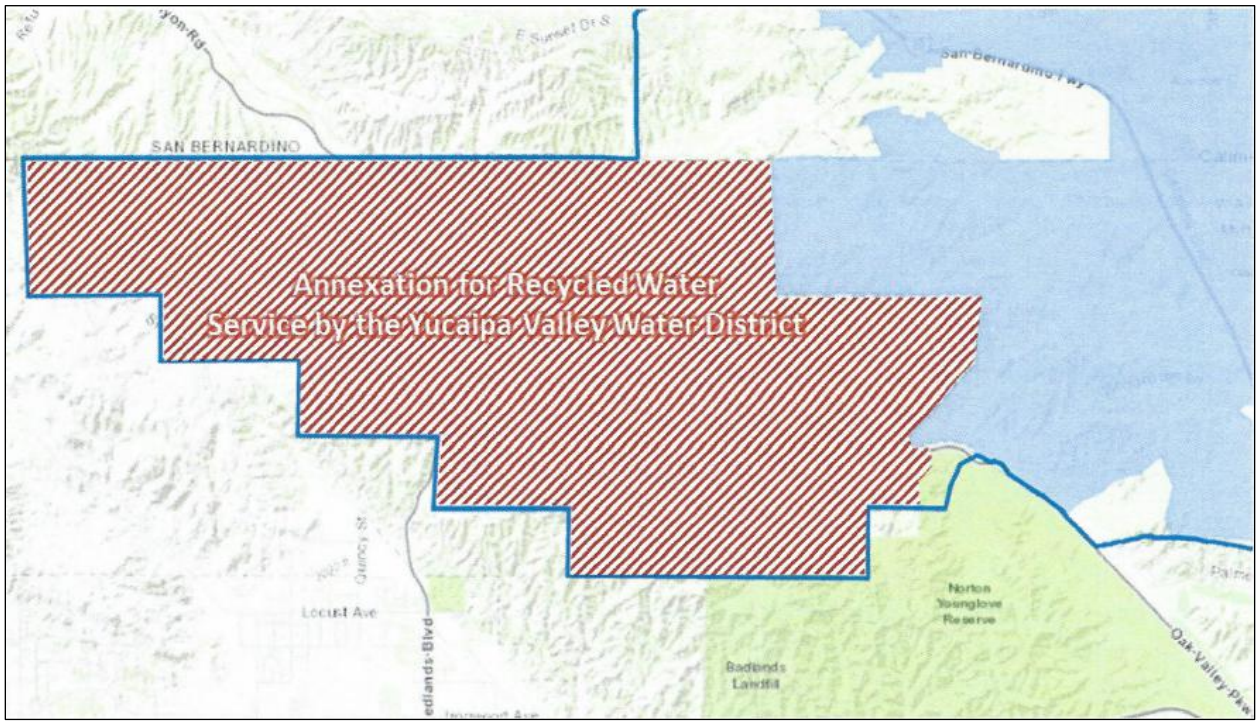
YVWD maintains a permit from the State Water Resources Control Board that requires recycled water only be used in the service territory of YVWD and not outside of the District's service territory by contract.

YVWD has received interest from property owners in San Timoteo Canyon (Exhibit 14) to receive recycled water for their agricultural irrigation instead of using local groundwater supplies. The use of recycled water in San Timoteo Canyon for agricultural, recreational, and habitat uses is consistent with the Sustainable Groundwater Management Act, State Water Resources Control Board requirements, the Regional Water Quality Control Board basin plan objectives, and the Riverside County Multiple Species Habitat Conservation Plan.

An annexation of San Timoteo Canyon for recycled water service by YVWD would: 1) not conflict with any other utility or service provider within the District's existing sphere of influence; 2) be an instrumental for additional agricultural development in San Timoteo Canyon; 3) enhance the wildlife corridors in the region; and 4) help to facilitate the reestablishment of wetlands at El Casco Lakes.

Yucaipa Valley Water District

Exhibit 14 – San Timoteo Canyon Annexation Area



LAFCO Policies Affecting Service Delivery

The District has indicated an interest in expanding its sphere and a possible annexation. LAFCO sphere policies would apply.

Potential Issues

1. The District currently needs to review the funding levels for the replacement of water related infrastructure including wells, reservoirs, pipelines and booster stations. A category of funding has been developed to start the process of project funding. Further evaluation by District staff is necessary to adequately fund the infrastructure replacement needs of the District.

2. Resolution of the boundary dispute with South Mesa Mutual Water Company.

3. Consider annexation of the San Timoteo Canyon to provide recycled water.

5. Municipal Service Review Determinations- Pass/Mountain Region

1. Growth and population projections for the affected area

Projections of growth provided by the agencies, Census data, Urban Water Management Plans, Sewer Master Plans and other resources indicate that growth will occur throughout much of Riverside County's Pass/Mountain County Region over the next 20 years. Several agencies including Cabazon County Water District, Fern Valley County Water District, High Valleys County Water District, Idyllwild County Water District, Pine Cove County Water District and Pinyon Pines County Water District are projected to experience no or very limited population growth.

2. Location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence

Within the Pass/Mountain Area County Region, Riverside LAFCO has identified a number of disadvantaged unincorporated communities (DUCs) within or contiguous to the agency spheres of influence. All identified DUCs are currently provided water and sewer service by existing agencies through contract or have the opportunity to connect to such services in the future should homeowners elect to do so. Identified agencies with DUC's to be addressed are:

- City of Beaumont: Highland Springs area referred to as Cherry Valley West in the SOI.
- Beaumont Cherry Valley WD: Highland Springs is within the boundary of the District; there are no DUC's within or adjacent to the SOI.

3. Present and planned capacity of public facilities, adequacy of public services, and infrastructure needs or deficiencies, including needs or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the sphere of influence

Based on expected supplies from Metropolitan and the State Water Project, and local supplies from groundwater, through data and reports supplied by the agencies, the water service providers within the Pass/Mountain Area County Region have adequate water to meet future needs. Wastewater providers, through upgrading existing facilities and constructing new facilities, can also meet future wastewater needs within the region. The agencies adequately generally address infrastructure needs and deficiencies through master plans, Capital Improvement Plans and other long-range planning documents. Only one agency, Pinyon Pines CWD is limited to a single well source situation. As stated

above, identified DUCs in the Pass/Mountain Area County Region are currently provided water and sewer service or have the opportunity to connect to such services in the future.

4. Financial ability of agencies to provide services

All of the agencies prepare comprehensive annual budgets. Most maintain annual Capital Improvement Plans, and maintain adequate and appropriate reserves. For most of the agencies within the Pass/Mountain Area County Region, the amount of reserves held is matched to CIP and other infrastructure improvements. All agencies reviewed reported unqualified audits prepared in accordance with generally accepted accounting standards.

5. Status of, and opportunities for, shared facilities

There is extensive agency collaboration within agencies of the Pass/Mountain Area County Region. Excess capacity, facilities and staff are made available whenever possible. The agencies increase opportunities for shared facilities through joint powers agreements, inter-ties, service agreements and industry groups. Several agencies are in mountain areas separated from suburban services but cooperate with each other where possible. Specific cooperative programs are listed below by agency:

City of Banning: One of five members of Beaumont Basin Watermaster over the Beaumont Basin; Member of the San Gorgonio Regional Management Group, sponsors of the regional IRWMP; Member of the Beaumont Management Zone (BMZ) Maximum benefits Program, supporting long-term sustainability of water quality in the zone; Party to flume improvement project with Banning Heights Mutual Water Co. and Southern California Edison; joint owner with Beaumont-Cherry Valley WD of three wells since 2003.

City of Beaumont: City Council is the Board of the Beaumont Financing Authority and Beaumont Utility Authority overseeing financing of projects.

Beaumont-Cherry Valley WD: agreements to convey recycled water from City of Beaumont WWTF, Interagency agreement with City of Banning, South Mesa Water Co., Yucaipa Valley WD and San Gorgonio Pass WD for sharing water; cooperative agreement with Riverside County Flood Control and other agencies for basin recharge; member of the Beaumont Basin Watermaster Group.

Cabazon CWD: participant in San Gorgonio Pass Water Agency SGMA process along with other area agencies.

San Gorgonio Pass Water Agency: as wholesale agency, supplies portions of water to City of Banning, Beaumont-Cherry Valley WD, Yucaipa Valley WD and City of Calimesa. Member of the San Gorgonio Regional Management Group sponsoring a regional IRWMP.

Yucaipa Valley WD: cooperative agreement with City of Yucaipa, Valley District and other agencies to develop a conjunctive use program in the Yucaipa Basin; participant in the San Bernardino Valley IRWMP.

Fern Valley WD, Idyllwild County WD and Pine Cover County WD: the three districts cooperate as needed for operations and emergencies and have had previous discussions concerning possible consolidation, but these were discontinued in mid-2018. There may be opportunities to consider some functional sharing of services as an interim step to more cooperation.

6. Accountability for community service needs, including governmental structure and operational efficiencies

The governing bodies of the agencies are locally accountable through adherence to applicable government code sections, open and accessible meetings, and dissemination of information. All agencies have websites which help to promote transparency and accountability as well as allowing public oversight of agency activities.

There had been discussions among the three San Jacinto Mountain area districts of Idyllwild, Pine Cove and Fern Valley to study possible consolidation; however, in early 2018 the Pine Cove and Fern Valley districts each decided to not consider a consolidation study. As a result of completion of this MSR it may be possible for these discussions to be reconsidered within the communities.

Some agencies lack mapping capabilities. All agencies are encouraged to develop standardized mapping systems and submit updated maps to LAFCO on a regular basis.

7. Any other matter related to effective or efficient service delivery, as required by commission policy

No other matters related to effective or efficient service delivery were identified by Commission policy.

List of Tables

List of Exhibits