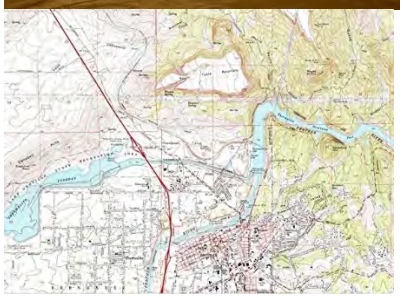
# Water and Wastewater Service
# In
# Oroville Area
# MUNICIPAL SERVICE REVIEW UPDATE

*Draft*



*Prepared for:*

**Butte LAFCO**

May 1, 2023

Featuring:

City of Oroville Wastewater Service
Lake Oroville Area Public Utility District
Sewerage Commission Oroville Region
South Feather Water and Power Agency
Thermalito Water and Sewer District

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DRAFT

Municipal Service Review Update

# OROVILLE AREA WATER AND WASTEWATER

City Of Oroville
Lake Oroville Public Utility District
Sewerage Commission Oroville Region
South Feather Water And Power Agency
Thermalito Water And Sewer
CalWater - Oroville

*Prepared by:*

SWALE inc

*Prepared for:*

Butte LAFCO

https://www.buttelafco.org/

Report Date: May 1, 2023

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**APPENDICES**

# ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| ACS | American Community Survey |
| ADD | Average Day Demand |
| ADWF | Average Dry Weather Flow |
| AF | Acre Feet |
| AF/Yr | Acre Feet Per Year |
| AMP | Asset Management Plan |
| BMP | Best Management Practices |
| CAFR | Comprehensive Annual Financial Report |
| CDF | California Department of Forestry |
| CEC | California Energy Commission |
| CEQA | California Environmental Quality Act |
| CDFW | California Department of Fish and Wildlife |
| CFR | Code of Federal Regulations |
| CIP | Capital Improvement Plan |
| CKH | Cortese-Knox-Hertzberg Reorganization Act of 2000 |
| COR | City Of Oroville |
| CPUC | California Public Utilities Commission |
| CTR | California Toxics Rule |
| CVP | Central Valley Project |
| CY | Calendar Year |
| DAC | Disadvantaged Community |
| DOC | California Department of Conservation |
| DUC | Disadvantaged Unincorporated Community |
| DWR | Department of Water Resources |
| EDU | Equivalent Dwelling Unit |
| EPA | U. S. Environmental Protection Agency |
| FAR | Floor Area Ratio |
| FERC | Federal Energy Regulatory Commission |
| FTE | Full-Time Equivalent |
| FY | Fiscal Year |
| GAAP | Generally Accepted Accounting Principles |
| GASB | Government Accounting Standards Board |
| GHG | Greenhouse Gas |
| GIS | Geographic Information System |
| GPM | Gallons per Minute |
| GSA | Groundwater Sustainability Agency |
| HUC | Hydrological Unit Code |

| | |
|---|---|
| I/I | Infiltration and Inflow |
| IMS | Irrigation Management System |
| LAFCO | Local Agency Formation Commission |
| LOAPUD | Lake Oroville Area Public Utility District |
| MDD | Maximum Daily Demand |
| MGD | Million Gallons per Day |
| MHI | Median Household Income |
| MOU | Memorandum of Understanding |
| MTP/SCS | Metropolitan Transportation Plan/Sustainable Communities Strategy |
| MSR | Municipal Services Review |
| NACWA | National Association of Clean Water Agencies |
| NEPA | National Environmental Policy Act |
| NPDES | National Pollutant Discharge Elimination System |
| O&M | Operation and Maintenance |
| PRC | California Public Resources Code |
| PUD | Public Utility District |
| RTP | Regional Transportation Plan |
| RWQCB | Regional Water Quality Control Board |
| SCADA | Supervisory Control and Data Acquisition; a software application |
| SCOR | Sewerage Commission Oroville Region |
| SCS | Sustainable Communities Strategy |
| SCO | State Controller's Office |
| SFR | Single Family Residence |
| SFWPA | South Feather Water And Power Agency |
| SGMA | Sustainable Groundwater Management Act |
| SOI | Sphere of Influence |
| SSMP | Sewer System Management Plan |
| SWPPP | Storm Water Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TWSD | Thermalito Water And Sewer |
| USBR | U.S. Bureau of Reclamation |
| UWMP | Urban Water Management Plan |
| WMP | Water Master Plan |
| WRF | Water Recycling Facility |
| WTP | Water Treatment Plant (for drinking water) |
| WWTP | Wastewater Treatment Plant |

# CHAPTER 1: EXECUTIVE SUMMARY



## 1.1 Overview

This Municipal Service Review (MSR) examines how municipal water and wastewater services are delivered to the Oroville Area by six providers:

- One charter city, the City of Oroville (Chapter 3);
- Three independent special districts, Lake Oroville Area Public Utility District (Chapter 4); the South Feather Water and Power Agency (Chapter 6); Thermalito Water and Sewer District (Chapter 7);
- One joint powers agency (JPA), Sewerage Commission – Oroville Region (Chapter 5); and
- One private company, Cal Water -Oroville.

In addition, this MSR Update discusses service delivery and efficiency, including an analysis of each of the following analytical factors:

- Growth and population projections for the three affected areas;
- Disadvantaged unincorporated communities;
- Present and planned capacity of public facilities;
- Financial ability of each agency to provide services;
- Opportunities for shared facilities;
- Accountability for government service needs; and
- Any other matter related to service delivery as required by Commission Policy.

Throughout this document, acronyms are utilized to refer to the six service providers as follows:

- City of Oroville (COOR)
- Lake Oroville Area Public Utility District (LOAPUD)
- South Feather Water and Power Agency (SFWPA)

- Thermalito Water and Sewer District (TWSD)
- Sewerage Commission – Oroville Region (SC-OR)
- Cal Water – Oroville (CWS)

The six service providers have been previously reviewed by Butte LAFCo, as listed in Table 1-1 below. These previous MSRs and Sphere of Influence (SOI) studies are available upon request to LAFCO as listed at: https://www.buttelafco.org/contact

Table 1-1: Previous MSRs, SOIs, and Special Studies for Water and Wastewater Service Providers in the Oroville Area

| Title | Year | Providers Studied |
|---|---|---|
| Domestic Water and Wastewater Service Providers MSR | June 1, 2006 | LOAPUD, COOR, SC-OR, Thermalito Irrigation District (now TWSD), SFWPA, CWS |
| Wastewater Service Providers MSR | November 5, 2009 | LOAPUD, COOR, SC-OR, TWSD |
| Municipal Service Review of Irrigation, Drainage, And Reclamation Service Providers | January 2007 | SFWPA |
| City Of Oroville MSR Update and SOI Plan Update | December 4, 2014 | COOR |
| Oroville Region Water Service Study | May 1, 2018 | TWSD, SFWPA, CWS |

This MSR also presents a written statement of conclusions, known as determinations, for the affected service providers'. The key facts that support each determination are discussed in Chapters 3-7. The areas of description and analysis contain the essential operational and management aspects of the six service providers and constitute a review of each provider's ability to meet the service demands of the customers within their respective boundaries. Only municipal water and wastewater services are considered in this MSR Update. These services are primarily provided to residents and visitors by the six service providers in cooperation with Butte County and the City of Oroville. Boundaries and spheres of influence (SOI) are determined by the Local Agency Formation Commission (LAFCo) for the COOR, SFWPA, TWSD, and LOAPUD. CWS, as a private cooperation/public utility, has a service area approved by the CA Public Utilities Commission.

Demographic information for Butte County is provided in Appendix A, and for the City of Oroville in Appendix B. Several options for the Commission to consider when they next update the SOI for the six service providers under LAFCo oversight are described in Appendix C. Laws and regulations related to the provision of Municipal Water are described in Appendix D. Public Water Systems in Butte County are listed in Appendix E. U.S. EPA Drinking Water Regulations related to water quality are described in Appendix F. Laws and regulations related to the provision of wastewater and sewer services are described in Appendix G. A summary of economic information for Butte County is provided in Appendix H. Appendix I describes the Feather River Watershed

Near Oroville, CA. Appendix J describes the flood risk in Oroville. Appendix K shares Water and Wastewater Recommendations from the American Society of Civil Engineers. Cal Water – Oroville is analyzed as a service provider in Chapter 8. Appendix L describes Butte County and the Oroville Area housing programs and data.

In recent years, the six water and wastewater agencies have had to address numerous crises, including:

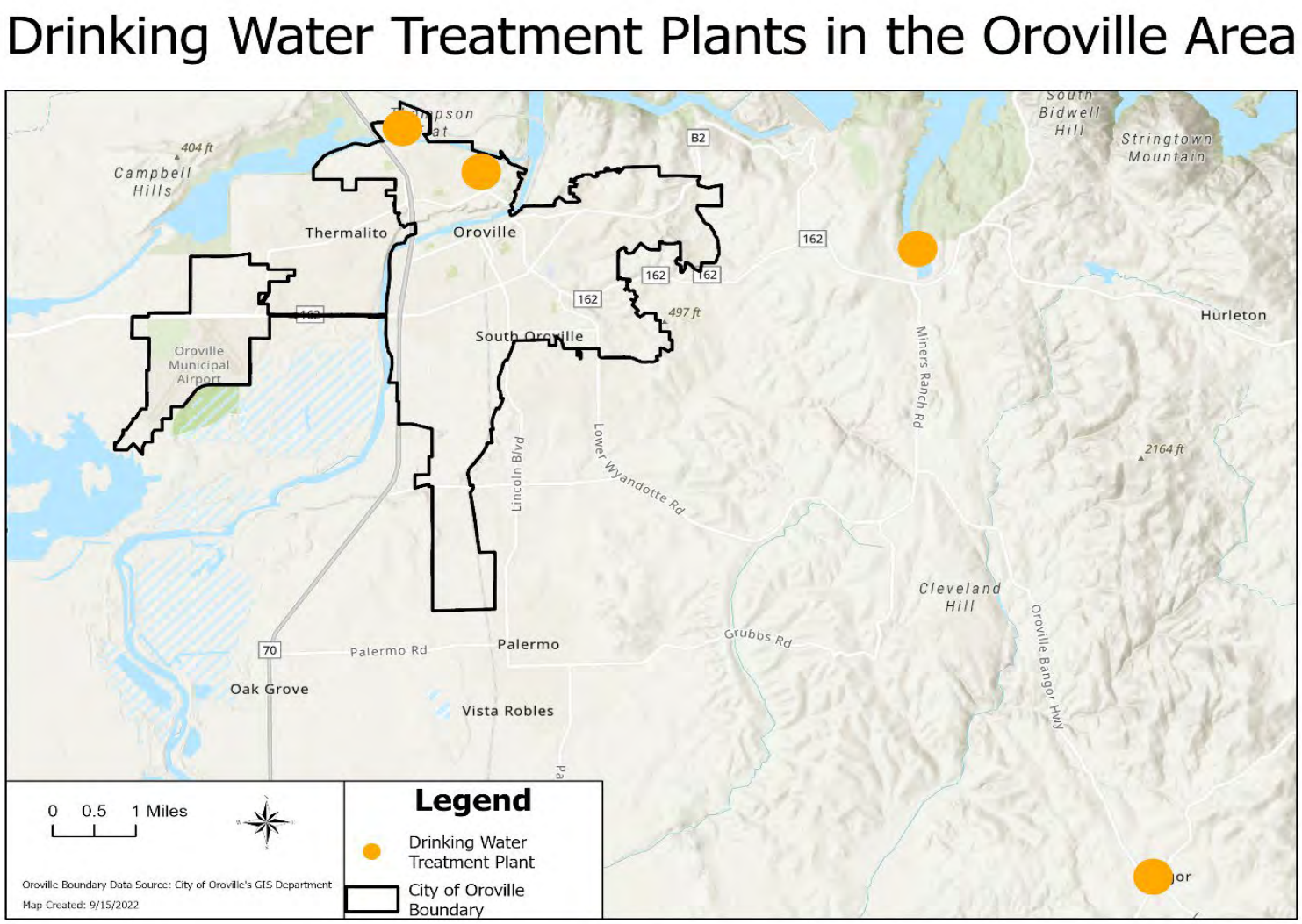
- 2017 Oroville Dam Crisis
- 2018 Wall Fire
- 2018 Camp Fire
- 2019 Public Safety Power Shutoffs
- 2020 COVID-19 Stay-at-Home Executive Order

These events created challenges for local government agencies, but each agency studied in this MSR met and addressed its obligations. For example, several agencies have coordinated with the Butte County Office of Emergency Services to create a chapter in the Local Hazard Mitigation Plan. Details about each district's plans are described in detail in their respective chapter.

Key Issues

This MSR analysis describes several key issues regarding service provision. The most significant issue relates to the duplicity of the current service provisions within the Oroville region, including three independent sewer collection systems, three independent public water distribution systems, and four drinking water treatment plants that provide service to the Oroville Area, as shown in Figure 1-1 below. Two water treatment plants are operated by SFWPA, one near Lake Oroville and one in nearby Bangor. TWSD operates one water treatment plant, and it is located on Table Mountain Blvd., near the Thermalito Power Canal. Cal Water – Oroville also has a drinking water treatment plant located near the Thermalito Power Canal.

Figure 1-1: Four Water Treatment Plants in the Oroville Area

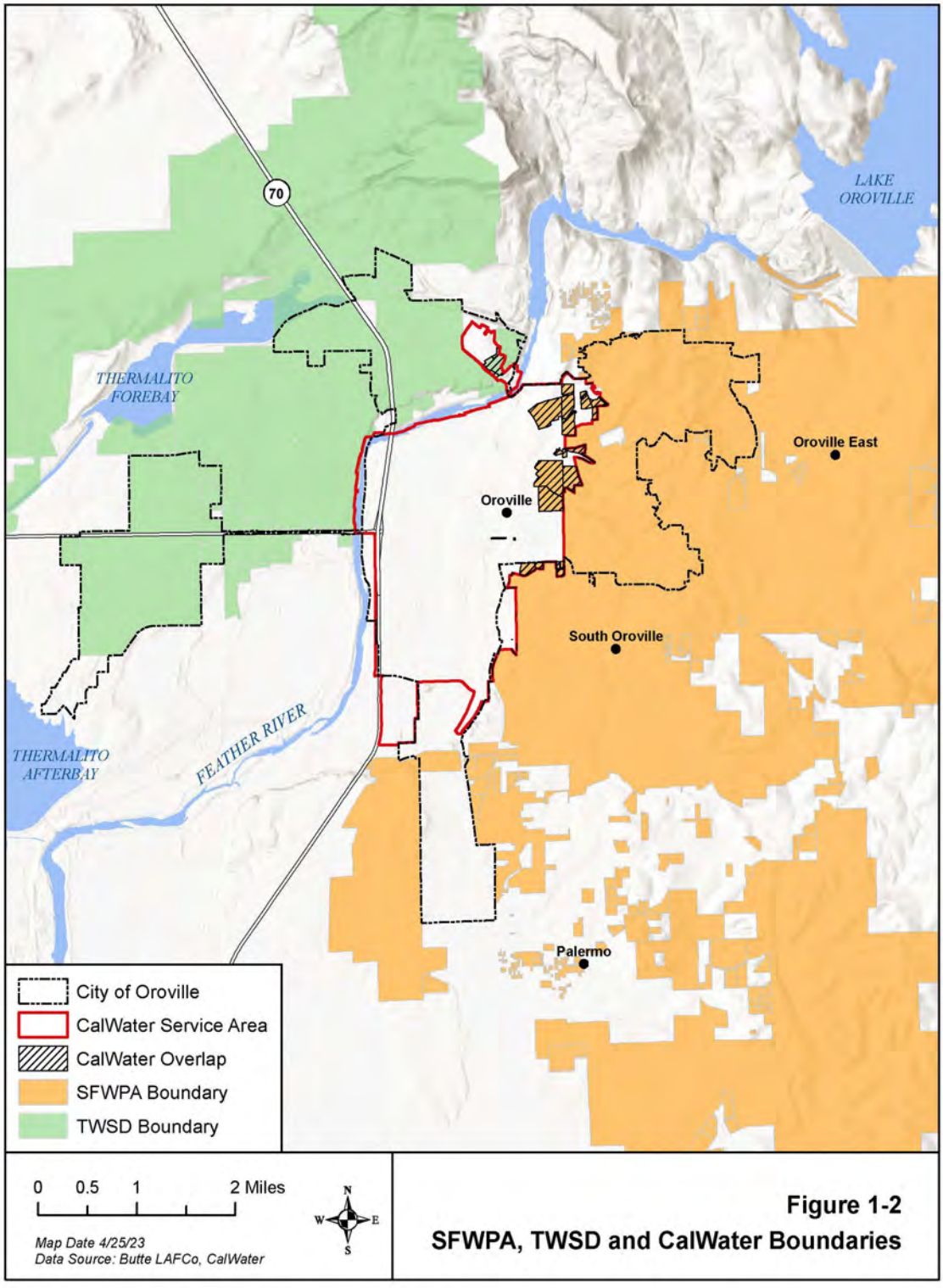


Another key issue relates to water affordability. The Butte Local Agency Formation Commission (LAFCO) prepared a study on water utility service in the greater Oroville area in 2018, including Cal Water's Oroville service area. The report, titled "Oroville Region Water Service Study," compared the costs and operations among three water service providers: South Feather Water and Power Agency (South Feather) and Thermalito Water and Sewer District (Thermalito), and Cal Water. The study identified key differences among the water service providers. For example, the study highlighted the fact that "Cal Water pays taxes" while South Feather and Thermalito "do not" (LAFCO, 2018). As Chapters 3-7 describes, there are several disadvantaged communities locally. Residents in these areas may dedicate a higher percentage of their income toward paying their water bill.

The third key issue is the geographic overlap between service providers' boundaries and/or SOI. The areas of geographic overlap are discussed in the individual chapter for each service provider. One example of geographic overlap is the overlap between the Cal Water – Oroville service area with the boundaries of TWSD and SFWPA, as shown in Figure 1-2 (next page).

## 1.2 Cross-Comparisons

This section compares geographic, demographic, and service-related information among the service providers. Key information and determinations are standardized to the extent possible in chapters 3 to 7 for each agency. Butte LAFCO has a standard cross-comparison table to summarize local agencies, and this data is shown in Table 1-2 below.


70
LAKE OROVILLE
THERMALITO FOREBAY
Oroville East
Oroville
South Oroville
FEATHER RIVER
THERMALITO AFTERBAY
Palermo
City of Oroville
CalWater Service Area
CalWater Overlap
SFWPA Boundary
TWSD Boundary
0 0.5 1 2 Miles
N
W
E
S
Map Date 4/25/23
Data Source: Butte LAFCo, CalWater
Figure 1-2
SFWPA, TWSD and CalWater Boundaries

| Table 1-2: Summary of Water and Wastewater Service Providers in Oroville Area | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **District Name** | **Services Provided** | **No. of Parcels (APNs)** | **Estimated Population (2022)** | **Net Position (as of 6-30-20)** | **FY 20/21 Revenue** | **FY 20/21 Expenditures** | **Parcel Assessment (i.e., Property Tax $ Received)** | **Per Capita Expenditures (FY 20/21)** |
| COOR | General government, land use planning and building services, parks, fire protection, and emergency services, law enforcement, roadways and stormwater drainage, and wastewater collection and conveyance services. | 7,447 | 18,863 (2020) | $2,750,158 | $4,303,809 | $5,385,555 | Not applicable to Sewer Enterprise Fund | $286 |
| LOAPUD | Wastewater collection and conveyance | 5,558 | 12,768 (2020) | $9,924,726 | $2,468,806 | $2,021,978 | $347,112 | $158 |
| SFWPA | Raw untreated water for agricultural irrigation; Water treatment and distribution for municipal purposes (residential and commercial); Recreation; and Hydropower. | 11,127 | 16,770 (2020) | $92,594,339 | $17,391,542 | $21,219,507 | $681,269 | $1,265 |
| TWSD | Management of raw water supply, water treatment, and distribution of potable water for residential, commercial, and municipal purposes; Wastewater collection and transport; and Solar | 3,798 | 10,500 (2020) | $19,340,395 | $4,336,141 | $3,553,692 | Not applicable to Water and Sewer Enterprise Fund | $338 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | electricity generation for internal use only. | | | | | | | |
| SC-OR | Wastewater treatment, disposal, Limited wastewater collection, Recycled water production and distribution for irrigation purposes, Solar photovoltaic electricity generation | 14,163 | 42,156 (2020) | $21,883,109 | $5,786,946 | $2,783,765 | Not applicable to Sewer Enterprise Fund | $66 |
| CWS | Water treatment and distribution for residential, commercial, and other domestic purposes. | n/a | 10,849 (2020) | n/a | $4,419,604 in 2015 | n/a | Not applicable to a private company | n/a |
| Data Source: Butte County and Butte LAFCO GIS Data, CA DOF, U.S. Census<br><br>1: The difference between (1) assets and deferred outflows of resources, and (2) liabilities and deferred inflows of resources is called **net position**. | | | | | | | | |

Details for the geographic size of each service provider is listed in Table 1-3 below. The Butte County Assessor establishes assessor parcel numbers (APNs) for every lot in Butte County for tax purposes. The cumulative number of APNs was summed for the service providers as listed in Table 1-3 below.

Table 1-3: Details on Acres and Parcels

| Agency | # of acres in the boundary | # of acres in the SOI only | # of parcels (APNs) in boundary | # of parcels in SOI only |
|---|---|---|---|---|
| COOR | 8,873 | 33,744 | 7,447 | 16,917 |
| LOAPUD | 8,582 | 20,295 | 5,558 | 8,013 |
| SC-OR | 29,189 | 75,200 | 14,163 | 18,148 |
| SFWPA | 33,718 | 64,125 | 11,127 | 11,853 |
| TWSD | 14,873 | 44,101 | 3,798 | 4,383 |
| CWS[1] | 3,449 | 0 | n/a | 0 |

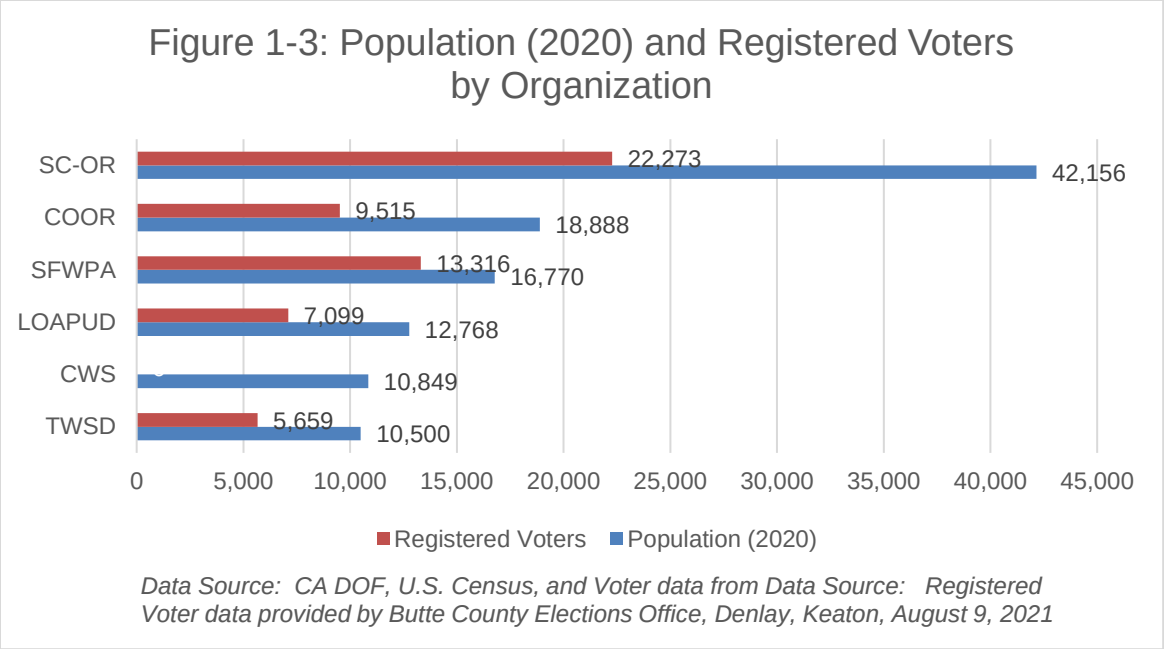
Data Source: Butte County and Butte LAFCO GIS Data

1: Acreage of CWS boundary is estimated because updated GIS data was not provided to the MSR Author.

Please note that Table 1-3 above lists acreage for the proper boundary the City of Oroville at 8,873 acres. However, the City provides wastewater collection service to a smaller area, 5,734 acres.

Population

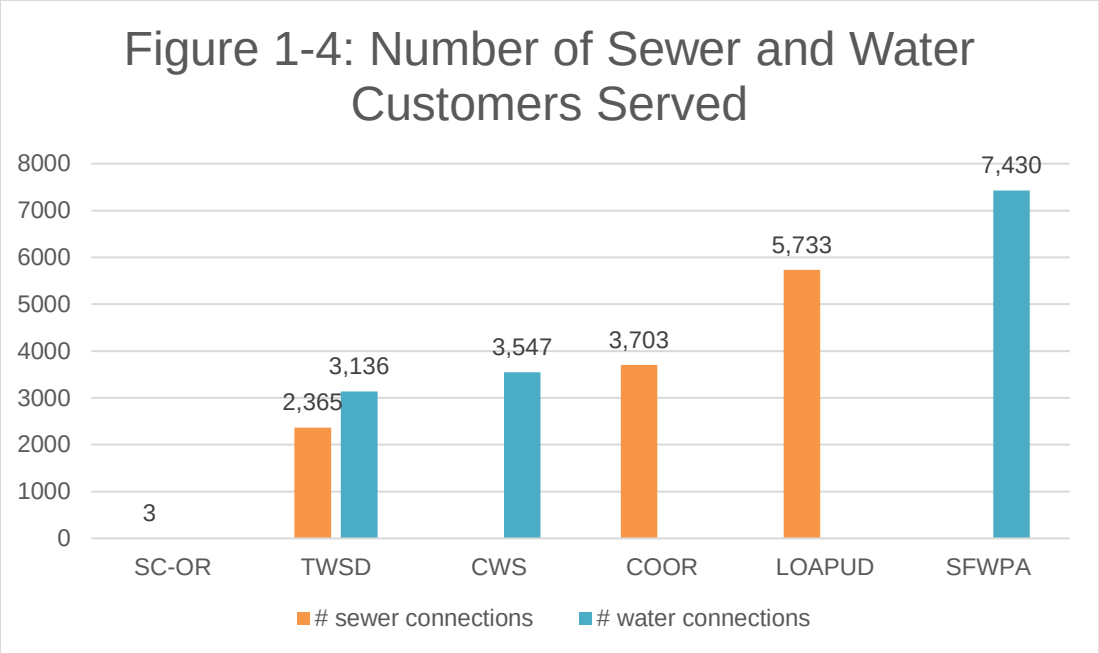
Providing specified municipal services to local residents and businesses is the primary aim of the service providers described herein. Analysis of population trends allows LAFCO to consider whether the service capacity of each service provider is sufficient to serve the existing and projected population. As shown in Figure 1-3, SC-OR has the largest population (42,156) and the largest number of registered voters (22,273). TWSD serves the smallest population (10,500) and the smallest number of registered voters (5,659). Please note that although a significant number of registered voters live within the Cal Water – Oroville boundaries, which is a private company and not involved in elections. Data on the number of registered voters within the CWS boundary was not readily available.




*Data Source: CA DOF, U.S. Census, and Voter data from Data Source: Registered Voter data provided by Butte County Elections Office, Denlay, Keaton, August 9, 2021*

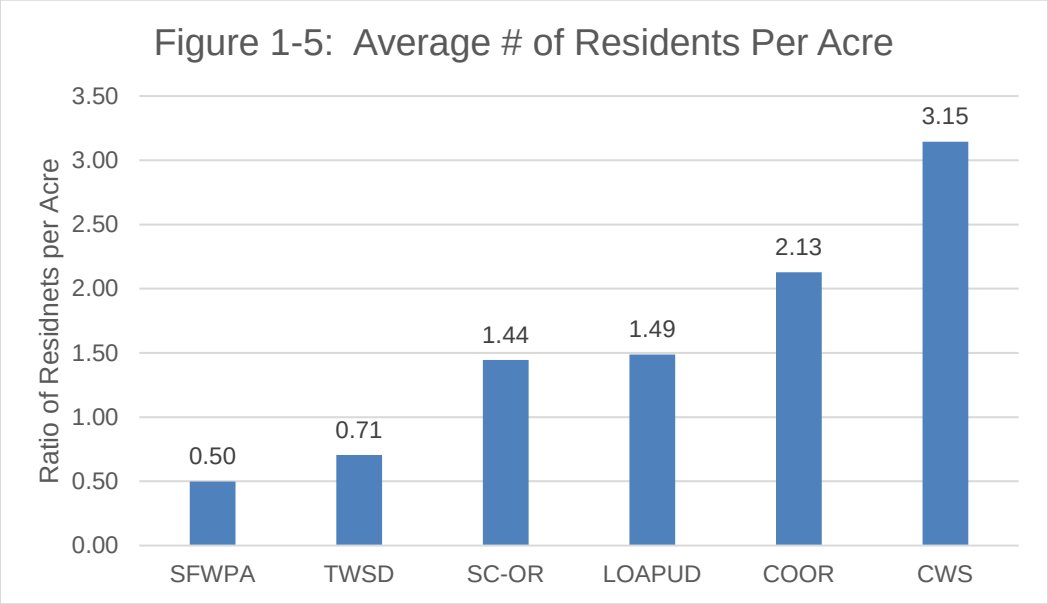
Number of Customers

Since SC-OR is a JPA, it does not provide retail sewer service to individual homes or businesses. Technically, it has only three customers, its member entities including COOR, LOAPUD, and TWSD. The largest retail provider is SFWPA, which provides water service to 7430 customers, including retail customers in the Oroville area, Bangor, and raw water customers, as shown in Figure 1-4 below. TWSD is the only district that provides both water and wastewater collection services in the Oroville Area.



Residents per Acre

Figure 1-5 below shows the average number of residents per acre in each of the six studied population areas. LAFCO consultants utilize the population per acre number as a metric because agencies with a higher population per acre tend to have higher tax revenue as a result of more optimal leverage of land-use economics (Badger, 2012). The higher tax revenue relates to the financial determinations that LAFCO is required to make. The most densely populated area is the boundary area served by Cal Water – Oroville, with 3.15 residents per acre, on average. SFWPA has the lowest density, with an average of 0.50 residents per acre.




Parcel Density

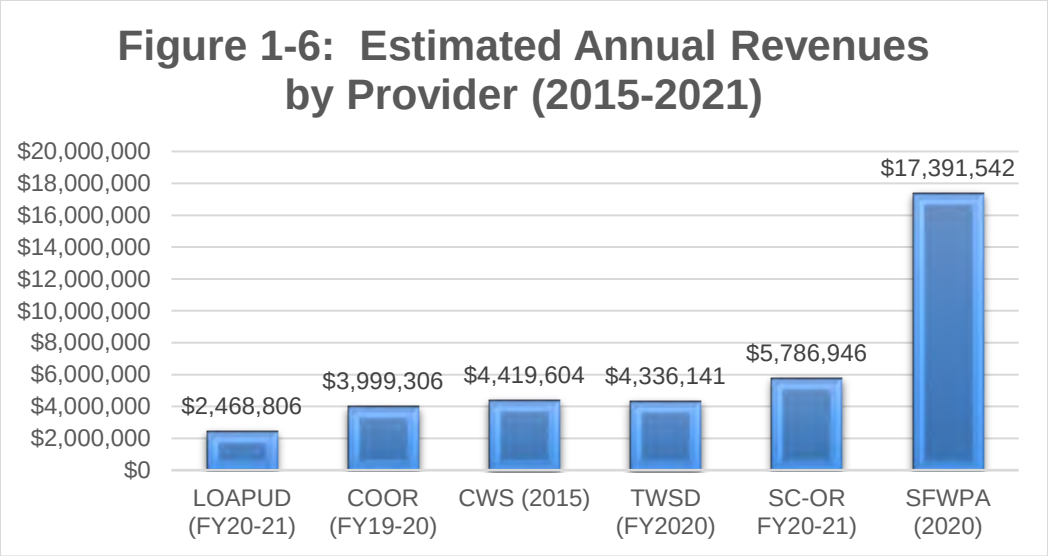
The population density is related to the character of the community (urban or rural) and to the efficiency of providing services. For water and sewer service, it is sometimes more efficient to provide service to homes and businesses that are located in closer proximity. To characterize the population density for each area within a provider's boundary, a density ratio was calculated using the number of acres within a boundary and the number of APNs within a boundary from Table 1-4. The number of APNs relates to parcelization, with smaller parcels likely indicating a higher number of APNs within a given area. Land-use decisions by cities and counties result in a specific density of parcels in an area. This analysis shows that COOR has the highest parcel density per acre at 0.84. TWSD has the lowest parcel density per acre at 0.26, as shown in Table 1-4 below. GIS data was not available for Cal-Water – Oroville, so it is not included in Table 1-4.

| Table 1-4: Parcels per Acre | |
|---|---|
| **Agency** | **Urban Density (# of APNs per acre)** |
| COOR | 0.84 |
| LOAPUD | 0.65 |
| SC-OR | 0.49 |
| SFWPA | 0.33 |
| TWSD | 0.26 |

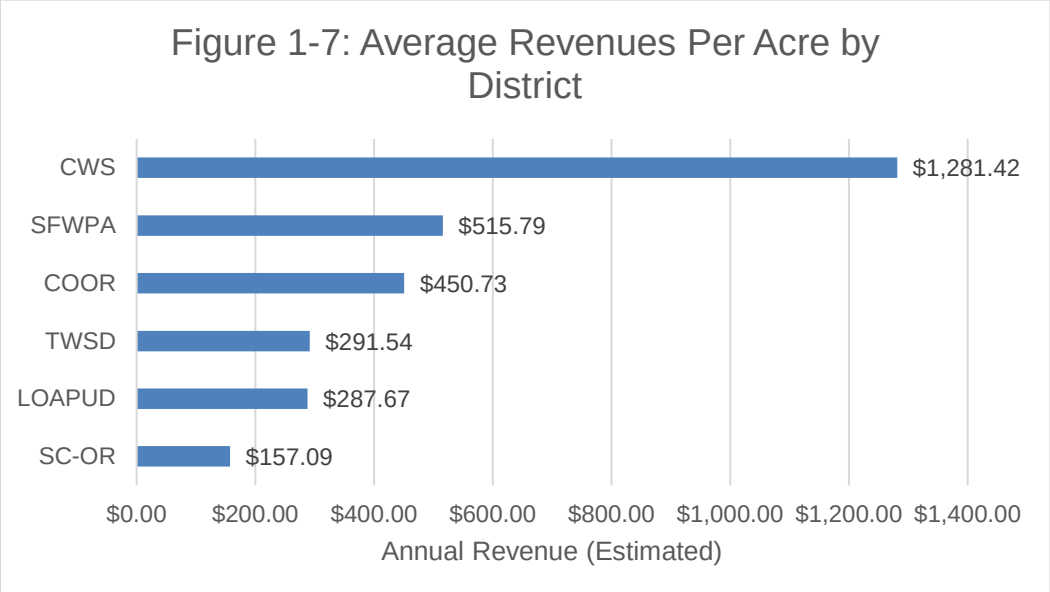
Annual Revenues

Municipal water and wastewater services are typically operated as an enterprise fund. This means that charges and fees for service directly pay for the cost of providing the specific service. LAFCO's 2018 Oroville Region Water Service Study formally compared rates among each water service provider, and readers are encouraged to read the specific details in that report. There are some constraints in the data available to create a comparison of annual revenue due to variations in data availability, sources of data, and timing in the data release. Given these constraints, Figure 1-6 (next page) shows the estimated annual revenue for the Oroville Area's six wastewater and water service providers. COOR's revenue of 3,999,306 is attributed only to its Sewer Enterprise Fund. However, SFWPA's revenue shown in Figure includes its water and hydropower revenue since both services are studied in this MSR. SFWPA generates the most annual revenue due to its hydroelectric energy production. LOAPUD generates the least amount of annual revenue.

The data listed in Figure 1-6 was obtained from a variety of sources as follows: LOAPUD data from the FY20-21 CAFR; COOR data from FY19-20 CAFR; CWS from 2015 per LAFCO 2018; TWSD from FY2020 CAFR; SC-OR data for the 2022 budget cycle; and SFWPA from FY2020 CAFR. Given the variation in fiscal year start dates, age of data, and source of data, Figure 1-6 should be interpreted loosely with moderate degrees of error, meaning that direct comparison is not advised. Given these caveats, the data in Figure 1-6 is the best currently available. Since MSRs are necessarily "snapshots in time" and since each organization regularly updates its financial data, readers are encouraged to visit an organization's website to obtain more recent data directly.




The average revenues per acre by District are shown in Figure 1-7 below. The acreage data is derived from GIS Data, as shown in Table 1-3. The revenues are from Figure 1-6 above. The acreage and revenues were divided to obtain the average revenues per acre, creating a per-unit index that does not emphasize size. For example, SFWPA has the highest annual revenue ($17,391,542), and it also covers the largest area (33,718 acres). Cal Water Oroville's - boundary covers the smallest area compared to other districts, yet it is very efficient at generating revenue on a per-acre basis. This is related to the relatively higher population density that the Cal Water service area enjoys compared to SFWPA, which has a relatively low population density.



Accountability

Accountability and transparency in local government agencies are key themes of the Cortese Knox Hertzberg Act and LAFCOs across California. This MSR provides an in-depth analysis of government and organizational accountability and transparency in Chapters 3-8 for the five governmental service providers and Cal Water – Oroville, a private company. Table 1-5 below summarizes a few key accountability factors.

Table 1-5: Summary of Accountability for Six Service Providers

| | COOR | CWS | LOAPUD | SC-OR | SFWPA | TWSD |
|---|---|---|---|---|---|---|
| Direct Service Provider? | Yes | Yes | Yes | No | Yes | Yes |
| Broadcast meetings via internet? | Yes | No* | Yes | Yes | Yes | Yes |
| Discloses Annual Financial Statements? | Yes | Partial** | Yes | Yes | Yes | Yes |

*Note: Cal Water's Board of Directors guide this private company. Meetings of its Board of Directors are not required to issue a public notice and are not regularly broadcast over the internet.

**Note: Limited financial information is available for Cal Water Oroville as described in Chapter 8. Cal Water Oroville is a private company, and its financial data disclosure is made to the CPUC in a different format and under a different frequency etc.

# 1.3 NARRATIVE SUMMARY FOR EACH SERVICE PROVIDER

The following text summarizes key features of the six service providers discussed in this MSR.

## City of Oroville Wastewater Services

Table 1-6 : Agency Profile

| | |
|---|---|
| **Type of Agency:** | Incorporated Charter City (1906) |
| **Principal Act:** | City Charter, CA Government Code §34450 |
| **Functions/Services:** | General government, land use planning and building services, parks, fire protection, and emergency services, law enforcement, roadways and stormwater drainage, and wastewater collection and conveyance services. |
| **Main Office:** | 1735 Montgomery St. Oroville, CA, 95965 |
| **Mailing Address:** | Same |
| **Phone No.:** | (530) 538-2436 |
| **Fax No.:** | (530) 538-2468 |
| **Web Site:** | https://www.cityoforoville.org/home |
| **City Administrator:** | Vacant, Email: admin@cityoforoville.org |
| **Alternate Contact:** | Assistant City Administrator Ruth Wright, E-mail: finance@cityoforoville.org |
| **Meeting Schedule:** | Regular City Council meetings on the 1st and 3rd Tuesday of every month. |
| **Meeting Location:** | City Hall, Council Chambers, 1735 Montgomery St, Oroville, CA 95965 |
| **Date of Formation:** | January 3, 1906 |
| **Area Served:** | 8,873 acres (13.86 square miles) |

| | |
|---|---|
| **Population** | 18,863 (2022) |
| **# Sewer Connections** | 3,703 connections (residential, commercial, and industrial) |
| **Gross Revenue** | $36,050,818 city-wide revenue (FY19/20) |
| **Principal LAFCO:** | Butte LAFCO |
| **Other LAFCO:** | None |

## CITY OF OROVILLE: ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENT STRUCTURE AND OPERATIONAL EFFICIENCIES

In 2020, the City of Oroville held 19 closed sessions, which equates to 65% of the total Council meetings held. This is an issue that needs improvement. It is recommended that the City Council consider ways to reduce the number of closed sessions it holds in the upcoming years. LAFCO should reevaluate this metric when it next prepares an MSR or SOI for the City. Compliance with the 2016 updates to the Brown Act described in Government Code §54954.2 was evaluated in this MSR. The City of Oroville website partially complies with the Brown Act 2016 Updates described in AB2257. COOR makes its agenda available on its website as a link from the homepage, which directs to the "services" tab and then to the nested "City Clerk" subtab. The nested sub-links from the home page do not meet the structural webpage agenda distribution requirements of AB2257. This is an item that needs improvement. It is recommended that the COOR update its website accordingly. Website functionality was evaluated in this MSR. The City's website is kept up to date with current and past meeting agendas and meeting minutes. The website also provides copies of certified annual financial statements and compensation reports (CAFR). The City of Oroville does not seem to have a policy requiring that the COOR website be user-friendly and contain accurate and up-to-date information. It is recommended that the City adopt a policy requiring its website to be user-friendly and contain up-to-date information.

City Council members' terms of office and next election date are not disclosed on the City's website. This is an item that needs improvement. It is recommended that the City update its website accordingly. Committee appointments are posted in a PDF file online.

1) The City's Code of Ethics is consistent with the Political Reform Act's intent and is available to the public on the City's website. City Council Members have filed Form 700, Statements of Economic Interests, with the City Clerk. Compliance with Fair Political Practice Act was assessed by querying the FPPD Complaint and Case Information Portal. Query results for the COOR found one open complaint regarding two current City Council members (Janet Goodson and Art Hatley) with case number 2018-01102, opened on October 16, 2018, which remains pending.
2) Local government officials are required to take ethics training every two years, consistent with Assembly Bill 1234 (Salinas, 2005). Ethics training for the City Council and city managers/supervisors is conducted biannually. This is a regularly recurring training. Therefore, COOR's City Council complies with AB 1234.
3) Local government officials must receive the required sexual harassment prevention two-hour training every two years consistent with Government Code 53237 et. seq. Sexual harassment prevention training for the City Council and City managers/supervisors is conducted biannually. This is a regularly recurring training. Therefore, COOR's City Council complies with Gov. Code 53237 et. seq.

In 2018, the City of Oroville was the subject of a grand jury report regarding additional sources of revenue for the City of Oroville. Due to an increased cost of doing business, the City staff has had to implement drastic staffing cuts as well as a 10% cut in pay and/or benefits. The Grand Jury concluded that the City of Oroville has been left "with a demoralized, depleted staff" and that

drastic measures must be taken to find new sources of revenue for the City. Of the nine recommendations made by the Grand Jury, six were implemented. Recently, City-wide staffing levels and associated pay/benefits have been restored, and most of the issues raised in the grand jury report have been resolved. The City of Oroville is not currently involved in any litigation.

## CITY OF OROVILLE: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA

The City of Oroville's geographic boundary encompasses 8,872 acres and includes 7,447 assessor parcels. The original SOI study prepared for the City of Oroville was completed in 1985. Today, the City's SOI encompasses 33,744 acres and 16,917 assessor parcels. City staff indicated that it believes that the current configuration of the Sphere of Influence is adequate for projected future growth in wastewater customers. The COOR does provide extra-territorial services to customers located outside of its City boundary. Specifically, the City provides wastewater collection services to 19 parcels outside the City boundaries.

In the "moderate" growth estimate, the DOF's population projection for the County of Butte is utilized to extrapolate population growth rates for the City of Oroville. By the year 2045, it is estimated that COOR's existing boundary could encompass a population of 22,830 persons. This represents an average annual growth rate (i.e., compound rate) of 0.76 percent between the years 2020 and 2045. However, due to a decline in population from 2020 to 2021, potentially related to movement related to the Camp Fire, the "low" growth scenario may be more on-trend. Currently, the City's boundary area supports an average of two persons per acre, which is considered low population density. The City's General Plan suggests that future growth may occur within the COOR's boundary. The City's boundaries contain a sufficient land area to accommodate projected growth. There are agricultural lands within the City's boundary and SOI. The City's land-use decisions do have a direct effect on agricultural land and open space.

## CITY OF OROVILLE: LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE

There are no DUCs within the City's boundary. However, several areas within the City's SOI can be classified as a disadvantaged unincorporated community since the MHI is less than the $60,188.00 threshold for 2019. All SOI areas receive essential municipal services of water, wastewater, and structural fire protection (or acceptable private alternatives). Therefore, no communities within the existing COOR boundary or in the City's SOI lack public services, and no health or safety issues have been identified.

## CITY OF OROVILLE: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES, INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES

The City of Oroville has two plans that are relevant to the current management of its wastewater conveyance and transmission service:

- Sanitary Sewer Master Plan January 2013
- Sewer System Management Plan October 2019

Implementation of plan goals and policies are codified in the Municipal Code. The City has been diligent in updating its plans to accommodate the infrastructure and service needs of current and future constituents and to help ensure that infrastructure needs and deficiencies are addressed in a timely manner. Although the SSMP, as updated in October 2019, is available at City Hall upon request, it has not yet been properly posted to the City's website. It is recommended that the City update the Public Works webpage to allow readers easy access to the newer 2019 version. In 2007, the City completed an "Inflow/Infiltration Study," and this report is now 14 years old. It is recommended that the City update this I/I study within the next few years.

The City's infrastructure relates to wastewater collection and conveyance only. The City's wastewater collection system includes approximately 69 miles of sanitary sewer pipes, approximately 1,350 sewer maintenance holes, and 7 sewage lift stations. The sewer system conveys wastewater to a treatment plant owned and operated by the Sewerage Commission - Oroville Region. The City's sewer pipes are configured such that expansion into new geographic areas is possible if needed. However, new pumps or lift stations may be needed depending on the elevation of any future expansion area. Several nearby agencies offer wastewater services similar to that of the City of Oroville (such as TWSD and LOAPUD). However, within the City's sewer service area, the City is the only provider, and there is no geographic overlap.

The City's 2019 SSMP contains a detailed capital improvement plan and schedule. Since 2010, the City has spent approximately $2 million on capital equipment and system rehabilitation (slip lining, pipe patching, etc.). The City continues to undertake rehabilitation projects, such as repairing, relining, and replacing existing pipes that are structurally deficient and/or subject to re-occurring tree root infestation and or subject to excessive infiltration and inflow and repair or replacement of deficient maintenance holes. The City plans to spend about $3.1 million between 2020 and 2029 on wastewater projects listed in the CIP COOR, SSMP, 2019. However, due to the City's past financial challenges, its plans have not been consistently implemented, resulting in a deficit in maintenance.

In the recent past, the City has experienced financial challenges which have prevented the City from retaining staff engineers and other professionals necessary for the City to serve a leadership role by assisting with and/or assuming services provided by other agencies. Retention of staff engineers and associated institutional knowledge of the wastewater system is an area that needs improvement. However, the City has close collaborative relationships with nearby independent wastewater providers such as TWSD, SC-OR, and LOAPUD.

**CITY OF OROVILLE: FINANCIAL ABILITY TO PROVIDE SERVICES**

COOR's Comprehensive Annual Financial Reports and Budgets are prepared annually, and they clearly and transparently present financial information. Oroville's 2019 CAFR was awarded the prestigious Certificate of Achievement for Excellence in Financial Reporting by the Government Finance Officers Association. The City's published policy for reserve funds is available from the City's Finance Department. The General Fund Reserve Policy described the purpose and suggested size of reserves. However, the Policy does not indicate how reserve funds should be invested. This is an item that needs improvement. It is recommended that the next time the City updates its General Fund Reserve Policy, it should add a statement about how reserve funds should be invested. COOR's Comprehensive Annual Financial Report contains a list of its accounting policies. Additionally, the Municipal Code describes several financial policies, with specific procedures for purchases and procurement practices. The City's Municipal Code is readily available on the COOR's website. Required reports on employee wages are sent to the California State Controller for Government Compensation. Although the City's Master Salary Scale is not directly posted to a webpage, it is available using the "search" feature on the COOR website.

The City's Sewer Fund had Total Revenues that exceeded Total Expenditures in each of the five study years. Changes to the Net Position show a steady increase, year to year. For example, in FY19/20, the Net Position increased by 2,750,158 from the previous year. The Sewer Fund operates as an enterprise fund within the City and therefore does not utilize tax revenue. Therefore, the Tax Revenues/Connection Ratio is zero.

COOR's City Council adopted the fee schedule for the Public Works Department through Resolution #5889. Rates for sewer service provided to City residents include the City's collection fees and SC-OR's fees for treatment and disposal. The City's rates were approved by Council Resolution No. 5889, and the fee can increase by 3.1% in accordance with the Engineering News Record Construction Cost Index. Rates are displayed on the City's website for the Public Works Department at: <*https://www.cityoforoville.org/services/public-works-department/engineering-division/engineering-fees*>.

**CITY OF OROVILLE: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES**

The City collaborates with multiple other agencies to deliver sewer services within its boundary, including SC-OR, TWSD, and LOAPUD. The City is a member of the wastewater JPA (aka SC-OR), along with TWSD and LOAPUD. TWSD and LOAPUD also provide wastewater services to some geographic areas within the City's jurisdictional boundary. The three members of the JPA, along with SC-OR, provide each other with mutual aid assistance on an as-needed basis. While the current organization of sewer services between three collection agencies and the wastewater treatment plant (SC-OR) effectively delivers sewer services to the Oroville region, this duplication of services should be evaluated to determine if a reorganization of service providers and/or boundaries would result in a more transparent and cost-effective provision of sewer services. At present, both LOAPUD and TWSD provide sewage collection services within COOR boundaries. It is recommended that the City initiate dialogue with the its sewage collection partners to consider potential reorganization options that would allow for greater efficiencies, cost savings and offer a

more streamlined approach that would benefit not only current users but new development interests as well. Wastewater systems generally have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, COOR pursues an array of cost avoidance techniques that each contributes incrementally towards keeping costs at a reasonable level. Specifically, COOR carefully utilizes its budgeting processes to serve as one means to avoid unnecessary costs. Additionally, COOR participates in two joint powers authorities (SC-OR and NCCSIF) to reduce wastewater treatment and disposal costs. Overhead is currently minimized to the greatest extent feasible (COOR, 2021d). There is little opportunity for further cost savings because the system has been deprived of maintenance for many years.

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## Lake Oroville Area Public Utility District

Table 1-7: Agency Profile

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|---|---|
| **Type of Agency:** | Public Utility District |
| **Principal Act:** | California Public Utility District Act. Public Utilities Code §§ 15501-18055 |
| **Functions/Services:** | Wastewater collection and conveyance |

| | |
|---|---|
| **Main Office:** | 1960 Elgin Street, Oroville, CA 95966 |
| **Mailing Address:** | Same |
| **Phone No.:** | (530) 533-2000 |
| **Web Site:** | https://www.loapud.com/ |
| **General Manager**: | David Goyer at email manager@loapud.com |
| **Alternate Contact:** | Kelly Hamblin at email: acct_payable@loapud.com |

| | |
|---|---|
| **Meeting Schedule:** | The Board of Directors meets the 2nd Tuesday of every month at 2:00 pm. |
| **Meeting Location:** | District Office located at 1960 Elgin St., Oroville, CA 95966. |
| **Date of Formation:** | 1938 |
| **Area Served:** | Serving approximately 8,582 acres (13.4 square miles) |

| | |
|---|---|
| **Population** | 12,768 permanent residents |
| **Number of sewer connections** | 5,733 sewer connections |
| **Gross Revenue** | $2.49 million |
| **Principal LAFCo:** | Butte LAFCo |
| **Other LAFCo:** | None |

**LOAPUD: ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENT STRUCTURE AND OPERATIONAL EFFICIENCIES**

For the LOAPUD, the number of closed sessions was evaluated. In 2020, the LOAPUD held one closed session, which is well below the 50 percent threshold, which indicates that LOAPUD does a very good job of providing transparency. Compliance with the 2016 updates to the Brown Act described in Government Code §54954.2 was evaluated in this MSR. LOAPUD's website agenda distribution complies with the Brown Act 2016 Updates described in AB2257 in that meeting agendas are retrievable, downloadable, searchable, and indexable. The LOAPUD Board's current meeting agenda is posted directly on the District's primary homepage website. Additionally, LOAPUD makes its agenda and minutes available in .pdf format on its website through a direct "Quick" link to the recent and archived accessed directly from the homepage. An alternative pathway to Board agendas is provided through a dropdown menu "Who We Are/Board Meetings." The meeting minutes are posted directly under the meeting agenda. Board packets for both regular and special meetings are listed. However, several Board policies are not posted on the website, including the Board's Policy No. 3065, Sewer Use Regulations. Therefore, when LOAPUD next restructures its website, it is recommended that the complete catalog of Board policies be posted online.

Compliance with the Special District Transparency Act (Gov. Code, §6270.6 and 53087.8) was evaluated in this MSR. The LOAPUD's website complies with the Special District Transparency Act by listing contact information, posting financial statements, compensation reports, and other relevant public information. It is recommended that the LOAPUD adopt a policy requiring its website to be user-friendly or contain up-to-date information. In addition, it is recommended that the next time LOAPUD updates its website, it considers adding a feature to allow community members to sign up for a free electronic subscription service that will send automatic email notifications when a new meeting agenda is available.

LOAPUD's current Board of Directors members and terms of office are available online through the District website under the "Board Members" tab. However, the webpage does not disclose the next election date. In addition, the committee appointments are not directly disclosed on the District's webpage, and this is an item that needs improvement. LOAPUD's elected Board members must submit required forms and receive required training as prescribed by the three state laws regarding accountability and ethics, including 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training

1) The Political Reform Act: LOAPUD's conflict of interest code is enacted as Board Policy No. 1020, originally adopted on February 8, 1984, and amended on February 8, 2005. LOAPUD's conflict of interest policy is available to the public at the District Website: <*https://www.loapud.com/board-policy-no-1020-conflict-of-interest#body_file-34da7246-572e-4071-94cf-06e9734ab4a7*>. The Political Reform Act also requires special district board members to disclose all personal economic interests by filing a "Statement of Economic Interests" with the District Clerk or Butte County. All required LOAPUD Staff and Board members file the "Statement of Economic Interests" annually with Butte County. Additionally,

there have been no complaints to the CA FPPC regarding filing Economic Statements of Interest required under the Political Reform Act.

2) Ethics training as required by AB 1234: LOAPUD posts ethics training certification on its website at: <*https://www.loapud.com/board-members-ethics-certificates*>. Training is offered regularly. Each of the five Board members has completed this training. Special district board members must receive the required sexual harassment prevention two-hour training every two years per Gov. Code 53237 et. seq. LOAPUD posts certification of the prevention training on its website. Training is offered regularly. Each of the five Board members has completed this training.

The Butte County grand jury has not investigated Lake Oroville Area Public Utility District. Lake Oroville Area Public Utility District is not currently involved in any litigation. This suggests that LOAPUD's management team is successfully using alternative dispute resolution methods.

**LOAPUD: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA**

LOAPUD's 8,582-acre boundary area is located mainly in the unincorporated County of Butte. A small portion of LOAPUD's boundary overlaps with the City of Oroville. The boundary area has an irregular shape and includes 5,558 assessor parcels. The District's SOI was most recently updated on July 10, 2013. In addition to the 8,582-boundary area, the District's SOI covers 20,295 acres for a total of 28,877. Given the large geographic size of the Sphere of Influence area, it is adequate for projected future needs. The LOAPUD does not provide extra-territorial services outside of its District boundary.

Approximately 12,768 permanent residents live within the LOAPUD boundaries. From 2020 to 2045, it is anticipated that an additional 2,892 persons are expected to reside within LOAPUD boundaries. This represents a 22.65 percent increase in the projected future population (or 0.82 percent per year). This will bring the total population within the District's service area to approximately 15,660 persons by the year 2045. Currently, the District's boundary area supports an average of 1.5 persons per acre, which is considered low population density. The County General Plan suggests that growth may occur within the LOAPUD boundary. LOAPUD's boundaries contain a sufficient land area to accommodate projected growth.

LOAPUD's boundary and SOI include grazing land, prime farmland, farmland of statewide importance, and unique farmland. Most farms and agricultural land in the area rely on septic tanks and do not receive wastewater collection services. LOAPUD does provide wastewater collection service to state lands associated with Lake Oroville and surrounding open space, thereby protecting water quality. However, the provision of wastewater collection services generally has minimal effect on agricultural land and open space.

## LOAPUD: LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE

DUCs have a MHI of less than the $60,188.00 threshold for 2019. There are six census "blocks" with median household income below the state threshold within the LOAPUD boundary and SOI. These areas are classified as DUC's. Additionally, eight of the nine census tracts encompassing the LOAPUD boundary and SOI are classified as DUCs. Within LOAPUD's boundary, identified DUCs receive essential water, wastewater, and structural fire protection services. However, within LOAPUD's SOI, the community of Palmero has experienced water quality contamination resulting in a potential health or safety issue that requires attention. LAFCo's 2013 SOI Update Report found that "Large portions of LOAPUD's updated SOI are identified as disadvantaged unincorporated communities, including the unincorporated community of Palermo. The disadvantaged unincorporated communities within LOAPUD's SOI will require District sanitary sewer services in the future to replace poorly performing or failing septic systems or to facilitate new development. Therefore, there is a present and probable need for public sanitary sewer services within the areas designated as disadvantaged unincorporated communities in LOAPUD's updated SOI".

## LOAPUD: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES, INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES

LOAPUD regularly reviews and updates its service plans to help ensure that infrastructure needs and deficiencies are addressed in a timely manner. For example, LOAPUD originally adopted its Sewer System Management Plan on July 14, 2009, and subsequently updated it on July 14, 2013. The most recent comprehensive update to the Management Plan occurred in September 2021. However, The Sewer System Management Plan (2021) is not posted as an individual item on the LOAPUD website, and this is an issue that needs improvement. LOAPUD has demonstrated its diligence in developing plans to accommodate current and future constituents' infrastructure and service needs by creating a capital improvement plan as part of its 2021 Sewer System Master Plan.

LOAPUD's infrastructure relates to wastewater collection and conveyance only. The wastewater collection system includes approximately 77 miles of pipelines, 1,550 individual maintenance holes, and nine lift stations. The sewer system conveys wastewater to a treatment plant owned and operated by the Sewerage Commission - Oroville Region. The District's sewer pipes are configured such that expansion into new geographic areas is possible if needed. However, new pumps or lift stations may be needed. The District's 2021 Sewer System Master Plan identifies new facilities that would be needed to accommodate future growth. More importantly, the 2021 SSMP outlines a range of actions the PUD will undertake to address geographic areas known to receive high wet weather flows due to inflow and infiltration (I&I). One of the primary sources of I&I into LOAPUD's facilities identified by the 2021 SSMP is the privately-owned sewer laterals connecting individual homes and businesses to the District's sewer main. When private property

owners do not maintain these laterals, it can become an I&I problem. In addition, inflow and infiltration are infrastructure-related issues that need improvement.

Several nearby agencies offer wastewater services similar to that of the LOAPUD (such as TWSD and the City of Oroville). However, within the District's sewer service area, the LOAPUD is the only provider, and there is no overlap of actual infrastructure. However, a small portion of LOAPUD's boundary overlaps with the City of Oroville. The LOAPUD SOI overlaps significantly with the City of Oroville's SOI.

Infiltration and inflow are significant within the District's existing system due to the age and deteriorated condition of older pipes, joints, and related infrastructure. LOAPUD's 2021 Sewer System Master Plan contains a detailed capital improvement plan, including cost estimates, that will continue the District's work to address the infiltration and inflow issue. The District regularly undertakes rehabilitation projects, such as repairing, relining, and replacing existing aged or poorly functioning pipes. The District is planning to spend approximately $20 million on the pipeline replacement projects and the proposed collection system expansion projects listed in its 2021 Sewer System Master Plan. However, a timeframe for these expenditures has not yet been determined.

LOAPUD has demonstrated some capacity to assist with or assume services provided by other agencies. For example, the LOAPUD has close collaborative relationships with nearby independent wastewater providers such as TWSD, SC-OR, and the City of Oroville. LOAPUD's leadership capacity could be improved by assigning specific timeframes to the projects in its capital improvement plan and by posting its Sewer System Master Plan (2021) and Sewer System Management Plan (2021) on the website in a timely manner.

**LOAPUD: FINANCIAL ABILITY TO PROVIDE SERVICES**

LOAPUD's Financial Statement and Budget are prepared annually and clearly and transparently present financial information. The District's fiscal year begins July 1st. LOAPUD's reserve policy is described in its annual financial statement, posted on the District website. LOAPUD's Financial Statement contains a list of its accounting policies. Employee wage scale is available in LOAPUD's annual budget, posted on the District website. In addition, required reports are sent to the California State Controller for Government Compensation.

About 67 percent of all revenues for the LOAPUD comes from wastewater Service Charges. Total revenue was more than the total expenditures in each of the five study years. Please note that in future fiscal years, capital contributions will be made to fund capital improvement projects, and it is recognized that capital improvement projects are expensive and necessary. Many wastewater districts in California are in a similar situation. The Net Position steadily increased year to year in each of the five study years. As of June 31, 2021, the District's net position was $10,371,553. This was an increase of $446,828 from the prior year. Tax Revenues/Connection Ratio calculates tax revenues ($347,112) per the number of sewer connections (5,733) which equates to a ratio

of 60.5, meaning that on average, each sewer connection pays $60.5 in property tax annually to LOAPUD.

The District Board adopted its wastewater rate schedule via Resolution 05-2019, adopted on June 11, 2019. These rates were adopted based on a wastewater rate study by Sauers Engineering, Inc. (a Civil & Environmental Engineer firm) which considered several options to fairly allocate the cost of service to the District's customers through increased rates. LOAPUD mailed its customers the Notice of Rate Increase on April 25, 2019. A public hearing was held at 2 PM on June 11th, 2019, consistent with Proposition 218. The LOAPUD's fee schedule provides information regarding wastewater rates, prominently posted on its website at: <*https://www.loapud.com/documents-maps-forms-and-fees*>.

**LOAPUD: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES**

LOAPUD collaborates with several other agencies to deliver services within its boundary by implementing the following practices: facility sharing through SC-OR, information sharing, and cost reduction. LOAPUD does not currently participate in any formal Joint Agreements or Mutual Aid. However, it is a member of SC-OR. LOAPUD assists SC-OR and receives assistance from SC-OR. Municipal wastewater systems generally have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, LOAPUD pursues several cost avoidance techniques that each contribute incrementally towards keeping costs reasonable. Specifically, LOAPUD carefully utilizes its budgeting processes to serve as one means to avoid unnecessary costs. LOAPUD participates in one Joint Powers Authority (SC-OR).

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## Sewerage Commission - Oroville Region

Table 1-8: Agency Profile

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|---|---|
| **Type of Agency:** | Joint Powers Agreement/Agency |
| **Principal Act:** | Ca. Govt. Code Sec. 6500 et al., the Joint Exercise of Powers Act. |
| **Functions/Services:** | • Wastewater treatment, disposal<br>• Limited wastewater collection<br>• Recycled water production and distribution for irrigation purposes<br>• Solar photovoltaic electricity generation |

| | |
|---|---|
| **Main Office:** | 2880 S. 5th Ave, Oroville, CA, 95965 |
| **Mailing Address:** | PO BOX 1350, Oroville CA, 95965 |
| **Phone No.:** | (530) 534-0353 |
| **Web Site:** | https://www.sc-or.org/ |
| **General Manager**: | Glen E. Sturdevant Email: gsturdevant@sc-or.org |

**Alternate Contact:** Mikah Salsi, Plant Supervisor. Email: msalsi@sc-or.org

**Meeting Schedule:** The fourth Tuesday of each month at 5:00 PM (except for November and December when the meetings are held earlier due to holidays)
**Meeting Location:** Commission HQ: 2880 S. 5th Ave, Oroville, CA, 95965
**Date of Formation:** The JPA was formed on June 18, 1971.
**Area Served**: Serving roughly 28,712 acres (50.5 square miles)

| | |
|---|---|
| **Population** | 41,131 permanent residents |
| **Number of water/sewer connections** | There are two direct connections to SC-OR's main trunk line. All other connections are managed by the JPA member entities (SC-OR, 2021b). |
| **Gross Revenue** | Gross revenues are based on monthly sewer service fees and are $4,585,157 for the 2022 budget cycle |
| **Principal LAFCO:** | Butte LAFCO |
| **Other LAFCO:** | None |

**SC-OR: ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENT STRUCTURE AND OPERATIONAL EFFICIENCIES**

In the year 2020, SC-OR held a total of 17 Board meetings which included 12 regular meetings and five special meetings. Ten of those 17 meetings (59 percent) included a closed session. This exceeds the suggested 50 percent metric. However, it is recognized that 2020 may not have been a typical year for SC-OR Board meetings, given the special circumstances related to employee and contract negotiation, which increased the number of closed sessions. Therefore, it is recommended that LAFCO re-evaluate this metric in the next MSR for SC-OR. Compliance with the 2016 updates to the Brown Act described in Government Code §54954.2 was evaluated in this MSR. SC-OR makes its current Board agenda directly available from its website homepage. Additionally, the agenda can be found on the website via the "Board Meetings" subsection under the "Governance" tab at the following URL: https://www.sc-or.org/board-meetings. This webpage contains dates, meeting minutes, and agendas dating from the most recent meeting back to Jan. 8, 2019. Agendas are posted to the website at least 72 hours prior to each meeting. Therefore, the Commission's website agenda distribution does comply with the requirements of the Brown Act 2016 updates described in AB 2257.

Compliance with the Special District Transparency Act (Gov. Code, §6270.6 and 53087.8) was evaluated in this MSR. SC-OR's website is regularly updated and easily navigable to allow for access to a directory containing current and past agenda packets, meeting minutes, and audio recordings for download. In the "Transparency" subsection under the "Governance" tab, users can access the current budget plan and financial statements covering the current year and up to 3 years prior. When SC-OR next updates its website, it is recommended to consider adopting a Commission policy providing guidance on keeping its website updated and installing a web-enabled electronic subscription service. The Sewerage Commission-Oroville Region mostly

complies with the requirements of the Special District Transparency Act. Since the Commission members are appointed, the three-member entities are responsible for reporting the terms of office and the next election date for SC-OR Commissioners. SC-OR's Board does not currently have any committees.

SC-OR is a JPA, and it relies upon its three-member agencies that appoint Commission members to comply with the three state laws regarding accountability and ethics, including 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training.

1) SC-OR's Commission complies with the Political Reform Act by listing its conflict of interest policy on the SC-OR website. The FPPC database query results for the SC-OR found no violations. Additionally, SC-OR's policy states that designated employees are to "file statements of economic interests with the Clerk of the Board of Supervisors of the County of Butte."
~~2)~~ Ethics training is required by Assembly Bill 1234 for most local agencies. However, it appears that ethics training may not be required for JPAs as they are not defined as "local agencies."
~~3)~~ Harassment prevention training is required by Government Code 53237 et. seq. This requirement seems to be mandatory for all employers. SC-OR's website does not contain up-to-date training certificates for its Commission members. This is an item that needs improvement.

The Butte County grand jury has not investigated this Commission as of 2021. In addition, the Commission is not currently involved in any litigation. This indicates that SC-OR's management team successfully uses alternative dispute resolution methods.

**SC-OR: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA**

SC-OR is a Joint Powers Agency and therefore does not have a LAFCo adopted official district boundary. However, the area served by the SC-OR regional wastewater treatment facility is determined by the LAFCo-approved boundaries of the three-member entities (COOR, TWSD, and LOAPUD). The 28,712-acre combined service area (i.e., "boundary") encompasses land within the unincorporated County of Butte and the City of Oroville. SC-OR is not a special district and therefore does not have a LAFCo adopted official sphere of influence. However, the area served by the SC-OR regional wastewater treatment facility is determined by the SOI of the three-member entities (COOR, TWSD, and LOAPUD). SC-OR's three-member agencies have SOIs that encompass 75,199.8 acres and include less than 29,000 parcels.

The SC-OR does not "directly" provide extra-territorial services outside the boundary of its three-member entities. However, SC-OR accepts and treats domestic septage trucked in by approved septage haulers licensed by Butte County Environmental Health Department and SC-OR. The septage originates from pumped residential septic tanks and is brought to the SC-OR WWTP for treatment and disposal. SC-OR accepts approximately 1 million gallons per year of domestic septage from within their service area.

From 2020 to 2045, it is anticipated that an additional 7,462 permanent residents will be expected within SC-OR's Service Area. This represents an overall 17.7 percent increase in the projected future population (or 0.65 percent per year). This will bring the total population within the Commission's service area to approximately 49,618 persons by 2045. Currently, the Commission's "boundary" area supports an average of 1.27 persons per acre, which is considered to be a low population density. The County General Plan and the City of Oroville General Plan both suggest that growth may occur within the boundaries of the three-member entities. SC-OR's "boundaries" contain a sufficient land area to accommodate projected growth.

The boundaries and SOIs for the three-member entities include grazing land, prime farmland, farmland of statewide importance, and unique farmland. Most farms and agricultural land in the area rely on septic tanks and do not receive wastewater collection services. LOAPUD, in particular, does provide wastewater collection service to state lands associated with Lake Oroville and surrounding open space, thereby protecting water quality. However, the provision of wastewater treatment services generally has minimal effect on agricultural land and open space. Wastewater disposal occurs at a site along the Feather River. SC-OR aims to protect water quality (and associated open space values) by complying with the regulations of the Regional Water Quality Board and other state regulators.

**SC-OR: LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE**

The median household income is identified. The DUC threshold MHI (80 percent of the statewide MHI) is clearly stated. The MHI in the Agency's boundary is described. This MSR analysis identified DUCs within the SC-OR service area and area of interest. Water service to the DUCs is provided by several methods, including the Thermalito Water and Sewer District, the South Feather Water and Power Agency, Cal Water Oroville, or by individual wells. Wastewater collection services are provided by Thermalito Water and Sewer District, Lake Oroville PUD, the City of Oroville, or by individual septic systems. Wastewater treatment and disposal services are provided by SC-OR. Fire protection service for most of the parcels within the SC-OR service area and AOI is provided by the Butte County Fire Department and CAL FIRE. SC-OR's Service Area and AOI areas receive essential municipal services of water, wastewater, and structural fire protection (or acceptable private alternatives). Therefore, no DUCs within the existing SC-OR service area and AOI areas lack essential public services, and no public health or safety issues have been identified.

**SC-OR: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES, INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES**

SC-OR has been moderately diligent in developing plans to accommodate the infrastructure and service needs of current and future constituents. SC-OR adopted a Sewer System Management Plan Update in February 2019. This SSMP complies with the RWQCB rules to complete a Comprehensive Master Plan pertaining to its sewer systems and includes a Sewer Overflow

Emergency Response Plan Element for Sanitary Sewer Overflows reporting. The 2019 SSMP is not available on SC-OR's website. It is recommended that the SSMP be posted on SC-OR's website to promote transparency. The 2019 SSMP is an update to the 2005 SSMP. However, much of the underlying data and assumptions were not updated in 2019 and instead retains the 2005 data. This means that the SSMP contains old data, and it was difficult to utilize this data in this current MSR analysis. This is a situation that needs improvement. Therefore, it is recommended that when SC-OR next updates its SSMP, it should provide a comprehensive update that utilizes up-to-date flow data and population projections.

SC-OR's infrastructure relates to the treatment and disposal of wastewater. SC-OR operates and maintains an advanced secondary conventional activated sludge wastewater treatment plant. The collection systems belonging to the three-member entities (City of Oroville, Lake Oroville PUD, and Thermalito Water and Sewer District) bring the wastewater to SC-OR's facilities. SC-OR is responsible for 2.3 miles of interceptor sewer trunk lines (East, West, and Main), including a 1.6-mile force main, two pump stations (Ruddy Creek and Feather River), and the seven-mile effluent outfall pipe and diffuser on the Feather River. There is no duplicate infrastructure or service by other agencies nearby. However, SC-OR does have three-member entities (City of Oroville, Lake Oroville PUD, and Thermalito Water and Sewer District), and each has expertise in wastewater conveyance (as opposed to treatment). The three-member agencies provide support and assistance to SC-OR.

SC-OR's 2019 Sewer System Management Plan describes preventative maintenance measures and has planned for the replacement of aging infrastructure. Additionally, SC-OR has successfully obtained a state grant to assist with costs associated with the New Influent Pump Station. However, infiltration and inflow remain significant within the SC-OR existing service area due to the age and deterioration of older pipes, joints, and related infrastructure maintained by the three-member entities.

The American Society of Civil Engineers, Region 9 has several recommended remedies for California's aging wastewater infrastructure as outlined in Appendix K and as summarized below:

1. Implement an education program at the state and local level about what a wastewater treatment plant is, what kind of wastes it can treat, and what impact wastes have on the sewer pipes. Continue educational programs about identifying a sewer overflow and whom to call if such an event occurs.
2. Make risk-based decisions on capital improvements, maintenance, and operations.
3. Continue advancements in water reuse/recycling.

SC-OR has demonstrated some capacity to assist with or assume services provided by other agencies. For example, the SC-OR has close collaborative relationships with its three-member entities, including TWSD, LOAPUD, and the City of Oroville. However, SC-OR's leadership capacity could be improved by implementing the recommendations from this MSR. For example, SC-OR should develop a capital improvement plan and promptly post its Sewer System Management Plan on the website.

**SC-OR: Financial Ability to Provide Services**

SC-OR's Annual Financial Statement and the Annual Budget are prepared for a timeframe of one fiscal year. The financial statements and budgets clearly and transparently present financial information. Although SC-OR does not seem to have a specific reserve policy, its financial reserves are listed within its Annual Financial Statements. SC-OR has a policy called "Investment in Local Agency Investment Fund Policy" adopted by the Commission and is available on its website at <*https://www.sc-or.org/board-policies*>. SC-OR Policy #3130 was originally adopted on December 18, 1985, and subsequently updated on August 22, 2007. SC-OR's "Reimbursement Policy: SC-OR policy #5200 establishes Agency policy on travel expenditure reimbursements. SC-OR's Annual Financial Statement contains a list of its accounting policies. For example, the Commission's Financial Statement describes its Investment Policy with specific procedures and practices. However, some of SC-OR's financial policies do not seem to be codified. Employee wage reports are sent to the California State Controller for Government Compensation, and a link to this report is provided from SC-OR's website.

SC-OR's total revenue exceeded total expenditures in each of the three study years, FY 2019, FY2020, and FY2021. All revenues for this JPA come from wastewater fees for service and are considered business-type activities. The reliance on the sale of wastewater service furthers the importance of ensuring reliable service and keeping rates at a sustainable level for the JPA member agencies. Changes to the Net Position are shown in Table 5-24 to be variable, with moderate increases in Net Position seen each year. LAFCO requested that the "Tax Revenues/Connection Ratio" performance measure be studied in this MSR. Since SC-OR is a JPA and does not receive property tax revenue, the Tax Revenues/Connection Ratio is zero (0).

SC-OR Board of Directors adopted the rate structure during a public meeting. SC-OR's staff and their consultants prepare rate studies before adopting changes to the rate structure. These rate studies are considered during public meetings. The process for adopting rates is consistent with Proposition 218. Rates are provided to the JPA's three-member entities. It is recommended that SC-OR consider displaying its rates on its website to promote financial transparency.

**SC-OR: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES**

SC-OR collaborates with several other agencies to deliver services within its Service Area by implementing the following practices: sharing the wastewater treatment plant as a JPA, information sharing, and cost reduction. SC-OR does not currently participate in any formal Mutual Aid Agreement. However, SC-OR does informally cooperate with its three-member entities. As a JPA, the agreement with the three-member entities expires in 2030. Municipal wastewater systems generally have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, SC-OR pursues several cost avoidance techniques that each contribute incrementally towards keeping costs reasonable. Specifically, SC-OR carefully utilizes its budgeting processes to serve as one means to avoid unnecessary costs. While the current organization of sewer services between three collection agencies and the wastewater treatment plant (SC-OR) effectively delivers sewer

services to the Oroville region, this duplication of services should be evaluated to determine if a reorganization of service providers and/or boundaries would result in a more transparent and cost-effective provision of sewer services. Given that the SC-OR JPA expires in 2030, it is an appropriate time for SC-OR to evaluate its role in the overall sewage collection configuration for the Oroville Region. Currently, SC-OR is in a reactive mode as it responds to the collection demands of its JPA members. Therefore, it may be beneficial to improve accountability and efficiency for wastewater treatment plant management. Additionally, it may be efficient to have the collection system operated under a single agency with one set of comprehensive policies and procedures umbrella.

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## South Feather Water and Power Agency

Table 1-9: Agency Profile

| | |
|---|---|
| **Type of Agency:** | Irrigation District |
| **Principal Act:** | California Water Code, Division 11, §20500 et seq. |
| **Functions/Services:** | • Raw untreated water for agricultural irrigation;<br>• Water treatment and distribution for municipal purposes (residential and commercial);<br>• Recreation; and<br>• Hydropower. |

| | |
|---|---|
| **Main Office:** | 2310 Oro Quincy Highway, Oroville, CA 95966 |
| **Mailing Address:** | Same |
| **Phone No.:** | (530) 533-4578 |
| **Fax No.:** | (530) 533-9700 |
| **Web Site:** | https://southfeather.com/ |

| | |
|---|---|
| **General Manager**: | Rath Moseley Email: rmoseley@southfeather.com |
| **Alternate Contact**: | Jaymie Perrin Email: jperrin@southfeather.com |
| **Meeting Schedule:** | Fourth Tuesday of every month, starting at 2:00 PM PST |
| **Meeting Location:** | 2310 Oro Quincy Highway, Oroville, California 95966. |
| **Date of Formation:** | November 1919 |
| **Area Served:** | 33,718 acres (52.68 square miles) |

| | |
|---|---|
| **Population:** | Existing population ranges from 16,770 to 24,300 |
| **Number of water connections:** | Miners Ranch Treatment Plant serves 6,909 connections. The Bangor Treatment Plant serves 22 connections. |
| **Annual Total Revenue:** | Approximately $17.4 million in FY2020 |
| **Principal LAFCO:** | Butte LAFCO |

**Other LAFCO:** None

**SFWPA: ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENT STRUCTURE AND OPERATIONAL EFFICIENCIES**

100 percent (i.e., 13) of the SFWPA Board of Directors meetings included closed sessions during the year 2020. This number exceeds the 50 percent accountability indicator and is, therefore, an item that needs improvement. Therefore, it is recommended that the Board and staff reduce the number of closed sessions held each year by reducing the number of concurrent lawsuits.

Compliance with the 2016 updates to the Brown Act described in Government Code §54954.2 was evaluated in this MSR. The Agency's website agenda distribution complies with the Brown Act 2016 Updates described in AB2257 in that meeting agendas are retrievable, downloadable, searchable, and indexable. SFWPA makes its agenda and minutes available in .pdf format on its website under a tab entitled "Publications" under its "Board Agenda Information" section at the following URL: https://southfeather.com/publications/agenda/. Agendas are also found directly on its homepage at the bottom. Board packets for both regular and special meetings are listed.

Compliance with the Special District Transparency Act (Gov. Code, §6270.6 and 53087.8) was evaluated in this MSR. The SFWPA currently maintains a website that lists staff and the Board contact information. Financial reports are also available at: <*https://southfeather.com/publications/financial-reports/*>. Compensation reports were not found on the SFWPA website; however, the data is available from the CA Auditor's website. Therefore, the SFWPA mostly complies with the Special District Transparency Act. It is recommended that the SFWPA website be updated to include a link from the home page to the CA Auditor's website for access to compensation data.

Terms of office for each Board member are listed on the Agency's website. The next election date is disclosed for Board members by year, but not by the specific month and day, and this item could be improved by updating the website. In addition, board committee appointments are not online. It is recommended that the website be updated to list Board committee appointments.
Compliance by SFWPA Board members in submitting required forms and receiving required training as prescribed by the three state laws regarding accountability and ethics was assessed in this MSR.

1) SFWPA Board members comply with the Political Reform Act by submitting required economic interest forms to the SFWPA Finance Dept.
2) Assembly Bill 1234 (Salinas, 2005) requires ethics training, and compliance with this law is currently in-progress. SFWPA Board members will receive this training in August 2022. It is recommended that the SFWPA website be updated to share training certifications.
3) Government Code 53237 et. seq. mandates sexual harassment prevention training, and compliance with this law is currently in-progress. SFWPA Board members will receive this training in August 2022. It is recommended that the SFWPA website be updated to share training certifications.

The Butte County grand jury has not investigated SFWPA since 2011, which was regarding ensuring SFWPA's continued compliance with the ethics training requirements of AB 1234. SFWPA was involved in eight litigation cases in 2020, including seven active cases and one anticipated case. For example, the SFWPA is currently being sued by the North Yuba Water District, asserting a number of legal issues such as "breach of contract and breach of fiduciary duty." Therefore, it is recommended that new SFWPA managerial staff continue their work to reduce the number of concurrent lawsuits.

**SFWPA: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA**

SFWPA's 33,718-acre boundary area is located mainly in the unincorporated County of Butte. A small portion of the City of Oroville is located within the SFWPA boundary. The boundary area has an irregular shape, and 19 detached and isolated boundary pockets are located east of the sphere of influence. The boundary includes 11,127 assessor parcels. The Agency's SOI was last affirmed in the 2011 MSR/SOI for the Agency. The Agency's SOI encompasses 64,125 acres and includes 11,853 parcels. Agency staff believes the Sphere of Influence boundary is adequate for projected future needs. However, in its 2006/07 MSR, SFWPA noted that their Sphere of Influence boundary should be co-terminus with their "place-of-use" boundary designated by the State Water Resources Control Board to best accommodate future needs regarding the approved area for distribution of water per existing water rights.

LAFCO's 2006 MSR (by Kleinschmidt) noted that SFWPA served water to six customers outside its boundaries via surplus water agreements that were considered for renewal annually. These six customers received irrigation water (not potable). However, there are no current surplus water agreements for these six customers. Otherwise, the SFWPA has not provided extra-territorial services outside its District boundary.

The addition of 4,117 to 5,075 more people to the SFWPA boundary area by the year 2045 is projected as the area contains under-developed areas that could potentially be annexed to the City and/or made available for more intensive residential development. Areas located near the City of Oroville have a moderate probability of developing over the next twenty years since the City continues to grow and expand. This represents an average annual growth rate of less than one percent per year. This could bring the total population within the Agency's service area to approximately 29,375 persons by the year 2045.

Currently, the Agency's boundary area supports an average of 0.72 persons per acre, considered low population density. The County General Plan suggests that growth may occur within the SFWPA boundary. SFWPA boundaries contain a sufficient land area to accommodate projected growth. SFWPA's boundary and SOI include grazing land, prime farmland, farmland of statewide importance, and unique farmland. SFWPA provides raw (untreated) irrigation water to approximately 67 customers, thereby supporting agriculture in the community. The Agency's provision of water services to other open space areas (i.e., non-structural) within its boundaries occurs occasionally. However, natural areas and parks may be unconnected to the SFWPA

system and therefore be rainfall or groundwater-dependent. Therefore, water service generally has minimal effect on agricultural land and open space.

**SFWPA: LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE**

There are six census "blocks" with median household income below the state threshold ($60,188.00) for 2019 within the SFWPA boundary and SOI. These areas are classified as DUC's. Due to the identified DUCs receiving essential services of water, wastewater, and structural fire protection, there are not any communities within the existing SFWPA boundary or SOI that lack public services (or a private alternative), and no health or safety issues have been identified.

**SFWPA: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES, INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES**

SFWPA has a 5-year strategic plan which includes a capital improvement plan. The strategic plan and CIP were presented at the May 2022 SFWPA board meeting. Implementation of these plans in the future will help ensure that infrastructure needs and deficiencies are addressed in a timely manner.

**SFWPA: FINANCIAL ABILITY TO PROVIDE SERVICES**

Financial information is clearly articulated in SFWPA's Annual Audited Financial Statement and budgets, prepared annually with a fiscal year beginning January 1st. The SFWPA annual budget and financial statement are available to the public through the District website. SFWPA's policy for reserve funds is formally described in the 2005 agreement between SFWPA and the NYWD. SFWPA's Annual Financial Statement contains a list of its accounting policies. The District's Rules and Regulations also describe a list of fees and financial responsibilities. The District Rules and Regulations document is readily available on the SFWPA's website. The Schedule of Employee Pay Ranges is approved annually by the Board of Directors and available on the SFWPA website. Required reports are sent to the California State Controller for Government Compensation.

Total revenues exceeded the total expenditures in four of the five study years. Changes to the Net Position are shown to be highly variable. Although the general trend of the Net Position is to increase year over the year, 2020 saw a decline in the Net Position due to reduced sale of hydroelectric power due to the drought. Each water connection paid an average of $9.80 in property tax for the year 2020. This ratio was based on property tax revenue of $681,269 in 2020 and 69,500 water connections in SFWPA.

The SFWPA Board of Directors adopts and publishes its water rate schedule as part of its Rules and Regulations Governing Water Service document. Monthly rates charged to customers for potable water have three components, including 1) monthly service charge, 2) rates of use charge, and 3) meter charge. SFWPA's Rules and Regulations indicate that fees can increase on

an annual basis in accordance with the Engineering News Record's National Construction Cost Index. Rates are displayed in the Rules and Regulations document on the District's website under the "publications" tab at: <*https://southfeather.com/publications/*

**SFWPA: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES**

SFWPA collaborates with multiple other agencies for the delivery of services within its boundary. For example, SFWPA closely coordinates with the Plumas National Forest to provide recreation facilities. SFWPA has four mutual aid agreements with the following agencies: North Yuba Water District (NYWD), Lake Madrone CSD, Berry Creek CSD, and Paradise Irrigation District. The Agreements for mutual aid are periodically reviewed to ensure fiscal neutrality. In the recent past, SFWPA has implemented an array of cost avoidance techniques that each contributes incrementally towards keeping costs at a reasonable level, including cooperation with other municipal water purveyors and fire departments in Butte County to implement new fire safety regulations, utilizing its budgeting processes to avoid unnecessary costs, three-party bid process, and electronic payment system. No other cost-efficiency or risk-reduction strategies have been identified. The 2018 Oroville Region Water Study described the current domestic water system organization between SFWPA, TWSD, and CWS. SFWPA has more than adequate treated water supply capabilities that could assist its neighboring service provider, CWS, with more cost-effective water supplies that may reduce costs to CWS customers. This would also address the duplication of existing water treatment plants that serve the Oroville region. It is recommended that SFWPA and CWS cooperatively evaluate their service capabilities, service demands, and water rates to determine if any cooperative agreement would be beneficial to current customers.

## Thermalito Water and Sewer District

Table 1-10: Agency Profile

| | |
|---|---|
| **Type of Agency:** | Irrigation District |
| **Principal Act:** | California Water Code, Division 11, §20500 et seq |
| **Functions/Services:** | • Management of raw water supply, water treatment, and distribution of potable water for residential, commercial, and municipal purposes;<br>• Wastewater collection and transport; and<br>• Solar electricity generation for internal use only. |

| | |
|---|---|
| **Main Office:** | 410 Grand Avenue, Oroville, CA 95965 |
| **Mailing Address:** | Same |
| **Phone No.:** | (530) 533-0740 |
| **Fax No.:** | None |
| **Web Site:** | https://www.twsd.info/ |
| **General Manager**: | Jayme Boucher at <jboucher@twsd.info> |

**Alternate Contact**: Chris Heindell at <cheindell@twsd.info>

**Meeting Schedule:** 3rd Tuesday of the month at 2:00 p.m.
**Meeting Location:** District Office Boardroom, 410 Grand Avenue – Oroville, California 95965
**Date of Formation:** 1922
**Area Served:** 14,873 acres near Oroville, CA

| | |
|---|---|
| P**opulation**: | Estimate ranges from 10,500 to 11,318 persons |
| **Number of water/sewer connections:** | 3,136 water connections and 2,365 sewer connections |
| **Gross Revenue:** | $4,336,141 in FY2020 |
| **Principal LAFCO:** | Butte LAFCO |
| **Other LAFCO:** | N/A |

**TWSD: ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENT STRUCTURE AND OPERATIONAL EFFICIENCIES**

In the year 2020, the TWSD held a total of 13, and six of these meetings included closed sessions. In other words, 46 percent of the TWSD Board meetings in 2020 included closed sessions. The government code sections applicable to each closed session were listed on the meeting agenda. Compliance with the 2016 updates to the Brown Act described in Government Code §54954.2 was evaluated in this MSR. The new law requires that meeting agendas be retrievable, downloadable, searchable, and indexable. TWSD makes the current board agenda directly available on the homepage of its website at: *https://www.twsd.info/*. Additionally, from the homepage, a "quick-link" to the Board Meeting webpage containing minutes and agendas for the current year and past years. However, Board packets (which contain staff reports) for both regular and special meetings are only available by special request and are not provided via the website. The District website agenda distribution meets the minimum requirements of the Brown Act 2016 Updates described in AB2257. It is recommended that Board packets also be made available via the website. Compliance with the Special District Transparency Act (Gov. Code, §6270.6 and 53087.8) was evaluated in this MSR. Although the District website partially complies with the requirements of the Special District Transparency Act, there is always room for improvement, and it is recommended that TWSD consider adding the following features associated with its website and other public communication:

- Adopt a policy requiring that the TWSD website be user-friendly and contain accurate and up-to-date information; and
- Create a web page where community members can sign up for a free electronic subscription service to send automatic email notifications when a new agenda is available.
- Create a webpage that contains District news, and that is updated regularly.
  (continued)
- Ideally, all independent districts in California would post their employee wage scale by bargaining unit onto their website as described in the Finance Section of this Chapter. Therefore, it is recommended that TWSD Post either the employee compensation rates OR a link to the California State Controller Government Compensation website at:

<*https://publicpay.ca.gov/*>. (TWSD's existing link does not currently link to helpful information).

TWSD's website discloses the terms of office for each District Board member. Although the next election date for District Board members and committee appointments can be determined by making a special inquiry to District staff, this information is not currently available online. This is an item that needs improvement, and it is recommended that the TWSD website be updated to disclose the terms of office and the next election date.

TWSD's elected Board members must submit required forms and receive required training as prescribed by the three state laws regarding accountability and ethics, including 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training.

1) The Political Reform Act: TWSD's Board adopted a code of ethics on November 19, 2019. TWSD's conflict of interest policies are available to the public at *https://www.twsd.info/board-policy*. The Political Reform Act also requires special district board members to disclose all personal economic interests by filing a "Statement of Economic Interests" with the District Clerk or Butte County. TWSD Board members submit the forms to the County Clerk annually. Additionally, There have been no complaints to the CA FPPC regarding filing Economic Statements of Interest required under the Political Reform Act.

2) Ethics training as required by AB 1234: TWSD posts ethics training certification on its website at: *https://www.twsd.info/board-members-ethics-certificates*. Training is offered on a regular basis. Two board members (Latulippe and Wristen) have completed this training. Three board members have not. Therefore, TWSD's Board is partially in compliance with AB 1234. This is an item that needs improvement.
3) Special district board members must receive the required sexual harassment prevention two-hour training every two years per Gov. Code 53237 et. seq. TWSD posts certification of the prevention training on its website. Training is offered on a regular basis. Three board members (Hatley, Latulippe, and Wristen) have completed this training. Two board members have not. Therefore, TWSD's Board is partially in compliance with Gov. Code 53237 et. seq. This is an item that needs improvement.

TWSD works to inform and educate homeowners regarding water or wastewater safety and prevention consistent with Butte County General Plan Objective 6.2.5 through the following Public Outreach programs: 1) informational fliers distributed in the monthly bill statements and 2) notices posted on the District website. There are sufficient opportunities for local involvement in District activities, and information regarding the District is available to members of the public. TWSD is currently involved in litigation against PG&E for damages incurred by the Camp Fire related to operations at the Concow Reservoir and subsequent water quality issues at the District's treatment plant. TWSD has not been subject to a grand jury report in recent years.

## TWSD: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA

TWSD's 14,873-acre boundary area is located in the unincorporated County of Butte and includes most of the community of Thermalito. TWSD's boundary overlaps with small portions of the Thermalito Forebay operated by the CA State Parks. LAFCO initially established the District's SOI in 1985. The District's SOI encompasses 44,101 acres and includes 4,383 parcels. District staff indicates that the Sphere of Influence boundary is adequate for projected future needs due to its large size. The TWSD does not provide extra-territorial services outside of its District boundary. By the year 2045, it is estimated that TWSD's existing boundary will encompass a population ranging from 9,605 to 14,911 persons. This represents an additional 507 to 2,845 persons expected to reside within TWSD boundaries.

Currently, the District's boundary area supports an average of 0.81 persons per acre, which is considered to be low population density. The City of Oroville General Plan suggests that growth may occur in the southern portions of the TWSD boundary, and there are opportunities for infill development. Additionally, the City of Oroville has plans to annex the Thermalito area. These data indicate that the TWSD boundaries contain a sufficient land area to accommodate projected population growth. Farmland of statewide importance and grazing land exists within the TWSD boundaries. However, TWSD does not provide raw water for irrigation purposes. Farmland within the boundaries and SOI are rainfall and/or groundwater-dependent and may utilize individual septic systems to dispose of wastewater. The services provided by TWSD have minimal effects on agricultural land and open space.

## TWSD: LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE

Four of the five census tracts encompassing the TWSD boundary and SOI have a MHI of less than the $60,188.00 threshold for 2019 and are classified as DUCs. Due to the identified DUCs receiving essential services of water, wastewater, and structural fire protection, there are not any communities within the existing TWSD boundary or SOI that lack public services (or a private alternative). No health or safety issues have been identified other than the Golden Feather Mobile Home Park. However, water affordability remains an issue for local residents, and recommendations have been provided in the finance section.

## TWSD: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES, INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES

TWSD has a significant plan relevant to delivering potable water: its Urban Water Management Plan of 2020. TWSD's 2020 Sewer System Management Plan supports its delivery of wastewater conveyance services. It is recommended that TWSD post both plans on its website so they are readily accessible to constituents. TWSD has made a good start towards developing a formal capital improvement plan by listing wastewater improvement projects in its SSMP and listing proposed capital expenses for one year in the annual budget. However, it is recommended that

TWSD improve its capital planning by projecting multiple years of capital expenses consistent with projects that should be described for both wastewater (SSMP) and potable water (UWMP). In addition, it is recommended that TWSD improve its diligence in developing plans to accommodate the infrastructure and service needs of current and future constituents and to ensure that infrastructure needs and deficiencies are addressed in a timely manner.

TWSD provides sufficient services to meet current and future demands as follows:

1) Based on the water supply and water demand assessments described in TWSD's 2020 UWMP, the Concow Reservoir and the four active groundwater wells contain sufficient supply to adequately meet the current and foreseeable demand through 2045.
2) TWSD provides wastewater collection and conveyance, and its wastewater collection system includes approximately 34.7 miles of gravity sewer line with approximately 570 maintenance holes and one sewage lift station.
3) The sewer system conveys wastewater to a treatment plant owned and operated by the Sewerage Commission - Oroville Region. TWSD wastewater infrastructure currently covers 25 percent of its boundary area. Expansion into new geographic areas is possible if needed. However, new pumps or lift stations may be needed depending on the elevation of any future expansion area.
4) TWSD generates electricity using solar panels, which offsets the utility costs at the treatment plant.

Two nearby agencies offer wastewater services similar to TWSD, including the City of Oroville and LOAPUD. Since TWSD provides sewer/water services to COOR lands, there is geographic overlap. Similarly, two nearby agencies offer drinking water services similar to TWSD, including SFWPA and the private California Water Company. However, within the TWSD's boundary area, it is the only water service provider. If, in the future, an opportunity to reduce the number of drinking water treatment plants were to arise, it is possible that the improved efficiency could be beneficial to the community. LAFCO's 2018 Oroville Region Water Service Study recommended that the three entities openly and honestly consider the potential for treatment plant consolidation in the future. It should be noted, however, that the actual potential for this will be limited due to the very different ownership models of the entities. The Authors of this MSR concur with this recommendation of LAFCO's 2018 Oroville Region Water Service Study.

TWSD actively implements preventative maintenance on its water and wastewater infrastructure; however, the MSR Authors did not find a summary describing the recent improvements. In addition, a multi-year plan for the replacement of aging infrastructure (i.e., a Capital Improvement Plan) for both water and wastewater could not be found by the MSR Authors. Therefore, there is insufficient information to address this determination. However, the SSMP lists capital projects for the wastewater system, and the District's annual budget lists capital expenses for the upcoming year. Additionally, TWSD staff have identified infrastructure needs and deficiencies as aging pipeline infrastructure. TWSD has demonstrated some capacity to assist with or assume services provided by other agencies. For example, TWSD has a good financial basis with revenues in line with expenses. TWSD has retained staff engineers and other professionals necessary to serve a leadership role, and these skilled staff persons have the ability to assist with or assume services

provided by other agencies. Additionally, TWSD has close collaborative relationships with nearby independent government agencies, as demonstrated by its collaboration with the SC-OR and the Wyandotte GSA. TWSD successfully communicates with nearby local agencies such as the City of Oroville, Butte County, and SFWPA. TWSD's leadership capacity could be improved by developing a clear and multi-year capital improvement plan and by posting its UWMP and SSMP on the website in a timely manner.

**TWSD: FINANCIAL ABILITY TO PROVIDE SERVICES**

The Consolidated Financial Statement and budgets are prepared annually and clearly and transparently present TWSD's financial information. TWSD reserve policy is called the "Cash and Investment Policy" and is described in their Annual Financial Report posted on the District website. TWSD's Annual Financial Report contains a list of its accounting policies. Additionally, specific District finance policies are posted on the District website. However, TWSD does not seem to have an adopted purchasing policy, and this is an item that needs improvement. The employee wage scale by bargaining unit and the unrepresented employee wage scale are not available on the TWSD website, and this is an item that needs improvement. Required compensation reports are sent to the California State Controller for Government Compensation.

Total revenue exceeded total expenditures in four of the five study years. For the TWSD water fund: About 95 percent of all revenues for this fund are derived from water sales and associated services. The reliance on the sale of water and service furthers the importance of ensuring sustainable and reliable sources to keep rates at a reasonable level for customers. Changes to the Net Position have been relatively stable, with small increases each year. Tax revenue is not listed as a line item in the District's Annual Financial Report. Therefore, the Tax Revenues/Service Ratio is zero. TWSD does not collect any amount of property taxes.

The District Board adopted its water rate schedule during a public meeting via Resolution 04-10 on June 23, 2010. The sewer rates were amended twice, by Resolution 02-15 on June 16, 2015, and Resolution 02-16 on May 21, 2019. TWSD must satisfy the requirements of Proposition 218 for rate increases, including nexus documentation. Therefore, TWSD cannot charge more for the water delivered than it costs to produce and supply it. The sewer fund has similar rate constraints. TWSD's water and wastewater service rates are displayed on the District's website at: <https://www.twsd.info/twsd-policies-fees>. The average TWSD water customer paid approximately $66.50 per month in 2018. An average TWSD wastewater customer in a single-family home will pay $35.27 per month.

**TWSD: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES**

TWSD actively collaborates with multiple other agencies to deliver services within its boundary by implementing the following practices: facility sharing through SC-OR, mutual aid, information sharing, and cost reduction. TWSD actively utilizes mutual aid to reduce long-term costs and to receive and provide assistance during emergencies. The District has mutual aid agreements with surrounding agencies to allow for sharing equipment and personnel as needed. It is

recommended that TWSD periodically review agreements for mutual aid or any other appropriate agreement (i.e., Tax Sharing Agreement) to ensure fiscal neutrality. While the current organization of sewer services between three collection agencies and the wastewater treatment plant (SC-OR) effectively delivers sewer services to the Oroville region, this duplication of services should be evaluated to determine if a reorganization of service providers and/or boundaries would result in a more transparent and cost-effective provision of sewer services. At present, TWSD provides sewage collection services within COOR boundaries. It is recommended that the District initiate dialogue with the COOR to consider opportunities for collection system consolidation west of the Feather River that would allow for greater efficiencies, cost savings and offer a more streamlined approach that would benefit not only current users but new development interests as well.

In general, municipal water systems and wastewater systems have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, TWSD pursues an array of cost avoidance techniques that each contributes incrementally towards keeping costs at a reasonable level. Specifically, TWSD carefully utilizes its budgeting processes to serve as one means to avoid unnecessary costs. In addition, TWSD participates in two Joint Powers Authority (SC-OR and Wyandotte Creek Groundwater Sustainability Agency.

## Cal Water – Oroville

Table 1-11: Company Profile

| | |
|---|---|
| **Type of Organization:** | Private investor-owned utility serving the public and regulated by the California Public Utilities Commission |
| **Principal Act:** | Although there is no Principal Act, CalWater is operated consistent with the California Constitution, Article 12, Section 3; California Public Utilities Code, Section 216(a). |
| **Functions/Services:** | Water treatment and distribution for residential, commercial, and other domestic purposes. |

| | |
|---|---|
| **Local Office:** | 1905 High Street, Oroville, CA 95965 |
| **Administrative Contact:** | 1720 North First Street, San Jose, CA 95112 |
| **Phone No.:** | (530) 533-4034 |
| **Web Site:** | www.calwater.com; or visit https://www.facebook.com/calwater, https://www.instagram.com/calwater/, or https://twitter.com/calwater |
| **General Manager**: | Loni Lind, Operations Manager |
| **Alternate Contact:** | Dan Armendariz, Director of Field Operations |

**Meeting Schedule:** None
**Meeting Location:** None
**Date of Formation:** 1927

**Area Served:** Cal Water serves 3,463 acres (5.41 square miles) located in the Oroville community in Butte County.

| | |
|---|---|
| **Population** | 11,022 persons |
| **Number of water connections** | 3,547 |
| **Principal LAFCO:** | Butte LAFCO |
| **Other LAFCO:** | none |

## CAL WATER: ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENT STRUCTURE AND OPERATIONAL EFFICIENCIES

As a private company, California Water Service does not have a government structure. Cal Water's Board of Directors does not hold public meetings and is not subject to compliance with the Brown Act. Limited information regarding the Company is readily available to members of the public. LAFCO's 2006 MSR determined that consideration should be given to resolving inefficiencies in service provision in relation to SFWPA and TID [TWSD], and this determination remains valid. However, as a utility that serves the public and is regulated by the California Public Utilities Commission (CPUC), Cal Water – Oroville must comply with different laws and regulations than government-owned utilities. The laws and regulations to which Cal Water – Oroville is subject allow opportunities for public involvement, oversight, and accountability. However, those opportunities are somewhat more limited and geographically separated as compared to local special districts. Cal Water Oroville does currently maintain a website at: <*https://www.calwater.com/*>. Cal Water - Oroville is regulated by the California Public Utility Commission (CPUC), which regularly holds public meetings in Sacramento and San Francisco. During rate-setting proceedings, local public participation hearings may also be held. The public can participate in CPUC meetings remotely, via phone or web conference. Providing in-person public testimony to regulators may be difficult for Oroville residents due to driving distances and the reduced frequency of meetings compared to local special districts.
The number of employees (seven) is appropriate, given the operation and size of the Cal Water Oroville District.

## CAL WATER: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA

Cal Water Oroville's 3,463-acre service area is located in the City of Oroville. LAFCO's 2006 MSR/SOI depicts the Cal Water Oroville Sphere as congruent with its boundary. Cal Water Oroville does not provide extra-territorial services outside its Company service area. However, to supply its operations, Cal Water Oroville has a purchase agreement with the Pacific Gas and Electric Company to purchase up to 3,000 acre-feet per year of water. In addition, it has an agreement with Butte County to purchase 150 AFY of surface water.

There are approximately 11,022 residents within the Cal Water service area boundaries as of 2022. From 2020 to 2045, it is anticipated that an additional 345 to 1,068 persons are expected

to reside within Cal Water Oroville boundaries. This represents an overall 3.2% percent increase in the projected future population. Currently, the Company's service area supports an average of 3 persons per acre, which is considered low population density. Therefore, the existing service area boundaries contain a sufficient land area to accommodate projected growth. The City of Oroville's boundary and SOI do contain agricultural lands, as described in Chapter 3. However, Cal Water Oroville is a private company with no jurisdiction over land use and no influence over agricultural or open space lands. Therefore, the provision of treated municipal water services generally has minimal effects on agricultural land and open space. Open space, agriculture, and urban areas are all part of the modern landscape, and associated local hazards such as earthquakes, fires, and floods are also ephemeral features that can significantly impact water service operations. Butte County adopted the Local Hazard Mitigation Plan (LHMP) in November 2019. At that time, an invitation to participate in the LHMP process was not given to Cal Water. It is recommended that Cal Water Oroville contact the Butte County Office of Emergency Services and ask to be invited to the next update of the LHMP.

## CAL WATER: LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE

The statewide annual median household income (MHI) in California for 2019 was $75,235 (U.S. Census, 2021). Eighty percent of the statewide MHI (2019) equals $60,188.00, the threshold used to determine which geographic areas qualify for classification as disadvantaged communities. The year 2019 is utilized as the baseline year because it corresponds to the CALAFCO map. The Cal Water Service area extends primarily to areas within the City of Oroville. Several DACs have been identified within the City, as described in Chapter 3. However, based on new GIS data provided by Cal Water, there seems to be one unincorporated area that could qualify as a DUC within the Cal Water Oroville Service Area. The provision of adequate water, wastewater, and structural fire protection services to DUCs is considered in Chapter 3. No public health or safety issues have been identified. Water affordability for disadvantaged communities is an issue that deserves further consideration by LAFCO and its partners.

## CAL WATER: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES, INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES

Regarding water quality, Cal Water Oroville meets current state and federal requirements. Cal Water Oroville submits regular reports to Calif. Public Utilities Commission. Water demands are expected to be somewhat higher in dry-year periods, potentially up to 2,833 AFY by 2025, during an extended five-year drought. The drought demand of 2,833 AFY exceeds the projected 2045 supply (2,586 AFY). However, Cal Water’s staff has noted that the future drought demand is projected to be less than the 3,150 AFY of “Total Right or Safe Yield.” The UWMP’s projected future water demand calculations do not consider the effect of climate change on water demand. However, the UWMP does note that Cal Water is studying this issue. Also, the UWMP's future projected water demand does not consider the effect that the expansion of the water service area recently approved by the CPUC could have on future water demand. The population in Oroville and the associated water demand will likely rise in the future. Given the identified data gaps, it is recommended that the next MSR or SOI update prepared by LAFCO for Cal Water study this issue of projected future water demand for the Cal Water Oroville service area in more detail. This long-term water demand question would ideally be hydrologically modeled by a hydrologist.

In 2021, the State Water Resources Control Board Division of Drinking Water completed an Inspection Report, which found that Cal Water Oroville's water system is in general compliance with regulatory requirements and is professionally operated and maintained. Minor deficiencies were found during the inspection.

Duplicate domestic water service infrastructure is located near the Cal Water Oroville service area. For example, four drinking water treatment plants are located in the Oroville/Bangor area. Additionally, areas of geographic overlap exist between Cal Water Oroville, SFWPA, and TWSD. Specifically, 228.5 acres are located in both SFWPA and Cal Water boundaries. 19.7 acres are located in both TWSD and Cal Water boundaries. It is recommended that LAFCO study this issue in more detail when the next MSR or SOI is prepared for the area. Additionally, LAFCO should formally notify CPUC of the overlapping service areas.

Cal Water Oroville's staff indicate that they file an infrastructure improvement plan every three years with the CPUC. The CPUC determines if those infrastructure investments are prudent and necessary. The CPUC determines the revenue necessary to safely and reliably operate the water system; the infrastructure improvement plan is key in determining that revenue requirement. Rates are adjusted up or down to meet the revenue requirement for that three-year cycle. Cal Water Oroville has demonstrated an ability to collaborate professionally as follows:

- Participated in the development of the Northern Sacramento Integrated Regional Water Plan (NSV-IRWMP),
- Participates in the regional WAC/SGMA
- Maintains water inter-tie infrastructure with TWSD.

It is also noted that Cal Water's 2020 UWMP did not mention any additional infrastructure capacity or water supply capacity that could be made available to assist nearby water service providers.

**CAL WATER: FINANCIAL POLICIES & FISCAL SUSTAINABILITY**

Pursuant to CPUC General Order 104-A, Cal Water submits to the CPUC an annual report that provides detailed financial information for Cal Water as a whole, as well as each individual service area, including Cal Water – Oroville. These reports are publicly available on the CPUC's website. The most recent report for the year ending December 31, 2021, was filed in May 2022 and is available here: *https://bit.ly/3IQ40Ah*. These reports are similar to the audited financial reports provided by government-owned utilities. Cal Water's most recent proposed Infrastructure Improvement Plan is available on its website at: <*https://www.calwater.com/rates/iip-2021/*>. Pursuant to federal securities laws, California Water Service Group, a subsidiary of Cal Water, prepares and submits comprehensive annual financial reports. These reports are publicly available on the organization's website at: *https://ir.calwatergroup.com/financial-reports/annual-reports*. Additional financial information has been shared with the public concerning Cal Water - Oroville's rates, finances, and operations in several recent reports, including:

- Analysis Group, Inc. January 2017. A Comparison of Residential Water Bills: Cal Water Oroville and South Feather Water & Power Agency. Contributions from David Sosa. Commissioned by Cal Water. 15-pages.
- Butte LAFCO. May 3, 2018. Oroville Region Water Service Study. 23-pages. Prepared by Northstar Engineering.
- West Yost Associates. May 2017. Oroville System Report. Prepared for California Water Service. 30-pages.

The California Public Utilities Commission (CPUC) regulates the compensation offered to Cal water employees. Pursuant to CPUC General Order 77-M, Cal Water prepares and submits to

the CPUC an annual report that documents the names, titles, and duties of all Executive Officers and the compensation received by each; and the names, titles, and duties of all employees who received compensation at the rate of $85,000 or more per annum, and the compensation received by each. These reports are available on the CPUC's website at: *https://bit.ly/3QJZ4i8*. However, Since Cal Water Oroville is a private company, they are not required to share or post information related to compensation reports and financial transaction reports to the State Controller's Office. The 2018 Service Study by Northstar Engineering found that as a private corporation, Cal Water is not required to comply with Prop 218. Instead, every three years, the CPUC reviews applications from Cal Water for rate increases. The CPUC's general proceeding is a formal review process that considers how projects could potentially affect utility ratepayers. The CPUC's general proceedings include a public participation hearing where local customers can provide written or oral input.

Water affordability relates to the monthly fee for domestic water in comparison to the ability of lower-income communities to pay. Since the City of Oroville is located in proximity to DACs and DUCs, water affordability will remain an ongoing concern. It is recommended that any future MSR or SOI for the Oroville Area contain a more detailed analysis of this water affordability issue, including modeling different affordability scenarios, such as a two percent threshold or a two-and-one-half percent threshold. Additionally, an affordability scenario that includes both water and sewer rates might be informative. In the future, the City of Oroville and/or LAFCo may wish to share median household income data with the CPUC to explore whether water affordability by local residents is an issue that the CPUC could help address. A different option would be for LAFCO to continue to explore structural or efficiency measures or infrastructure features that could be studied over the long term.

Between the years 2009 to 2016, Cal Water Oroville made several significant capital expenditures to improve system facilities and pipelines, resulting in enhanced system capacity, improved reliability, and/or maintenance of infrastructure conditions. In addition, Cal Water files a general rates case with the CPUC, including an infrastructure improvement plan, every three years. This triennial process determines the revenue required to safely and reliably operate the water system. Rates are adjusted up or down as appropriate to meet that revenue requirement.

## CAL WATER: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES

Cal-Water Oroville collaborates with multiple other agencies for the delivery of services within its service area. Specifically, Cal Water Oroville:

- Sustains a level of communication with nearby municipal service providers.
- Participates in regional planning efforts such as the IRWMP and SGMA.
- Maintains a physical infrastructure connection with Thermalito Irrigation District, which can be used during emergencies or treatment plant maintenance.
- Is considering a future consolidation with Cal Water Chico.

Cal Water Oroville has a physical infrastructure connection with Thermalito Irrigation District, which can be used during emergencies or treatment plant maintenance.

## 1.4 Bibliography

Badger, Emily. March 30, 2012. The Simple Math That Can Save Cities From Bankruptcy. Published by Citylab. Retrieved on July 12, 2021 from: <*https://www.citylab.com/life/2012/03/simple-math-can-save-cities-bankruptcy/1629/*>.

Butte LAFCO. May 1, 2018. Oroville Region Water Service Study. Authored by Northstar Engineering Consulting firm. 23-pages.

# CHAPTER 2: INTRODUCTION

*Image of Concow Lake, 1884, courtesy of Cal State Chico*

## TABLE OF CONTENTS

# 2.1: ROLE AND RESPONSIBILITY OF LAFCO

Local Agency Formation Commissions (LAFCOs) are independent agencies established by state legislation in 1963 in each county in California to oversee changes in local agency boundaries and organizational structures. It is LAFCO's responsibility to:

- oversee the logical, efficient, and most appropriate formation of local cities and special districts;
- provide for the logical progression of agency boundaries and efficient expansion of municipal services;
- assure the efficient provision of municipal services; and
- discourage the premature conversion of agricultural and open space lands. (Government Code [GC] §§ 56100, 56301, 56425, 56430, 56378).

The Cortese-Knox-Hertzberg (CKH) Local Government Reorganization Act of 2000 (CKH Act) requires each LAFCO to prepare a Municipal Service Review (MSR) for its cities and special districts. MSRs are required prior to and in conjunction with a Sphere of Influence (SOI) update. This MSR Update is intended to provide Butte LAFCO with the necessary and relevant information related to five local government agencies providing water and/or wastewater services in the Oroville area, including:

- City Of Oroville (COR)
- Lake Oroville Public Utility District (LOPUD)
- Sewerage Commission Oroville Region (SCOR)
- South Feather Water and Power Agency (SFWPA)
- Thermalito Water and Sewer (TWSD)

Additionally, information about a sixth service provider, a private company called California Water Service, with a service area in Oroville (Cal Water Oroville), is provided in Chapter 8.

# 2.2: ABOUT BUTTE LAFCO

Each LAFCO works to implement the CKH Act, and there is flexibility in how these state regulations are implemented to adapt to local needs. As a result, Butte LAFCO has adopted Policies and Guidelines that guide its operations, which were adopted on May 6, 2010. LAFCO's Policies and Guidelines can be found on Butte LAFCO's website (https://www.buttelafco.org/resources). This MSR Update was written under the auspices of Butte LAFCO. The mission of Butte LAFCO is to coordinate logical and timely changes in local governmental boundaries (§56001); conduct special studies which review ways to reorganize, simplify and streamline governmental structures (§56301); and prepare spheres of influence for each city and special district within the County (§56425). The Commission promotes the provision of efficient and economical services while encouraging the protection of agricultural and open space lands (§56001, §56300). Further efforts include discouraging urban sprawl and encouraging orderly formation and development of local agencies based upon local conditions and circumstances (§56301) (Butte LAFCO, 2010).

An MSR is an information tool that can be used to facilitate cooperation among agency managers and LAFCO to achieve efficient delivery of services. Describing existing efficiencies in service deliveries and suggesting new opportunities to improve efficiencies is a key objective of this MSR Update, consistent with Butte LAFCO's purpose. Since this MSR Update will be published on the LAFCO website, it also contributes to Butte LAFCO's principle relating to public accessibility and accountability. Butte LAFCO will conduct a public hearing on this MSR Update in the spring season of 2023, thereby contributing to the aim of encouraging an open and engaged process.

### Commissioners

Butte LAFCO is composed of seven regular Commissioners: two members from the Board of Supervisors; two members who represent cities; two members who represent special districts; and one public member who represents the public as a whole. In addition, there are four alternate Commissioners, one from each of the above membership categories. County representatives (regular and alternate) to LAFCO are selected as part of the Board of Supervisors' committee assignment process. Since Butte County has five cities (Biggs, Chico, Gridley, Oroville, and Paradise), the City Selection committee, made up of the mayor of each incorporated city within Butte County, appoints two city council members and one alternate. Special district representatives (regular and alternate) to LAFCO are elected by the governing boards of the special districts. The regular county, city, and special district members of LAFCO select one person to represent the public at large and one person to serve as his/her alternate. The public member and alternate cannot be an elected or appointed official of any public agency in the County of Butte. Commissioners are listed in Table 2.1 below.

Table 2.1: Members of Butte LAFCO

| **Commissioner Name** | **Representing** | **Date Term Expires** |
|---|---|---|
| Bill Connelly (Chair) | County Supervisor | May 2023 |
| Tod Kimmelshue (Vice-Chair) | County Supervisor | May 2025 |
| Al McGreehan | Special District Appointment | May 2025 |
| Bill Sharman | Special District Appointment | May 2024 |
| Bruce Johnson | City Appointment | May 2022 |
| Greg Bolin | City Appointment | May 2023 |
| Steve Betts | Public Member Appointment | May 2024 |
| Larry Bradley | Alternate Special District Appointment | May 2025 |
| Vacant | | May 2024 |
| Vacant | | May 2023 |
| Don Rust | Alternate Public Member | May 2025 |

### Staff / Administrative

LAFCO's staff work to implement the CKH Act and they can be contacted at the Oroville office at (530) 538-7784. LAFCO staff includes:

- Stephen Lucas, Executive Officer
- Shannon Costa, Deputy Executive Officer
- P. Scott Browne, Legal Counsel
- Jill Broderson, Management Analyst
- Krystal Bradford, Commission Clerk

### Funding

The funding for this MSR Update was provided through an agreement between the County of Butte and Butte LAFCO to utilize funding provided through the Senate Bill (SB) 2 Planning Grant Implementation Program (aka SB 2 Grant). These funds are provided by the State of California through the Building Homes and Jobs Act of 2017 (known as SB 2). SB 2 was passed to provide funding and technical assistance to local agencies to streamline housing approvals in compliance with the Housing Accountability Act and SB 35 and accelerate housing production[1]. In October 2019, the County of Butte and Butte LAFCO signed an agreement to prepare this MSR to study water and wastewater service providers in the Oroville area (Butte County, 2019).

## 2.3: PURPOSE OF THE MUNICIPAL SERVICE REVIEW

MSRs are intended to provide a comprehensive analysis of services provided by each of the special districts and other service providers identified within an MSR and that fall under the legislative authority of the LAFCO. With this MSR Update, Butte LAFCO can make informed decisions based on the best available data for the service provider and area. As required by law, written determinations are presented following the analysis in Chapters 3 to 8. LAFCO is ultimately the decision maker on approval or disapproval of any determinations, policies, boundaries, and discretionary items. This review provides technical and administrative information to support Butte LAFCO's future evaluation of the existing boundary and sphere of influence for six water and/or wastewater districts in the Oroville area, including:

- City Of Oroville (Sewage Collection)
- Lake Oroville Public Utility District (Sewage Collection)
- Sewerage Commission Oroville Region (Sewage Treatment WWTP)
- South Feather Water and Power Agency (Domestic and Irrigation Water)
- Thermalito Water and Sewer (Domestic Water and Sewage Collection Services)
- CalWater - Oroville

Three of the above agencies are special districts (LOAPUD, SFWPA, and TWSD). The City of Oroville is an incorporated municipality. The Sewerage Commission – Oroville Region is a joint powers agency. CalWater – Oroville is a private service provider.

[1] Additional information about the SB 2 Planning Grants is provided by the California Department of Housing and Community Development at: < https://www.hcd.ca.gov/grants-funding/active-funding/planning-grants.shtml>.

This updated MSR makes determinations in each of seven mandated areas of evaluation for MSRs. The analysis in Chapter 3 to 8 provides the basis for Butte LAFCO to consider future potential changes to the boundaries or SOI. Appendix C contains a range of alternative options offered as suggestions for LAFCO to consider when it next updates the SOI for each agency. An SOI is defined in GC § 56425 as "a plan for the probable physical boundary and service area of a local agency or municipality as determined by the Commission." The CKH Act indicates that LAFCO should review and update a sphere of influence every five years, as necessary, consistent with GC § 56425(g) and § 56106[2]. When reviewing and determining SOI for the five water and/or wastewater districts in the future, LAFCO will consider and make recommendations based on the following information:

- The present and planned land uses in the area, including agricultural and open-space lands;
- The present and probable need for public services and facilities in the area;
- The present capacity of public facilities and adequacy of public services that the agency provides;
- The existence of any social or economic communities of interest in the area if LAFCO determines that they are relevant to the service provider; and
- The presence of disadvantaged unincorporated communities for those agencies that provide water, wastewater, or structural fire protection services.

In addition to the above, Butte LAFCO's Policies and Procedures include special criteria for review of the sphere of influence amendments, including the following:

- Sphere Boundaries (3.1.4): When establishing the boundaries of a sphere of influence for an agency, LAFCO will consider the factors listed in Section 56425 of the Government Code as well as the following factors:
    - LAFCO will discourage including lands that are:
        - Unlikely to require the services provided by the agency, for example, lands not designated for inclusion to a city by the applicable general plan;
        - Areas where topographical factors constrain development;
        - Areas where the projected and/or historical growth rates do not indicate a need for service within the time frame of the Sphere Plan;
        - Areas in an agency's sphere of influence that cannot feasibly be served by the agency within a 20-year time frame, consistent with the Sphere Plan (3.1.4.1).
        - (*Data Source: LAFCO, 2010*)

Ideally, an MSR will support LAFCO and will also provide the following benefits to the subject agencies:

- Provide a broad overview of agency operations, including the type and extent of services provided;
- Serve as a prerequisite for a sphere of influence update;
- Evaluate governance options and financial information;

[2] The CKH Act (GC § 56106) states that all timeframes are directives. Any provision governing the time in which Commission is to act, is deemed directory rather than mandatory.

- Demonstrate accountability and transparency to LAFCO and the public; and
- Allow agencies to compare their operations and services with other similar agencies.

## 2.4 METHODOLOGY FOR THIS MSR UPDATE

Six Water and Wastewater Agencies

This 2022 MSR Update evaluates the structure and operation of the six water and wastewater service providers and determines the capacity of each provider to serve existing customers and accommodate additional service demands. The six service providers are the South Feather Water and Power Agency (SFWPA), Thermalito Water and Sewer District (TWSD), Lake Oroville Area Public Utility District (LOAPUD), Sewerage Commission Oroville Region (SCOR), and the City of Oroville (COR). Additionally, a sixth service provider, Cal Water Oroville, a private company, is described in Chapter 8.

Types of Service Providers

There are four main types of public service providers operating in Butte County, including:

- An independent special district is independent of other government bodies. It is important to note independent special districts are not part of state or county governments. They are only directly accountable to the people residing within the districts' boundaries. They are governed by an elected board that oversees the district's functions and finances. SFWPA (water service), TWSD (water and wastewater collection), and LOAPUD (wastewater collection) are three independent special districts described in this MSR.
- A dependent special district is governed by other governmental entities. For example, members of city councils or county boards of supervisors would serve on the board of a dependent special district. Another way to view a dependent district is that they are components of other government bodies. This MSR does not include any dependent special districts.
- The third type of special district is a joint powers authority, commonly referred to as a JPA. Joint powers authorities are permitted under California Government Code § 6502. The code allows two or more public authorities, such as utility or transport districts, to jointly exercise any power common to all of them even though they reside in different counties. While each public authority involved has its own governing board, the JPA also has a board of directors. SC-OR is a JPA described in this MSR and provides wastewater treatment and disposal services.
- The fourth type of service provider is a municipality (i.e., a City or a County). A municipality is usually a single administrative division having corporate status and powers of self-government or jurisdiction as granted by national and State laws to which it is subordinate. California Government Code (commencing with Section 34100) dictates that cities may be organized under either the general laws of the State or under a charter adopted by the local voters. Cities that are organized under the general laws of the State (Section 34102) have less autonomy compared to those that adopt their own charter (Section 34101). General law cities follow the rules described in the CA Government Code commencing

with Section 34000. The City of Oroville is a charter city analyzed in this MSR as a provider of wastewater collection services.

In addition to the four types of public service providers listed above, private companies such as the California Water Company can also provide municipal services.

Data Collection

This MSR has been compiled using a three-step data gathering process. This process included a comprehensive review of pre-existing plans and data, a Request for Information (RFI) distribution to each service provider, in-person interviews, and other periodic discussions with agency staff, LAFCO staff, and the consulting team. Key references and information sources for this study were gathered and include: published reports; review of agency files and databases (agendas, minutes, budgets, contracts, audits, etc.); master plans; capital improvement plans; engineering reports; environmental impact reports; finance studies; general plans; and state and regional agency information (permits, reviews, communications, regulatory requirements, etc.). MSRs were previously adopted by LAFCO for each of the six municipal agencies under consideration herein, as listed in Table 2-2 below. Reviewing previous MSRs was a key feature of the data collection process.

Table 2-2: Butte LAFCo's Previous MSRs for Six Service Providers

| Name of Service Provider | Link to Previous MSR | Date of MSR |
|---|---|---|
| South Feather Water and Power Agency | • *https://www.buttelafco.org/south-feather-water-power-agency* and<br>• Irrigation, Drainage, and Reclamation Service Providers MSR (not available on-line) | June 1, 2006<br><br>2007 |
| Thermalito Water and Sewer District | *https://www.buttelafco.org/thermalitoirragation-district* | June 1, 2006 |
| Lake Oroville Public Utility District | *https://www.buttelafco.org/lake-oroville-public-utility-district* | July 10, 2013 |
| Sewerage Commission Oroville region | Domestic Water and Wastewater Service Providers MSR (not available on-line) | June 1, 2006 |
| City of Oroville | • Domestic Water and Wastewater Service Providers MSR (not available on-line)<br>• *https://www.buttelafco.org/oroville* | June 1, 2006, and<br><br>December 4, 2014 |
| Cal Water - Oroville | Domestic Water and Wastewater Service Providers MSR (not available on-line) | June 1, 2006 |

A RFI was completed by each of the five public service providers. The in-person interviews were conducted in May 2021. All data were reviewed and analyzed by a team of municipal management and water resource professionals to provide a fair and honest analysis of key metrics and the development of realistic determinations. Interviews with Cal Water – Oroville Staff were conducted via Zoom in December 2022.

This MSR forms the basis for specific judgments, known as determinations, about each agency that LAFCO is required to make (GC § 56425, 56430). These determinations are described in the MSR Guidelines from the Office of Planning & Research (OPR) as set forth in the CKH Act, and they fall into seven categories, as listed below:

1. Growth and population projections for the affected area;
2. Location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence;
3. Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies;
4. Financial ability of an agency to provide services;
5. Status of, and opportunities for, shared facilities;
6. Accountability for community service needs, including government structure and operational efficiencies; and
7. Any other matter related to effective or efficient service delivery, as required by commission policy.

An MSR must include an analysis of the issues and written determination(s) for each of the above determination categories.

### California Environmental Quality Act

The California Environmental Quality Act (CEQA) is contained in Public Resources Code § 21000, et seq. Under this law, public agencies must evaluate their actions' potential environmental effects. Typically, MSRs are exempt from CEQA under a Class 6 categorical exemption. CEQA Guidelines §15306 states that "Class 6 consists of basic data collection, research, experimental management, and resource evaluation activities that do not result in a serious or major disturbance to an environmental resource."

Appendix C of this document includes alternative options to update the SOI for each of the water and wastewater service providers. Modifications to a SOI are subject to CEQA, and this will be evaluated by LAFCO when the Commission considers the SOI Updates in the future.

### Other Service Providers

The California Water Service Company is a private company that provides drinking water to a significant portion of the residents within the City of Oroville. Details about the California Water Service Company are provided in Chapter 8 of this MSR.

Residents of the Oroville area also receive public services from an array of service providers such as the County of Butte, several school districts, Butte County Association of Governments, Butte Regional Transit (B-Line), Butte County Mosquito and Vector Control District, Feather River Recreation and Park District, private utility companies, Butte County/CALFIRE Fire Department, , and several state and regional agencies. This list shows that residents interact with a networked

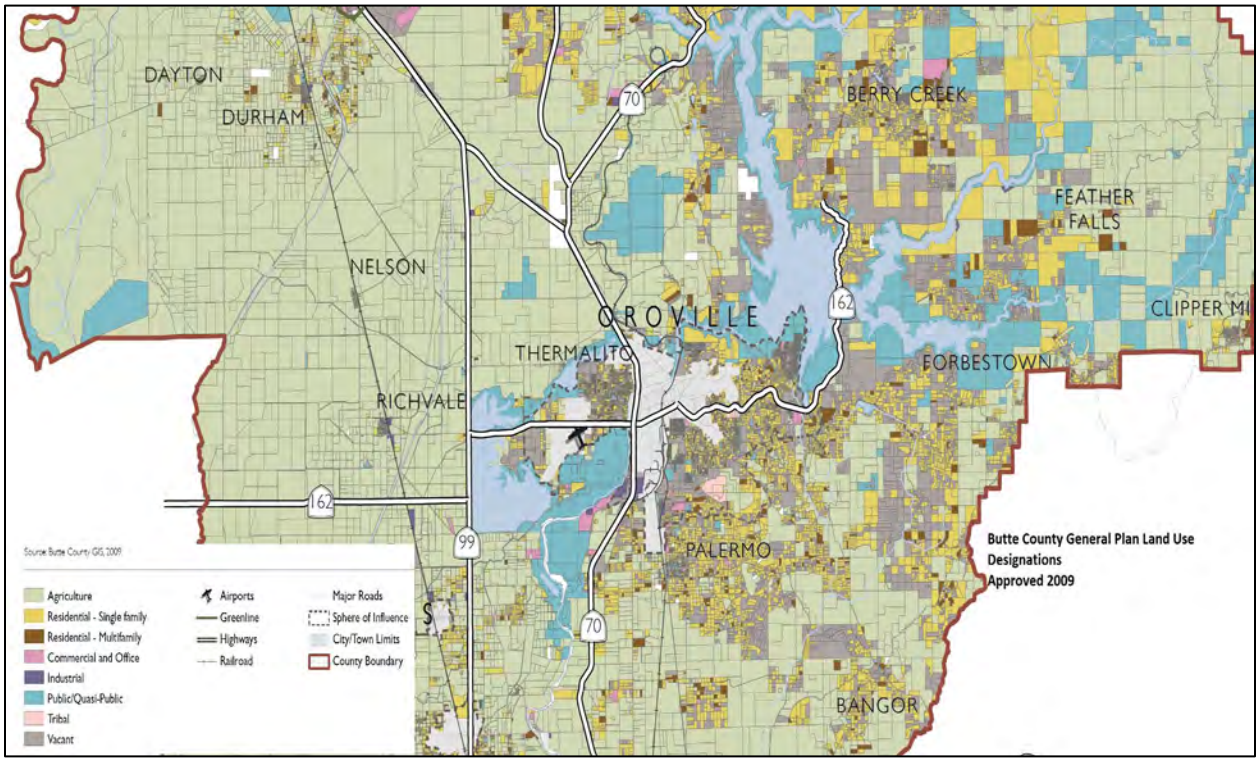
array of private and public service providers. Understanding and documenting the space within this network for water and wastewater service providers is one of the objectives of this MSR Update. LAFCO may utilize this information to support its determination regarding accountability for community service needs, including government structure and operational efficiencies.

## Planning Documents

### General Plans:

The City of Oroville and the County of Butte have adopted General Plans. The Butte County General Plan 2030 was updated and adopted on October 26, 2010 (County Resolution 10-152) and amended on November 6, 2012 (County Resolution 12-124). Butte County is currently preparing a 2040 General Plan Update. A visual image of the Butte County General Plan Map is shown in Figure 2-1 below. Existing land-uses are summarized in the Draft Environmental Impact Report (EIR) for the General Plan. Butte County is a moderately sized county, covering 1,677 sq. miles, and it contains a diverse array of land-uses. The City of Oroville has its own general plan and EIR, as described in Chapter 3.

Figure 2-1: Butte County General Plan Map



Regional Transportation Plans & Sustainable Community Strategies

California Senate Bill (SB) 215 (Wiggins in 2009)[3] requires LAFCo to consider regional transportation plans before making boundary decisions. Regional transportation plans are adopted pursuant to Section 65080 of the Cal Gov. Code. Metropolitan planning organizations (MPOs) must adopt "sustainable communities' strategies" or "alternative planning strategies" as part of their regional transportation plans. These strategies align regional planning for transportation and housing. In preparing a sustainable community's strategy, MPOs must consider city and special district spheres of influence as adopted by the local LAFCO. The Butte County Association of Governments (BCAG) Board of Directors approved the 2020 Regional Transportation Plan (RTP) & Sustainable Community Strategy (SCS), and Supplemental Environmental Impact Report (EIR) on December 10, 2020. All relevant RTP/SCS or SEIR material is posted on-line on BCAG's website at: <http://www.bcag.org/Planning/RTP--SCS/>. The RTP identifies that the City of Oroville has an Urban Center and Corridor. Future growth within an Urban Center may likely consist of compact infill developments on underutilized lands or redevelopment of existing developed lands. Both the City and the surrounding Oroville area are identified in the RTP as "Established" developed areas. Established areas generally consist of the remaining existing urban development footprint surrounding the Urban Center with a mix of uses and urban densities. Future growth within an "Established" area may potentially utilize locations of currently planned developments or vacant infill parcels. "New" areas are proposed for development to the west of the City and to the south of the City, as shown in "pink" in Figure 2-2 below. New areas currently consist of vacant land adjacent to existing development and represent areas of future urban expansion. Local plans could identify these areas as special planning or specific plan areas, master plans, and planned development or planned growth areas (BCAG, 2020). These proposed "New" areas may experience an increase in demand for water and wastewater services (if developed in the future), and this relates to the topic of this MSR.

Other Plans

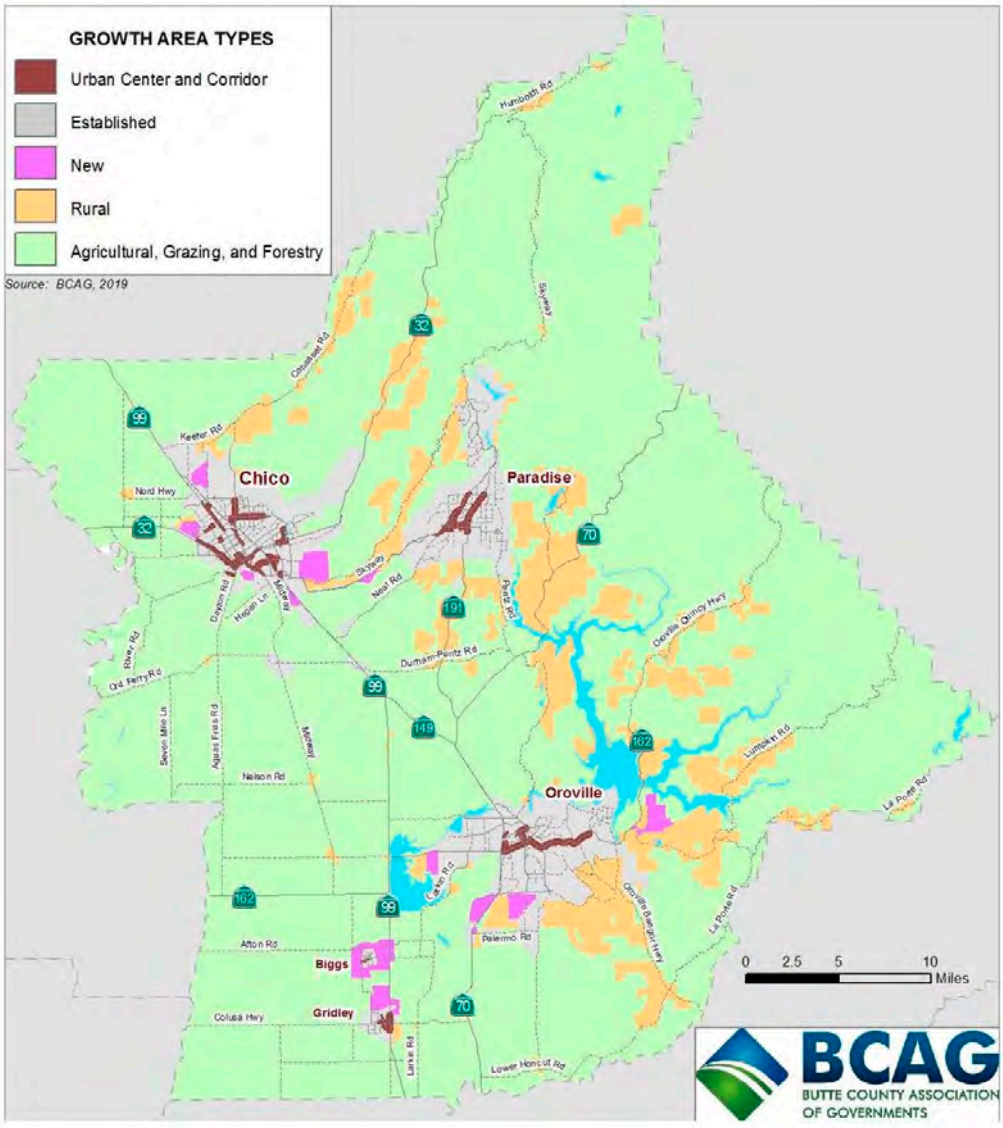
The County of Butte and the City of Oroville have each conducted recent planning efforts that aim to improve the quality of life in the Feather River watershed, including the following:

- Feather River Recreation and Park District Master Plan (2011)
- Butte County Climate Action Plan (2014),
- Oroville Balanced Mode Circulation Plan (2015),
- Oroville Community Climate Action Plan (2015)
- Oroville Area Urban Greening Plan (2015)
- Butte Regional Conservation Plan (Draft – Pending)
- Northern Sacramento Valley Integrated Regional Water Management Plan (IRWMP)[4]

[3] SB 215 was codified as Section 56668 of the CA Government Code.

[4] The Northern Sacramento Valley Integrated Regional Water Management Plan (IRWMP) covers the six counties of the northern Sacramento Valley, including Butte, Colusa, Glenn, Shasta, Sutter, and Tehama Counties. The IRWMP was adopted on March 3, 2014 with the goal to enhance coordination of the region's water resources. The plan considers several water resource issues including: Water supply

Figure 2-2: Regional Transportation Plan Growth Areas



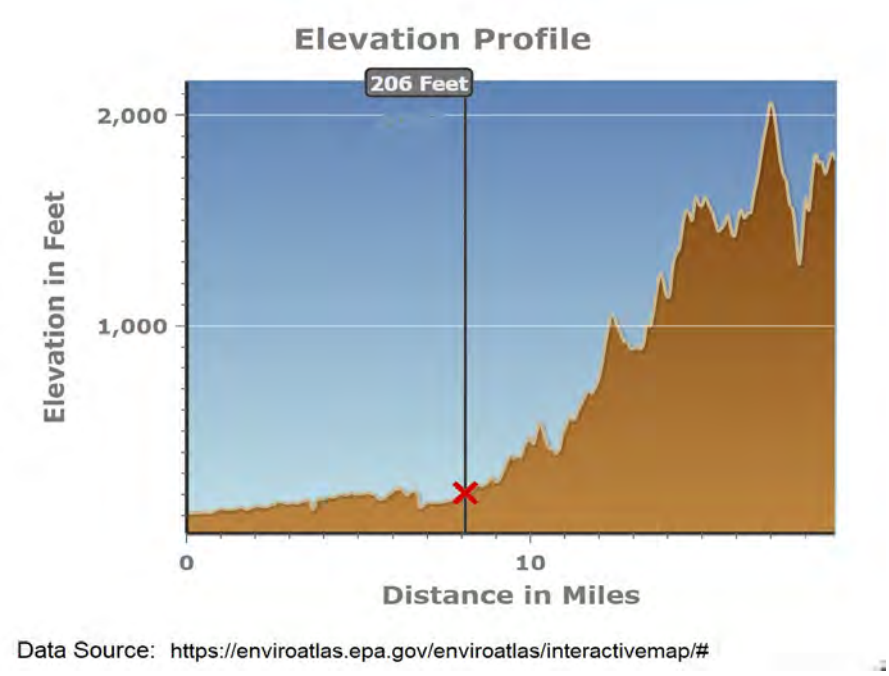

Data Source for Figure 2-2: BCAG, 2020

reliability; Flood, stormwater, and flood management; Economic health and vitality; Water quality improvements; and Ecosystem protection and enhancement

Land Use

This MSR covers service providers within the unincorporated Butte County and the incorporated City of Oroville. The City of Oroville sits at an elevation of approximately 200 feet msl, as shown in Figure 2-3. The foothills to the east of Oroville climb steeply to an elevation exceeding 2,000 feet msl. Specific details about existing land uses within the boundary and SOI for each service provider are described in Chapters 3 to 8.

*Figure 2-3: Elevation Profile for City of Oroville*




## Housing

The provision of low-income and moderate-income housing in California has been challenging in recent years, and one result is that housing costs are relatively high for many people. Appendix L provides background information on housing in the Oroville area, including:

- Several housing-related agencies aim to support the development of new housing, including the Housing Authority of the County of Butte and the Butte County Association of Governments
- City of Oroville's 2022-2030 Housing Element was adopted by the City Council on July 19, 2022.
- Butte County released the Public Review Draft of the 2022-2030 Housing Element in June 2022.
- Building Homes and Jobs Act (SB 2, 2017), administered by the California Department of Housing and Community Development.
- California Housing Act (SB 9), effective January 1, 2022, is designed to provide new ways to increase housing supply options in urban areas.
- Financing mechanisms

## Watershed Context

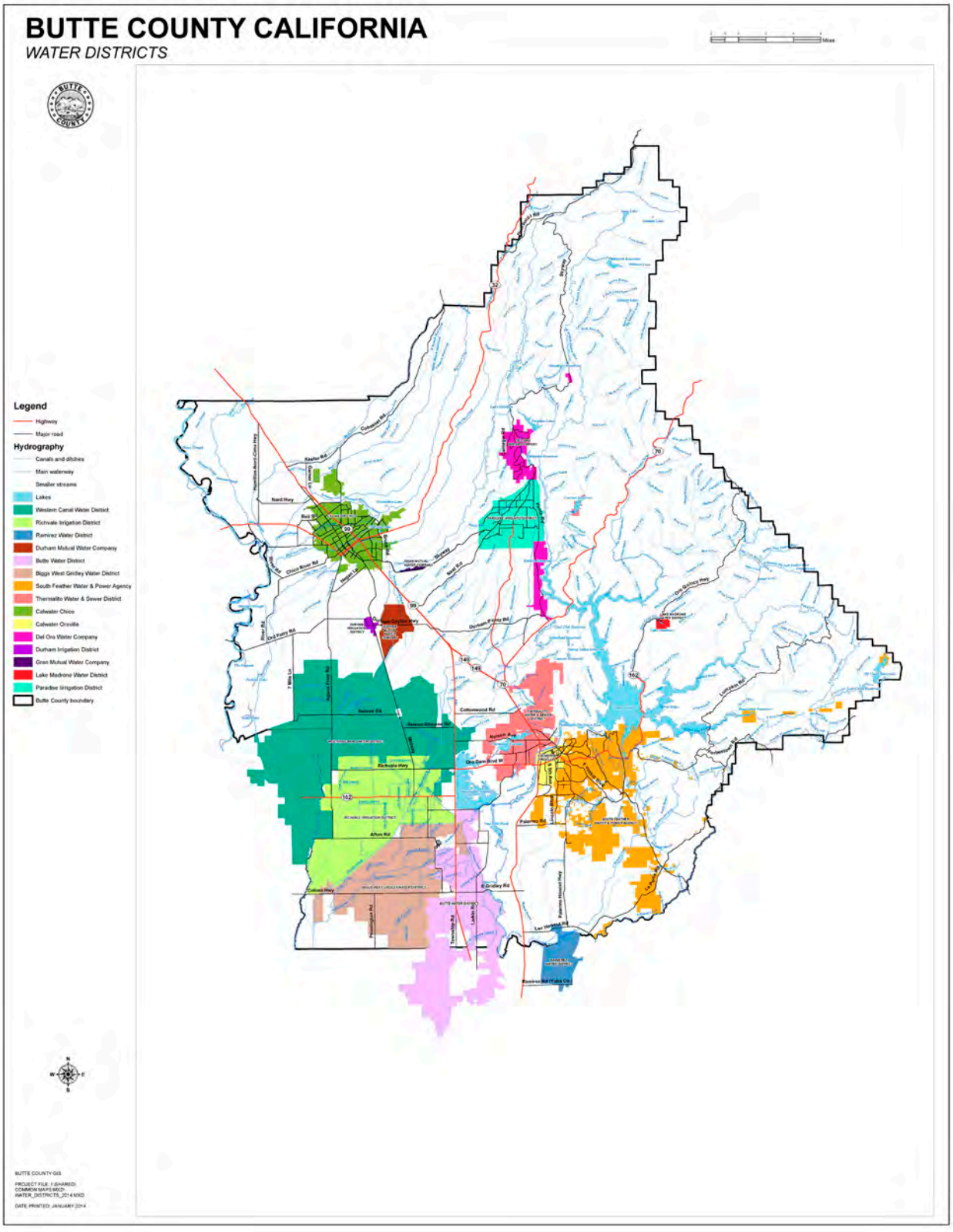
A watershed is the land area that drains into a river (aka catchment area). In this case, the six water and wastewater service providers are located in the lower Feather River Watershed. The lower Feather Watershed encompasses smaller streams, and they ultimately combine at a common point to join the Sacramento River. The Lower Feather River Watershed begins downstream of Lake Oroville and ends when it joins with the Sacramento River at Verona. The Feather River Basin is a crucial part of California's water-supply system and is a major contributor of water to Lake Oroville. Wastewater from the SCOR sewage treatment plant is discharged into the watershed. Regulations pertaining to drinking water and wastewater collection and treatment are summarized in Appendices D, E, F, and G. Additional details about the lower Feather River watershed and maps are provided in Appendix I.

### Domestic Water Districts in Butte County

There are 15 water districts in Butte County as shown in Figure 2-7. Six of these districts are irrigation providers. Nine provide municipal water service as listed below. Two districts of the California Water Service Company, Cal Water Chico and Cal Water Oroville, also provide domestic water service.

1) South Feather Water & Power Agency
2) Thermalito Water & Sewer District
3) Calwater Chico
4) Calwater Oroville
5) Del Oro Water Company
6) Durham Irrigation District
7) Gran Mutual Water Company
8) Lake Madrone Water District
9) Paradise Irrigation District

Figure 2-7: Water Districts in Butte County



### Local Hazard Mitigation

Butte County collaborated with five incorporated communities and ten special districts to prepare the November 2019 Local Hazard Mitigation Plan (LHMP). The LHMP aims to reduce risks from hazards and to serve as a tool to help decision-makers direct mitigation activities and resources. Protecting community assets such as public water and wastewater infrastructure, schools, transportation infrastructure (railroad tracks and roads), and hospitals is another important aim of an LHMP. The LHMP Update allows the participating agencies to continue to be eligible for federal disaster assistance, such as the FEMA Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, and Flood Mitigation Assistance Program (Butte County, 2019). Butte County continues to be vulnerable to numerous hazards, including floods, earthquakes, drought, levee failures, landslides, wildfires, heat waves, smoky air, and other severe weather events. In the past, these types of hazard incidents have had significant economic and social impacts on the County. Recent local hazards experienced in Butte County are listed below in Table 2-3.

Table 2-3: List of Recent Local Hazards

| Name of Hazard Incident | Type of Hazard | Date |
|---|---|---|
| Dixie Fire | Wildland Fire | July - August 2021 |
| Camp Fire | Wildland Fire destroyed City of Paradise | November 2018 |
| North Complex Fire | Wildland Fire caused evacuation of some SFWPA residents | September 2020 |
| Oroville Dam main and emergency spillway crisis | Risk of potential flooding necessitated large-scale evacuation | February 2017 |
| Drought 2019 to 2022 | Drought with State-wide water availability concerns and dry soils | March 2019 to December 2022 |

In addition to the above hazards, Butte County and local water and wastewater districts have faced smaller challenges that don't reach the "hazard" level but are nonetheless difficult. For example, in 2021, the drought caused local hydropower facilities to be shut down temporarily due to a lack of water. Another example is the PG&E PSP power outages that occurred during the summers of 2019, 2020, and 2021 during high wind conditions and high temperatures that were conducive to supporting wildland fires. Other hazards that the Sacramento Valley could experience include air quality degradation, soil dryness, extreme precipitation, extreme heat, landslides, and decreased snowpack.

The State Budget (FY 21/22) contained funding allocated to the implementation of pilot projects and shovel-ready projects listed in a General Plan Safety Element. State funds are to be granted on a competitive basis. It is important for the County and the City to regularly update their General Plan Safety Elements to remain eligible for these state grants that could help protect lives, property, and economic productivity in Butte County.

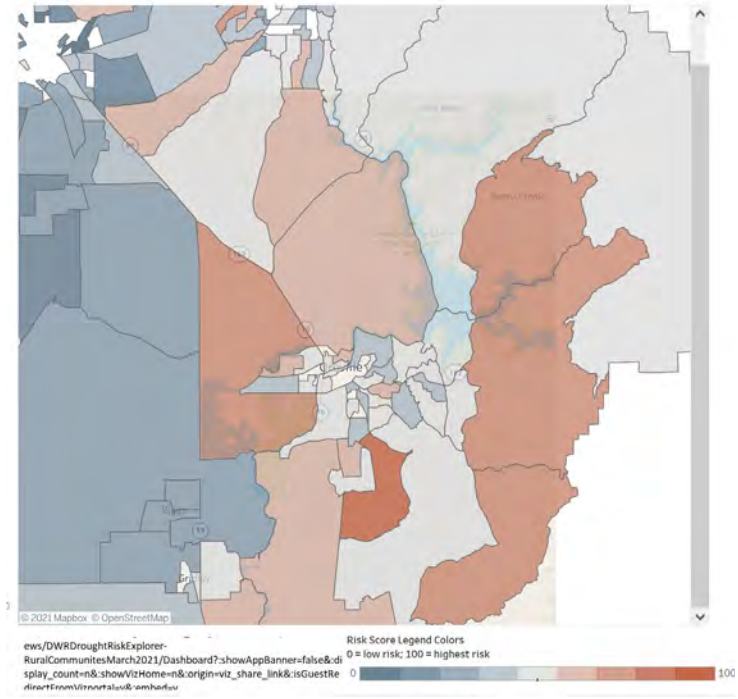
## Drought

Drought is one of the issues addressed in the County's Local Hazard Mitigation Plan. In addition, the California Dept of Water Resources and the State Water Resources Control Board have recently developed several databases with associated mapping tools to assess drought risk for California's water suppliers. These databases were queried, and the results are summarized here.

### DWR Self-Supplied Communities

The California interactive site for Drought and Water Shortage Risk of Self-Supplied Communities database was queried for Butte County. The California Dept. of Water Resources (DWR) developed this on-line database to support drought resilience planning among rural communities. Indicators were developed through a stakeholder participation process as part of the legislative requirements (AB 1668) to identify rural communities in California at risk of drought and water shortage. Database query results show the relative risks of drought in the Oroville area, as shown in Figure 2-9 below. The Thermalito area has a high drought risk (DWR, 2021). Butte County has approximately 10,867 domestic wells utilizing groundwater resources on record with DWR since 1970. This yields a domestic well reliance of 21% of the households in Butte County. DWR estimates a poverty rate of 13% in Butte County, indicating there are sensitive populations who could experience risk during a drought (DWR, 2021a).

The DWR database depicts the drought risk profile for Butte County, as shown in Figure 2-9 (next page). The risk profile indicates that Butte County has a high degree of risk for the following variables: Local Early Drought Forecast, Groundwater Decline, Fractured Rock, and Shallow Domestic Wells.



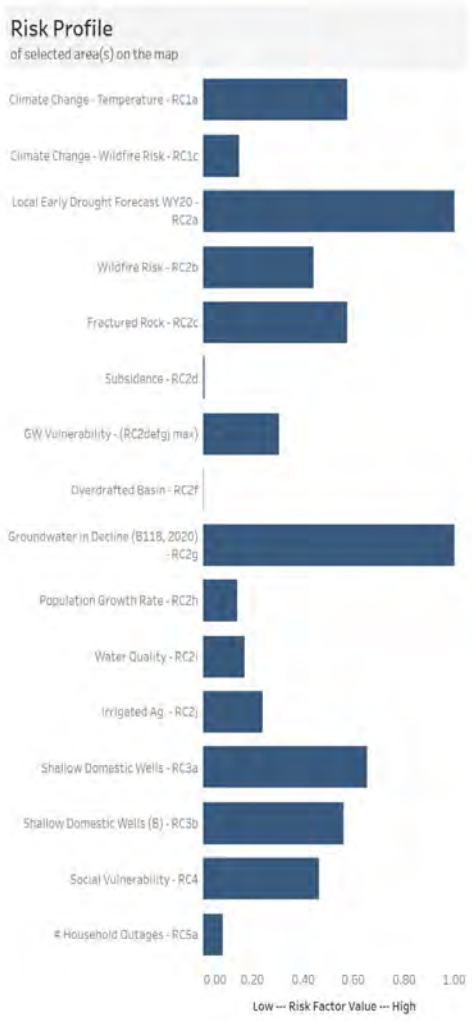
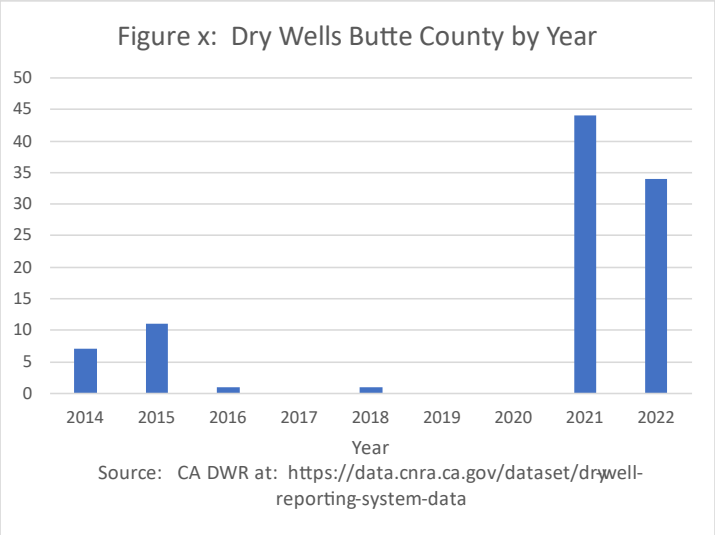




*Figure 2-9 DWR Drought Risk in the Oroville Area*
*Data Source: DWR, 2021a*

Dry Wells

In Butte County there are approximately 10,867 domestic water wells with approximately 65,018 residents reliant upon these wells as described in Appendix I, Feather River Watershed. Between the years 2014 to 2022, there were a total of 109 wells in Butte County that were reported “dry” to the DWR database. In the year 2022, a total of 34 dry wells were reported and 11 of these reports derived from the Oroville area. As seen in Figure 2-10, the year 2021 had the greatest number of reported dry wells. The years 2017, 2019, and 2020 did not have reported dry wells (DWR, 2022). The wells are primarily used for households, but some are used for schools and agricultural purposes. From the database query, it is evident that many of the wells are no longer producing water, or their pumps are not functioning properly (CA DWR, 2022).

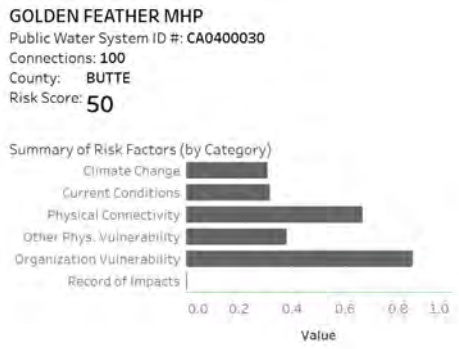
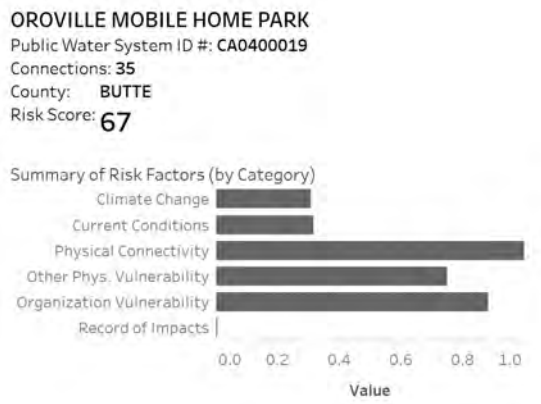
Figure 2-10: Dry Wells in Butte County by Year




DWR Small Water Suppliers

DWR provides a database entitled "Drought and Water Shortage Risk of Small Water Suppliers in California." DWR developed this database to support drought resilience planning among small water suppliers. Indicators of risk and scoring were developed through an extensive stakeholder participatory process as part of fulfilling state law, Assembly Bill 1668. This database was queried for Butte County. In the localized Oroville area covered by this MSR, there are only two small water suppliers at risk of drought and water shortage, as listed below:

Table 2-4: DWR Small Supplier Drought Risk

| Golden Feather Mobile Home Park | Oroville Mobile Home Park |
|---|---|
|  |  |





*Data Source: DWR 2021b*

Although this MSR's study area has only two small water supplies at risk of drought and water shortage, Butte County has over 45 small suppliers at risk, including, the Cities of Biggs and Gridley (DWR, 2021b).

SWRCB Human Right to Water List

On September 25, 2012, Governor Edmund G. Brown Jr. signed Assembly Bill 685, making California the first State in the nation to legislatively recognize the human right to water (HR2W). Now in the Water Code as Section 106.3, the State statutorily recognizes that "every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." The human right to water extends to all Californians, including disadvantaged individuals, groups, and communities in rural and urban areas. An HR2W system is defined as a Community Water Systems and Non-Community Water Systems that serve schools and daycares and were identified as out of compliance for consistently failing to meet primary drinking water standards. The HR2W list criteria were expanded in March 2021 to better align with statutory definitions of what it means for a water system to "consistently fail" to meet primary drinking water standards. The SWRCB publishes a list of systems on the Human Right to Water List in excel format. The MSR consultants reviewed this list, and four water systems in Butte County were identified. Two of the four are located in the Oroville Area. The remaining two water systems are located outside this MSR's study area. The two identified water systems in the Oroville area serve the Spring Valley School and the Feather River School, as listed in Table 2-5 below.

Table 2-5: SWRCB Human right to Water List, Oroville Area

| PWSID | SYSTEM NAME | REGULATOR | SYSTEM TYPE | CURRENT STATUS |
|---|---|---|---|---|
| CA0400065 | Spring Valley School | LPA34 - BUTTE COUNTY | Public Water System | HR2W |
| CA0400067 | Feather River School | LPA34 - BUTTE COUNTY | Public Water System | HR2W |

*Data Source: SWRCB, https://www.waterboards.ca.gov/water_issues/programs/hr2w/*

Drought Resilience

Infrastructure improvement projects can improve drought resilience. Examples include: installing water-efficient appliances, installing water reuse infrastructure, installing drought-resistant landscaping, educating on water conservation, outreach to educate about recycled water safety, building alternative forms of water recreation, diversifying water supply sources, developing a groundwater sustainability plan, and implementing local water recycling.

Drinking Water Systems with Violations Tool

The State Water Board has developed an interactive database to provide information on Drinking Water Systems with violations. Information includes the type of violation, system population and service connections, median household income, amount and type of financial assistance a system is receiving from the State, and more. The MSR consultants queried this database and found no drinking water systems with violations in the Oroville Area (SWB, 2021a). Butte County contains only one drinking water system with violations, the Feather Ridge Estates Water Co., located outside the MSR study area.

Aquifer Risk Map

The State Water Board has developed an interactive mapping tool called the Aquifer Risk Map. This Aquifer Risk Map was developed by the SWB to fulfill the requirements of Senate Bill (SB) 200 and is intended to help prioritize areas where domestic wells and state small water systems may be accessing groundwater that does not meet primary drinking water standards. In accordance with SB-200, the risk map is updated annually. The CA Fund Expenditure Plan states that the risk map will be used by the Water Boards staff to help prioritize areas for available SAFER funding. The MSR consultants queried the Aquifer Risk Map for the Oroville area, and the query results are shown in Figure 2-11 below.

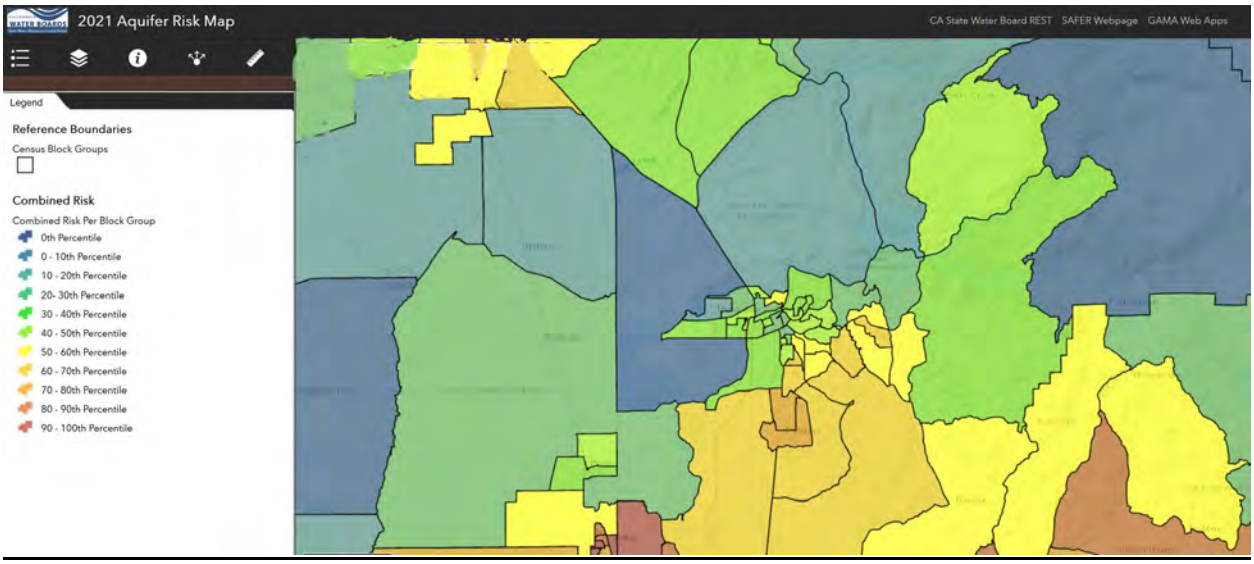



*Figure 2-11 Aquifer Risk Map (SWB, 2021b)*

As shown in Figure 2-11 above, most portions of the Oroville area have a low risk of aquifer depletion. However, a few census tracts do have a risk profile that is above 60 percent, and this indicates a concern, as shown in Table 2-6 below.

Table 2-6: Aquifer Risk Above 60 Percent

| **Census Block Group Number** | **Combined Risk Percentile** |
|---|---|
| 060070030022 | 66 percent |
| 060070031001 | 65 percent |
| 060070033001 | 61 percent |
| 060070032002 | 65 percent |
| 060070032001 | 79 percent |
| 060070033003 | 70 percent |
| Data Source: (*SWB, 2021b)* | |

Groundwater Ambient Monitoring and Assessment Program

The State Water Board's Groundwater Ambient Monitoring and Assessment Program (GAMA) and the U.S. Geological Survey have created tools to help users understand groundwater quality

in California (SWB, 2021c). Four groundwater basins in the Oroville area include East Butte, East Butte Highlands, North Yuba, and North Yuba Highlands, as shown in Figure 2-12 below (SWB, 2021c).

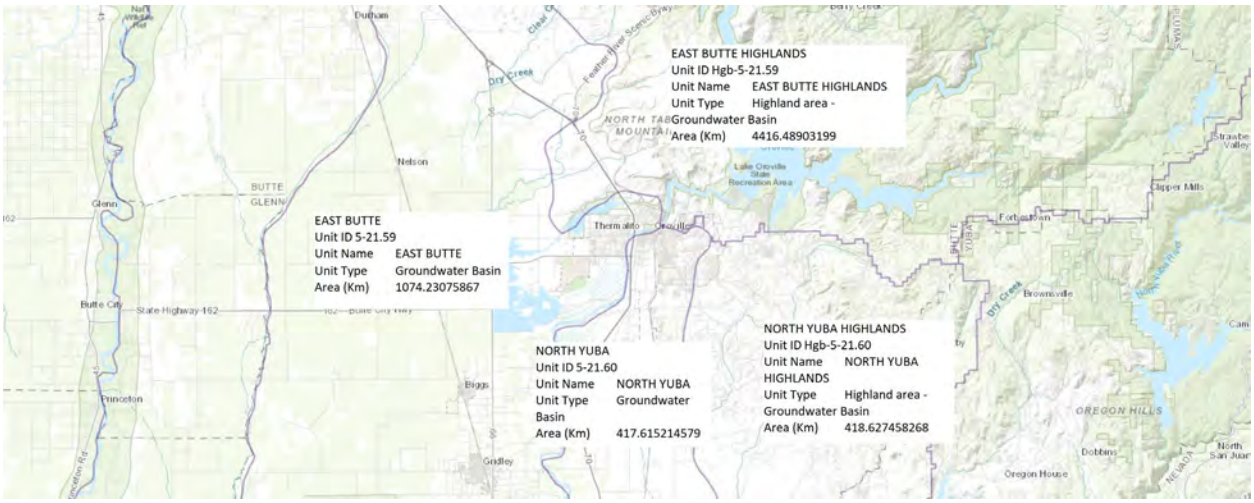


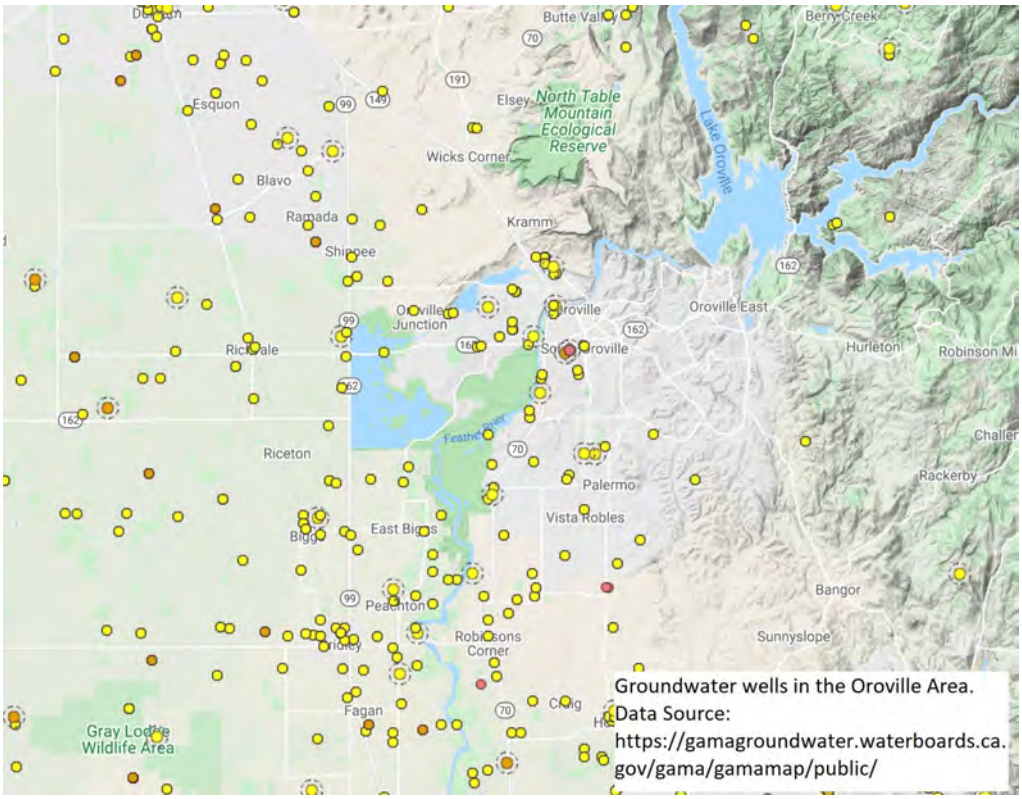
Figure 2-12: Groundwater Basins in the Oroville Area (SWB, 2021c)

In this MSR, the Thermalito Water and Sewer District is the only public agency that utilizes groundwater as a drinking water source. Cal Water, a private company, providing municipal water to its Oroville customers, also utilizes groundwater for a small percentage of its total supply, as described in Chapter 8. However, there are a number of residential, agricultural, industrial, monitoring, and other types of wells accessing groundwater basins in the Oroville Area. The spatial distribution of approximately 150 wells is depicted in Figure 2-13 (next page).

Sustainable Groundwater Management Act (SGMA)

Wyandotte Creek Groundwater Sustainability Agency is responsible for sustainable groundwater within its region. Thermalito Water and Sewer District and Cal Water Oroville both participate in the Wyandotte Creek Groundwater Sustainability Agency. SGMA is described in more detail in Appendix D, Municipal Water Regulations.

*Figure 2-13: Spatial Distribution of Groundwater Wells in the Oroville Area.*

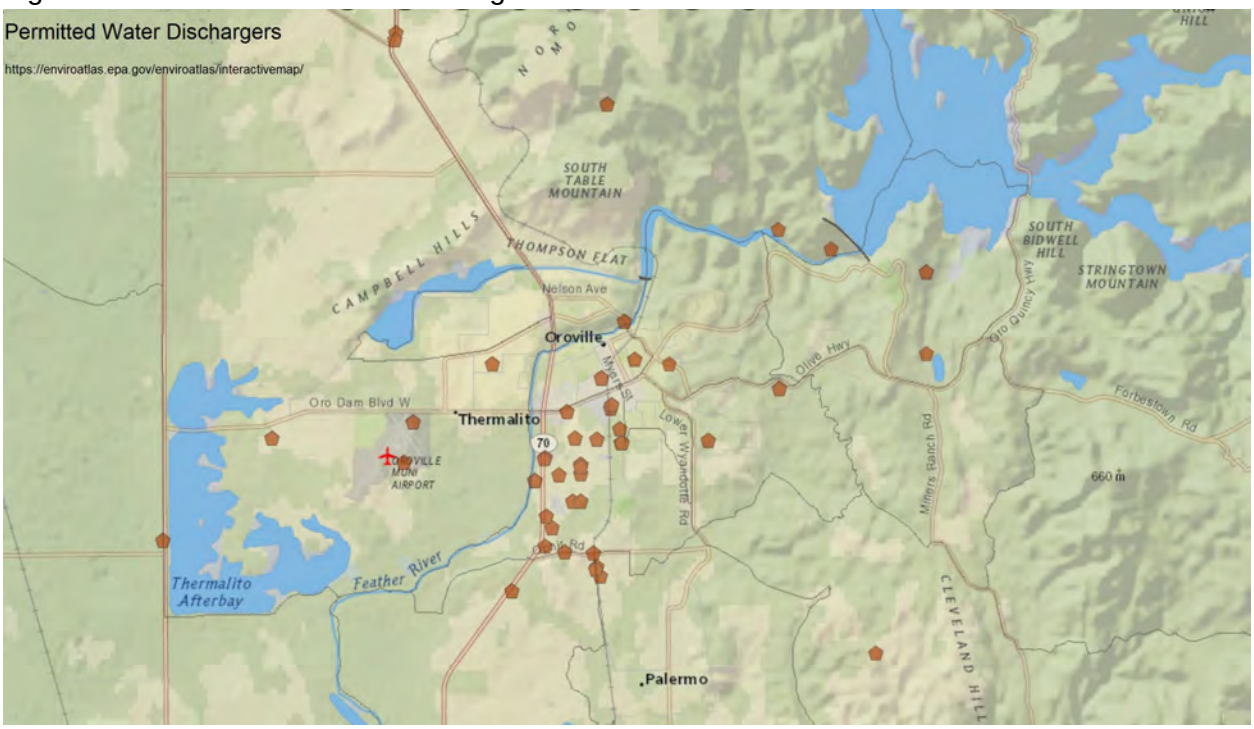



Regional Dischargers - Water Quality

Discharges to local rivers and streams can sometimes degrade water quality if pollutant discharges exceed state and national standards or if discharges are not carefully monitored. Regulations aim to prevent these types of discharges, which can potentially put water supplies at risk. SC-OR is a water discharger, described in Chapter 5 of this MSR, that is subject to water quality regulations. The spatial distribution of water dischargers who operate under a permit from the CA Water Board or from EPA (in addition to SC-OR) is shown in Figure 2-14 below. For example, some of the permittees depicted on the map below include:

- Lake Oroville Marina LLC DBA Bidwell Canyon Marina
- Miners Ranch Water Treatment Plant

Figure 2-14: Permitted Water Dischargers




Municipal Water Regional Context

This MSR studies three municipal drinking water providers, including Thermalito Water and Sewer District (Chapter 7), South Feather Water and Power Agency (Chapter 6), and California Water Company (Chapter 8). However, the region has several additional water providers, as shown in Figure 2-15 (next page).

Figure 2-15: Regional Context Map – Water Suppliers

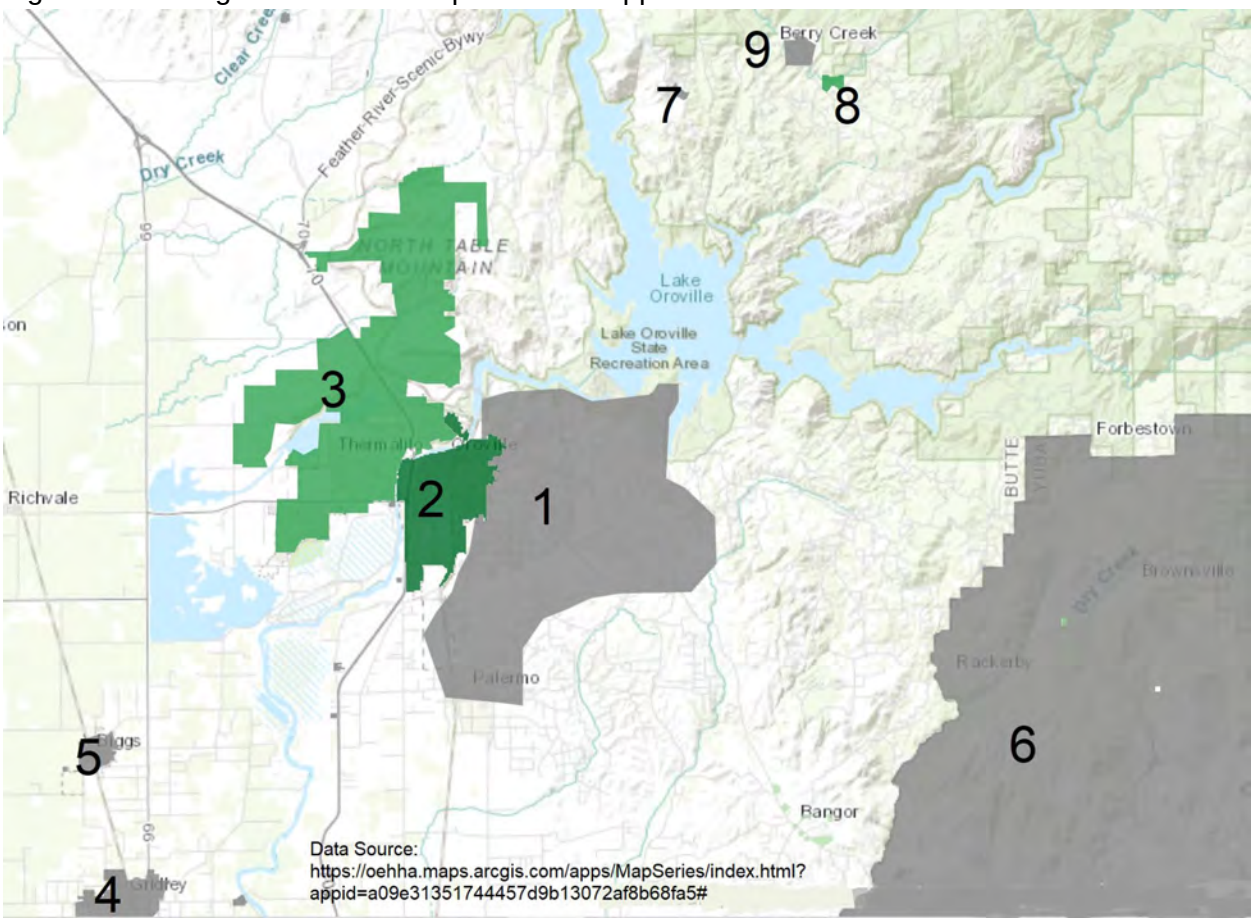



Table 2-7 provides a key to the regional water system map shown in Figure 2-15 above by defining the numbers shown on the map to the name of the system, the Public Water System Identification (PWSID) number, and the estimated number of residents relying upon the water system.

Table 2-7: Key to Regional Context Map

| Map Reference # | Name of Water System | PWSID # | Population Estimate |
|---|---|---|---|
| 1 | South Feather Water and Power Agency SFWP-Miners Ranch | CA0410006 | 24,846 |
| 2 | California Water Service Company-Oroville | CA0410005 | 10,556 |
| 3 | Thermalito Water and Sewer District | CA0410008 | 9,771 |
| 4 | City Of Gridley | CA0410004 | 6,608 |
| 5 | City Of Biggs | CA0410001 | 1,805 |
| 6 | North Yuba Water District | CA5810006 | 2,591 |
| 7 | Feather Ridge Estates Water Co | CA0400081 | 37 |

| | | | |
|---|---|---|---|
| 8 | Berry Creek Community Service Dist. | CA0400016 | 77 |
| 9 | Lake Madrone Water District | CA0400014 | 297 |
| *Data Source: CA OEHHA, Human Right to Water Data Tool (CalHRTW 1.0) Community Water Systems https://oehha.maps.arcgis.com/apps/MapSeries/index.html?appid=a09e31351744457d9b13072af8b68fa5#* | | | |

In addition to the water suppliers listed in Table 2-7 above and the small suppliers at drought risk listed in Tables 2-4 and 2-5, there are four other small water suppliers to list for completeness, including the River Reflections RV & Campground, Dingerville USA Park, Falling Rock RV Park, and Golden Oaks Mobile Estates. The following tables provide additional details on these four small water suppliers, which are not studied in this MSR.

**Table 2-8: River Reflections RV & Campground**

| | |
|---|---|
| Boundary Type | Water Service Area |
| Water System Number | Ca0400111 |
| Water System Name | River Reflections RV & Campground |
| County | Butte |
| Population | 125 |
| Regulating Agency | Lpa34 - Butte County |
| State Classification | Transient Non-Community |
| Address Line 1 | 4360 Pacific Heights Rd |
| City | Oroville |
| State | CA |
| Zip Code | 95965 |
| Service Connections | 94 |
| Contact Phone Number | 530-533-1995 |

Data source:
*https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=272351aa7db14435989647a86e6d3ad8*

**Table 2-9: Dingerville USA Park**

| | |
|---|---|
| Boundary Type | Water Service Area |
| Water System Number | CA0400051 |
| Water System Name | Dingerville USA Park |
| County | Butte |
| Population | 447 |
| Regulating Agency | LPA34 - Butte County |
| State Classification | Community |
| Address Line 1 | 5813 Pacific Heights Rd. |
| City | Oroville |
| State | CA |
| Zip Code | 95965 |
| Service Connections | 80 |
| Contact Phone Number | 530-533-6300 |

Data source: *https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=272351aa7db14435989647a86e6d3ad8*

**Table 2-10: Falling Rock RV Park**

| | |
|---|---|
| Boundary Type | Water Service Area |
| Water System Number | CA0400117 |
| Water System Name | Falling Rock RV Park |
| County | Butte |
| Population | 52 |
| Regulating Agency | LPA34 - Butte County |
| State Classification | Transient Non-Community |
| Address Line 1 | 3454 Hwy 70 |
| City | Oroville |
| State | CA |
| Zip Code | 95965 |
| Service Connections | 22 |
| Contact Phone Number | 530-533-9070 |

Data source: *https://gispublic.waterboards.ca.gov/portal/*

| Table 2-11: Golden Oaks Mobile Estates | |
|---|---|
| Boundary Type | Water Service Area |
| Water System Number | CA0400023 |
| Water System Name | Golden Oaks Mobile Estates |
| County | Butte |
| Population | 34 |
| Regulating Agency | LPA34 - Butte County |
| State Classification | Community |
| Address Line 1 | 3289 Hwy 70 |
| City | Oroville |
| State | CA |
| Zip Code | 95965 |
| Service Connections | 52 |
| Contact Phone Number | 209-785-5500 |

Data source: *https://gispublic.waterboards.ca.gov/portal/*

### Metrics

This MSR utilizes key metrics to support LAFCO's determinations related to governance, social, environmental, and financial factors prescribed by the CKH Act. These key metrics were selected to help nudge local activities toward addressing items consistent with LAFCO's values of transparency and efficiency. The use of key metrics can result in cost savings by leveraging and building upon the financial resources dedicated to local infrastructure and the provision of public services. Through improved communication and coordination, costly duplication of efforts and conflicting actions can be reduced; this is a standard goal of LAFCOs throughout the State. The continual improvement of a product, process, or service is often depicted as a Deming Wheel, or Deming Cycle, as shown in Figure 2-16 below. This is integrated learning-improvement model described by Dr. Deming and Walter Shewhart from Bell Laboratories in New York (Deming, n.d.).

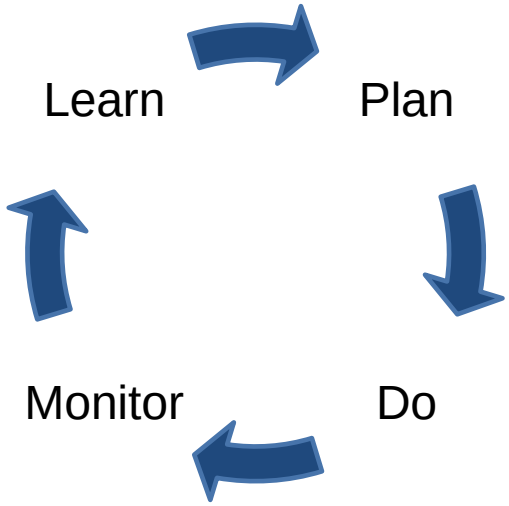



*Figure 2-16: Continuous Learning Cycle*

California water scientists and the CA Department of Water Resources use a similar continuous learning cycle called adaptive management. LAFCO's role in the above continuous learning cycle is the "monitor" phase through the use of MSRs, which monitor an agency's adherence to specific laws and other LAFCO criteria. This MSR standardizes metrics to enable cross-comparison among the six study agencies/organizations. Metrics have been assigned to each of LAFCO's determination criteria as listed in Table 2-12 below.

Table 2-12: Metrics Utilized in this MSR

| **Determination Topic** | **MSR Metrics** |
|---|---|
| Local Accountability and Governance | ▪ Number of closed sessions during the past six months.<br>▪ Agency website complies with the 2016 updates to the Brown Act described in Government Code §54954.2 and enacted by Assembly Bill 2257.<br>▪ Compliance with the Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8), which requires special districts to have a functional website that lists contact information and contains financial statements, compensation reports, and other relevant public information.<br>▪ Terms of office and next election date are disclosed for District Board members, and committee appointments are on-line.<br>▪ Do elected Board members submit required forms and receive required trainings as prescribed by the three state laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training?<br>▪ Current litigation, grand jury inquiry, and/or censure from a state agency. |
| Growth and Population | ▪ Existing boundary<br>• Overlapping services<br>▪ Existing Sphere of Influence<br>▪ Extra-territorial services<br>▪ Present and projected service population over 20-year time frame<br>▪ Land use and significant growth areas |
| Disadvantaged and Unincorporated Communities | ▪ Location and Characteristics<br>▪ Public services provided to DUC |
| Present and Planned Capacity | ▪ Description of services (water, wastewater)<br>▪ Age and condition of facilities<br>▪ Preventative maintenance measures<br>▪ Plans for expansion and/or upgrades (i.e., plans to replace aging infrastructure)<br>▪ Capacity Analysis |

| | |
|---|---|
| | o Sufficiency for present and projected need (i.e., reserve capacity)<br>o State databases [wastewater = sanitary sewer overflow; water = CA Drinking Water Watch, California Integrated Water Quality System Project (CIWQS), and Environmental Working Group's Tap Water Database] |
| Financial Ability, Constraints and Opportunities | ▪ Finance policies clearly articulated<br>▪ Compensation reports and financial transaction reports (including audits) that are required to be submitted to the State Controller's Office are posted to the district website.<br>▪ Revenues exceed expenditures in 50% of studied fiscal years<br>▪ Pension Payments (contributions in relation to actuarially covered payroll)<br>▪ Rates<br>o Current Rate Structure Basis<br>o Connection fees<br>o Tax Revenues/Service Ratio<br>o Rates/Service Ratio |
| Shared Facilities | ▪ Currently Shared Resources, Facilities, Personnel, and Systems<br>o Opportunities for Expanded Sharing<br>o Government Structure Options<br>▪ Cost Avoidance Opportunities<br>o Other practices and opportunities that may help to reduce or eliminate unnecessary costs |

Brown Act

As part of the Local Accountability and Governance determination listed in Table 2-12 above, this MSR determines whether each of the five public service providers comply with the Brown Act originally approved by the California State Legislature in 1953 (California Government Code § 54950). The Ralph M. Brown Act requires, with specified exceptions, that all meetings of a legislative body of a local agency, be open and public and that all persons be permitted to attend and participate. The Act also requires the legislative body of a local agency to post an agenda containing a brief general description of each item of business to be transacted or discussed at a regular meeting, in a location that is freely accessible to members of the public. Agendas must be posted 72 hours prior to the meeting. The State Legislature updated the Brown Act in 2016 as codified in Government Code §54954.2 (see also Assembly Bill 2257). The 2016 update added new requirements for posting meeting agendas on the local agency's website. There are additional requirements governing the location, platform, and methods by which an agenda must be accessible. The new requirements include that the agenda be retrievable, downloadable, searchable, and indexable. This MSR interprets these new requirements as follows:

- Prominent Direct Link: With one click from the agency's homepage the current agenda opens up. That one click does not take the individual to another page which would require the user to perform an additional action to reveal the agenda link.

- Downloadable: the agenda can be downloaded and saved to a computer.
- Searchable: the agenda document can be searched for specific terms using the search-on-the-page function provided in browsers.
- Indexable: commonly used search engines will respond to a search with the agenda for that legislative body.

Website

As part of the Local Accountability and Governance determination listed in Table 2-12 above, this MSR considers compliance with a new state law called the Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8). The Special District Transparency Act aims to improve information transparency by local government agencies by requiring that special districts have a functional website prior to January 1st, 2020. The Act requires a district website to list contact information and also suggests that agendas and minutes, budgets and financial statements, compensation reports, and other relevant public information and documents be posted to the website. A district may exempt itself from the law by adopting a resolution by a majority vote of its governing body including findings regarding any hardships that prevents the district from establishing or maintaining a website. Such resolution must be adopted annually as long as the hardship exists. For additional information see a legal analysis article at: *https://www.jdsupra.com/legalnews/ab-2257-new-brown-act-requirements-for-35346/*.

Chapters 3 to 8 evaluate each district's compliance with the Special District Transparency Act (Gov Code §6270.6 and 53087.8) and the results of this evaluation is a metric utilized in the determinations for each district.

## 2.5: PUBLIC PARTICIPATION

LAFCO will conduct a public workshop on the Draft MSR Update in the Spring of 2023. Comments from the public are solicited and will be addressed in Chapter 9. The Commission will then hold a public hearing on the Final Draft MSR/SOI. After this MSR Update is finalized, it will be published on the Commission's website (*https://www.buttelafco.org*), thereby making the information contained herein available to anyone with access to an internet connection. A copy of this MSR Update may also be viewed during posted office hours at LAFCO's office located at 1453 Downer Street, Suite C, Oroville, CA 95965. In addition to this MSR Update, LAFCO's office maintains files for each service provider and copies of many of the planning documents and studies that were utilized in developing this MSR. These materials are also available to the public for review.

# 2.6: REFERENCES

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# CHAPTER 3: CITY OF OROVILLE WASTEWATER


*Figure 3-1: City Hall. (Image provided courtesy of Google maps)*

This chapter presents a municipal service review (MSR) for the City of Oroville (COOR) with details about the City's formation, boundary, government structure, population and land use, disadvantaged communities, and the provision of wastewater services and facilities. Based on the information included in this report, written determinations that make statements involving each service factor that the Commission must consider as part of a municipal service review are presented. The determinations are based upon data presented in this Chapter and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution, which the Commission formally adopts during a public meeting.

Table of Contents

# 3.1 Agency Profile and Overview

### *3.1.1: Agency Profile*

| | |
|---|---|
| **Type of Agency:** | Incorporated Charter City (1906) |
| **Principal Act:** | City Charter, CA Government Code §34450 |
| **Functions/Services:** | General government, land use planning and building services, parks, fire protection and emergency services, law enforcement, roadways and stormwater drainage, and wastewater collection and conveyance services. |
| **Main Office:** | 1735 Montgomery St. Oroville, CA, 95965 |
| **Mailing Address:** | Same |
| **Phone No.:** | (530) 538-2436 |
| **Fax No.:** | (530) 538-2468 |
| **Web Site:** | https://www.cityoforoville.org/home |
| **City Administrator:** | , Email: admin@cityoforoville.org |
| **Alternate Contact:** | Assistant City Administrator Ruth Wright, E-mail: finance@cityoforoville.org |
| **Meeting Schedule:** | Regular City Council meetings on 1st and 3rd Tuesday of every month. |
| **Meeting Location:** | City Hall, Council Chambers, 1735 Montgomery St, Oroville, CA 95965 |
| **Date of Formation:** | January 3, 1906 |
| **Area Served:** | 8,873 acres (13.86 square miles) |

| | |
|---|---|
| **Population** | 18,863 (2022) |
| **# Sewer Connections** | 3,703 connections (residential, commercial, and industrial) |
| **Gross Revenue** | $36,050,818 city-wide revenue (FY19/20) |
| **Principal LAFCO:** | Butte LAFCO |
| **Other LAFCO:** | None |

### 3.1.2 Agency Overview

The City of Oroville was incorporated as a Charter City on January 3, 1906. Today, the City serves as the County Seat for Butte County. Oroville is located approximately 70 miles north of Sacramento, within the Sacramento Valley, and it is considered the gateway to Lake Oroville and Feather River recreational areas. As an incorporated municipality, the City of Oroville is empowered to provide the full range of public services to the local community. Today, the City regularly provides police and fire protection; construction and maintenance of streets; infrastructure; community development, including planning and zoning; building and safety, and housing activities; municipal airport; golf course; wastewater collection and conveyance, and general administrative services (Oroville CAFR, 2021c). This range of public services will soon be described in an upcoming City-wide MSR for Oroville, expected in 2023. **This Chapter focuses only on the wastewater collection and conveyance services provided by the City of Oroville.**

## 3.2 Agency Formation and Boundary

### 3.2.1 Formation

The City of Oroville was organized in 1906, and it is incorporated as a charter city consistent with CA Government Code §34450. The City's Charter consists of Statutes of 1933, Page 2904, as amended; and as adopted pursuant to Section 8 of Article XI of the State Constitution, ratified by the qualified electors at a special municipal election held on October 22, 1931, approved and adopted by the state legislature and filed with the Secretary of State on January 27, 1933 (Oroville Municipal Code Note). Today, the City is empowered to provide the full range of municipal services to its residents.

### 3.2.2 City Boundary

The City of Oroville's geographic boundary encompasses 8,872 acres (13.7 square miles) and includes 7,447 assessor parcels, as shown in Figure 3-2 (Butte County GIS, 2020). The City boundary contains two distinct areas:

- The larger eastern area includes downtown, the hospital, residential neighborhoods, and commercial areas.
- The smaller western area contains the Oroville Municipal Airport and an adjacent golf course.

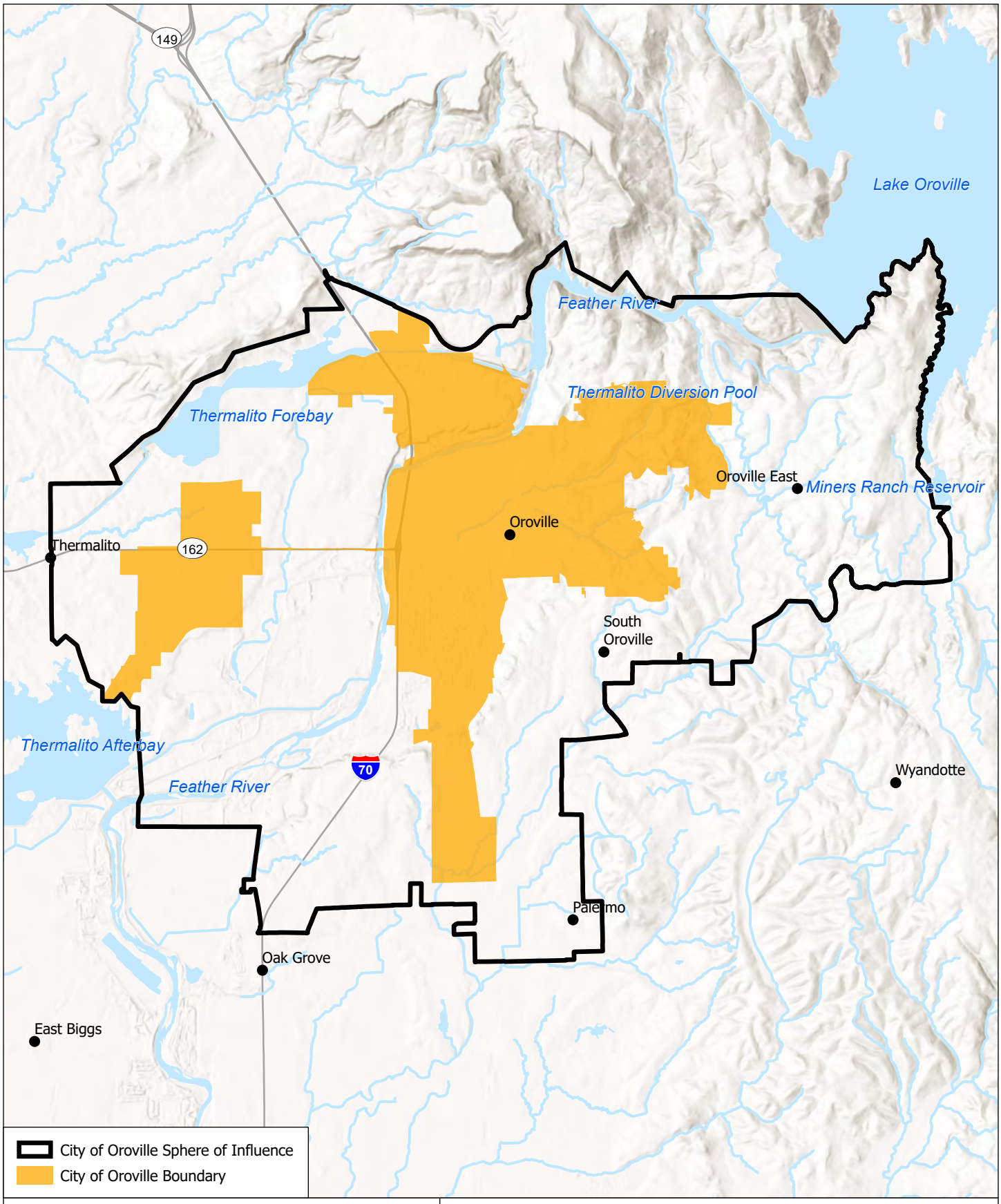
The City's Sphere of Influence (SOI) is quite large in size at 33,743 acres (53 square miles) (LAFCO GIS, 2021). COOR is bounded by the Thermalito Water and Sewer District (TWSD) to the northwest, Lake Oroville Area Public Utility District (LOAPUD) to the southeast, and the South Feather Water and Power Agency (SFWPA) to the east. Since the 2014 MSR, the City has annexed several parcels as listed in Table 3-1, below.

| Table 3-1: Annexations to the City | | |
|---|---|---|
| **Name of Annexation Area** | **Acreage in Annexation** | **Resolution Number and Date Approved** |
| South Oroville Annexation No. 1 (Oroville Area A) | 203 acres | Resolution 08 2014/15 adopted February 5, 2015 |
| Lower Wyandotte Road Annexation No. 4 (Oroville Area B) | 203.4 acres | Resolution 11 2014/15 adopted March 5, 2015 |
| Riverview Terrace Annexation No. 1 | 7 acres | Resolution 06 2016/17 adopted November 3, 2016 |
| Lincoln Boulevard Annexation No. 1 | 14.2 acres | Resolution 03 2020/21 adopted October 1, 2020 |
| Feather Avenue Annexation No. 2 | 26 acres | Resolution 07 2020/21 adopted September 2, 2021 |
| Data Source: LAFCO Files | | |

The City of Oroville provides wastewater collection services to a portion of the City's boundary area. The other JPA members (TWSD and LOAPUD) provide wastewater services to some areas within the City's jurisdictional boundary. As the City annexed unincorporated areas, wastewater collection services have remained with the original provider (COOR, 2021d).

### *3.2.3 Sphere of Influence*

This section briefly describes the existing Sphere of Influence (SOI) for the City of Oroville. Additional details can be found in Appendix K, SOI Options, in this document. The original SOI study prepared for the City of Oroville was completed in 1985. As of December 2014, the City of Oroville SOI contained 26,343 acres (41 square miles). LAFCO approved an update to the City's SOI on December 4, 2014, with Resolution No. 07-2014/15. This Resolution approved the addition of 1,104 parcels totaling approximately 9,838 acres (15.4 square miles) to the Sphere of Influence. LAFCO's Resolution also approved the removal of 276 parcels totaling approximately 2,734 acres (4.3 square miles) from the SOI. Since 2014 there have not been any amendments to the City's SOI. The City is currently preparing a new MSR which will describe city-wide public services.




# Figure 3-2
# Boundary and SOI City of Oroville

*Map Date: 08/25/2021*
*Data Source: Butte LAFCO*

Today, the City's SOI encompasses 33,744 acres (52.7 square miles) and 16,917 assessor parcels, as shown in Table 3-2 below. As part of this MSR preparation process, City staff indicated that the current configuration of the Sphere of Influence, as shown in Figure 3-2, is adequate for projected future growth (COOR, 2021d).

**Table 3-2: Geographic Summary (2021) of COOR Boundary**

| | Boundary Area (All Services) | SOI (All Services) | Total Boundary & SOI |
|---|---|---|---|
| Total Acres | 8,873 | 33,744 | 42,617 |
| Square Miles | 13.9 | 52.7 | 66.6 |
| Number of Assessor Parcels | 7,447 | 16,917 | 24,364 |

*Source: Butte County GIS Data, 2020*

### *3.2.4 Extra-Territorial Services*

The COOR does provide extra-territorial services to customers located outside of its City Limits. Specifically, the City provides wastewater collection services to 19 parcels outside the City boundaries (COOR, 2021d). LAFCO's files have one extension of service approval for Project 08-10 – EOS (sewer) for Mt Vista RV Park at APN 068-341-044. It's possible that the remaining 18 parcels were connected to city sewer prior to the LAFCO approval requirement in 2001. However, the history associated with the provision of service to these 19 parcels is not clear. It is possible that these 18 parcels are out-of-agency/area-services (O-A-S) and would require LAFCO approval. However, City staff believes that these parcels are attached to the 'MM line" in the areas from Oro Quincy Hwy south of Meadowview Dr. to Foothill Blvd north of Edgewood (personal communication, D. Nevers, 5/52022). The City does ask property owners to fill out a form prior to connecting to the sewer system.

## 3.3: Municipal Governance and Accountability

This section describes how performance, accountability, transparency, and public engagement related to the public's trust in local government. LAFCO is required by the CKH Act to make specific determinations regarding a municipality's government structure and accountability.

### *3.3.1 Government Structure*

The COOR is a local government agency structured as an Incorporated Charter City, and its City Charter is consistent with California Government Code §34450. The elected City Council is composed of seven members -- the Mayor plus six council members -- who are elected at large for four-year staggered terms. The City Council is responsible for passing ordinances, adopting the budget, appointing committees, and appointing the Vice Mayor. All registered voters who reside within the City boundaries are eligible to vote for and/or run for a seat on the City Council. The City Council appoints the City Administrator. The City Administrator appoints department heads. The City is organized into several departments described in the administrative draft City-wide MSR (2021), and this Chapter focuses only on the wastewater collection and conveyance service provided by the Public Works Department.

### *3.3.2 City Council*

The City operates under the direction of the elected City Council. Each elected City Council Member serves for a term of four years. There are seven members elected to the City Council, including the Mayor, Vice-Mayor, and five regular Council members. Municipal elections are held in November every two years on even-numbered years. The current City Council and their terms' expiration dates are shown in Table 3-3 below. Council members were historically elected via an at-large election system. However, recently this process has been updated to a by-district election system. On February 1, 2022, the Council adopted Ordinance No. 2 to amend Title 2, Chapter 2.08 of the Municipal code of the City of Oroville to adopt revised District voting boundaries and establish a sequence for each District election. Councilmembers are elected in Council Districts 3-A, 3-C, and 3-D beginning at the general municipal election in November 2022, and every four years thereafter. Councilmembers will be elected in Council Districts 3-8, 3-E, and 3-F beginning at the general municipal election in November 2024, and every four years thereafter (Ord. 1846 § 1, 2020).

Table 3-3: City of Oroville - City Council

| Name | Title | Term End |
|---|---|---|
| David Pittman | Mayor | Term expires 2026 |
| Scott Thompson | Vice Mayor | Term Expires 2024 |
| | Member | Term expires 2026 |
| Janet Goodson | Member | Term expires 2024 |
| | Member | Term expires 2026 |
| Eric J. Smith | Member | Term expires 2026 |
| Krysi Riggs | Member | Term expires 2024 |

*Source: city website at: https://www.cityoforoville.org/government/boards-commissions-committees-etc/city-council*

The City Council holds regular public meetings on the first and third Tuesday of every month. The City Council regularly meets in the City Council Chambers at City Hall, located at 1735 Montgomery Street, Oroville, CA 95965, United States (Oroville, 2020). The City Council has several committees, as follows:

- Citizens Oversight Committee
- Supplemental Benefits Fund Committee
- Executive Committee
- Oroville Recreation Area Committee

Committee assignments are shown in Table 3-4.

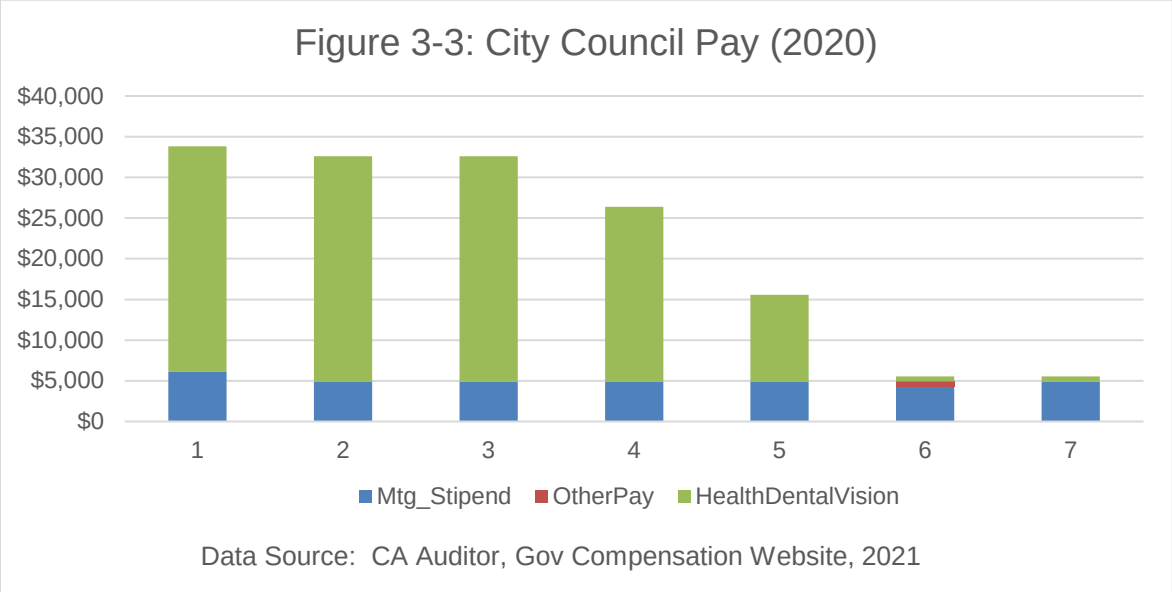
**Table 3-4: City Council Committee Assignments**

CITY OF OROVILLE COMMITTEE AND BOARD ASSIGNMENTS 2020-2021

| | Chuck Reynolds | Scott Thomson | Krysi Riggs | Janet Goodson | Art Hatley | David Pittman | Eric Smith | | |
|---|---|---|---|---|---|---|---|---|---|
| ALUC - Airport Land Use | | | | | | X | | 1, Alt | Airport Manager |
| ARTS COMMISSION | | | | X | | | A | 1, Alt | Community Development Director |
| BCAG - Butte County Association of Governments | X | A | | | | | | 1, Alt | City Administrator or City Engineer |
| BCAQCB - Butte County Air Quality Control Board | X | A | | | | | | 1, Alt | City Administrator or Director of Community Develop |
| CHAMBER OF COMMERCE | | X | A | | | | | 1, Alt | City Administrator |
| Citizens Oversight Committee | | | | X | A | | X | 2, Alt | Finance Director |
| COCC - Butte County Continuum of Care | | | | A | | | X | 1, Alt | Director of Community Development |
| EXECUTIVE COMMITTEE/ INTERGOVERNMENTAL | X | | | | | X | X | 3 | City Administrator |
| LEAGUE OF CALIFORNIA CITIES | | | X | | | | A | 1, Alt | City Administrator |
| LOAN ADVISORY HOUSING and ECONOMIC DEVEL | X | | X | | | X | | 3 | Business Assistance and Housing Director |
| ODBA - Oroville Downtown Business Association | | | X | | | | | 1 | PIO |
| ORAC - Oroville Recreation Area Committee | | X | | | | | A | 1, Alt | PIO |
| SBF - Supplemental Benefit Committee | X | X | A | | | X | | 3, 3 Alt | Program Specialist |
| SC-OR - Sewerage Commission Oroville Region | X | | | | | A | | 1, Alt | City Engineer |
| SGMA - Sustainable Groundwater Management | | | | | A | | X | 1, Alt | City Engineer |
| STAGE - State Theatre Arts Guild | | X | | | | | | 1 | Director of Community Development |
| TOURISM | | | X | | | | | 1 | PIO |
| VETERAN MEMORIAL PARK | | | | | X | | | 1 | City Administrator |

X - Voting Member A - Alternate Member

Please note that Table 3-4 above is slightly outdated due to the recent election of new City Council Members. If the City provides the MSR Consultants with an updated table, it can be shown in the Final MSR. City Council members are eligible to receive compensation for their work representing the City, including regular stipends for meeting attendance, other pay, and health and dental insurance. City Council members earned an average compensation of $21,723 for the year 2020, and details are provided in Figure 3-3 below.




All meetings of the City Council and other advisory boards are open to the public in accordance with the Brown Act. The agenda for each City Council meeting includes a public comment period for items not on the agenda. Additionally, the City Council meeting minutes reflect that the public is invited to speak on all items included on the agenda. All meeting agendas are publicly posted on the COOR website at: https://www.cityoforoville.org/home. Agendas are also distributed upon request via email or hard copy (not sent to the newspaper). The City Council reviews and approves meeting minutes at subsequent meetings, and copies are available upon request via email or the City's website (COOR, 2021d). The City and its representatives have a solid record of adherence to the requirements of the Brown Act, the Political Reform Act, and similar laws (COOR, 2021d).

In California, elected members of local agency governing bodies are required to comply with three laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training. A description of each of these three state laws is provided in Chapter 2 Introduction. An assessment regarding the compliance with these three ethics and accountability laws by elected board/council members of each of the subject five wastewater and water-related agencies was made as part of this MSR process.

- Political Reform Act: California voters passed the Political Reform Act as a ballot measure in the June 1974 election. The Political Reform Act requires the City Clerk, serving as the Filing Officer, to administer the Conflict-of-Interest Code. The City of Oroville has an adopted Code of Ethics which is part of the Municipal Code, Chapter 2.16. The City's Code of Ethics is consistent with the Political Reform Act and is available to the public at the City's website. Officials designated in the Conflict-of-Interest Code are required to file several forms with the City Clerk, including a Statement of Economic Interests (Form 700). The City's filing practice provides an online portal to upload Form 700, and this system is regulated by Chapter 2.05 of the Municipal Code and consistent with the Fair Political

Practices Commission (FPPC). The dates that City Council Members filed Form 700 are listed below:

- Chuck Reynolds – 3/23/21;
- Scott Thomson – 4/1/21;
- David Pittman – 3/4/21;
- Krysi Riggs – 2/17/21;
- Janet Goodson – 1/21/21;
- Art Hatley – 1/20/21; and
- Eric Smith – 3/29/21;

Statements of Economic Interests are available to the public by contacting the City Clerk. In addition, compliance with the Fair Political Practice Act was assessed by querying the FPPD Complaint and Case Information Portal <https://www.fppc.ca.gov/enforcement/complaint-and-case-information-portal.html>. Query results for the COOR found one open complaint regarding two current City Council members (Janet Goodson and Art Hatley) with case number 2018-01102 opened on October 16, 2018, which remains pending (FPPC, 2021).

- Assembly Bill 1234 (Salinas, 2005): Local government officials must take ethics training every two years. Compliance with this law was assessed for each of the five water and wastewater agencies studied in this MSR by asking the City Clerk for the dates and other documentation of training events. COOR's staff indicates that ethics training for the City Council and city managers/supervisors is conducted on a biannual basis and specifically on the dates listed in Table 3-5 below. This is a regularly recurring training. Therefore, COOR's City Council complies with AB 1234.
- Government Code 53237 et. seq.: Local government officials must receive the required sexual harassment prevention two-hour training every two years. Compliance with this law was assessed for each of the five water and wastewater agencies studied in this MSR by asking the Council Clerk for the dates and other documentation of training events. COOR's staff indicates that sexual harassment prevention training for the City Council and City managers/supervisors is conducted on a biannual basis and specifically on the dates listed in Table 3-5 below. This is a regularly recurring training. Therefore, COOR's City Council complies with Gov. Code 53237 et. seq.

**Table 3-5: Dates of Council Member Ethics and Harassment Prevention Training**

| City Council Member | Ethics Training Dates | Harassment Prevention Training Dates |
|---|---|---|
| Reynolds | 01/27/21 | 01/27/21 |
| Thomson | 01/27/21 | 01/27/21 |
| Pittman | 01/27/21 | 01/27/21 |
| Riggs | 01/27/21 | 01/27/21 |
| Smith | 01/27/21 | 01/27/21 |
| Hatley | 03/10/21 | 03/08/21 |
| Goodson | 01/27/21 | 01/28/21 |

Data Source: (COOR, 2021d)

### *3.3.3 Accountability and Transparency*

Brown Act

The Brown Act is described in Chapter 2, Introduction, of this MSR. All meetings of the City Council and committees are open to the public in accordance with the Brown Act. The agenda for each meeting includes a public comment period, and agendas are made available 72 hours before meetings. Any written document that relates to an agenda item is available for public inspection at the same time the document is distributed to the members of the City Council. Written hard copy documents are made available at City Hall, and e-copies are posted on the City website. Agendas are also distributed via email upon request (COR, 2021d).

The State Legislature updated the Brown Act in 2016 as codified in Government Code §54954.2 (see also Assembly Bill 2257). These new Brown Act requirements prescribe the methods and location by which an agenda must be accessible on an agency's website for all meetings as detailed in the Introduction, Chapter 2. The new requirements include a provision that meeting agendas be retrievable, downloadable, searchable, and indexable. COOR makes its agendas available on its website as a link from the homepage, which directs to the "services" tab and then to the nested "City Clerk" subtab. The City of Oroville makes its agendas available on its website at the following URL: <*https://www.cityoforoville.org/services/city-clerk-s-office/agendas-minutes*. This webpage also contains meeting minutes and agendas for the current and previous years. The nested sub-links from the home page do not meet the structural webpage agenda distribution requirements of AB2257. However, once the agendas are located, they are readily available in adobe acrobat's .pdf format, which is retrievable, downloadable, searchable, and indexable. Therefore the City of Oroville website partially complies with the Brown Act 2016 Updates described in AB2257.

During the global Covid-19 pandemic, Governor Newsom's Executive Order N-29-20 suspended parts of the Brown Act that require in-person attendance of City Council members and citizens at public meetings as described in Chapter 2, Introduction. In response to these events, the City implemented teleconference/electronic meeting protocols effective April 2020, allowing for public participation through video conferencing and telephone. During the Covid-19 global pandemic experienced in the years 2020-2021, the City of Oroville held its City Council meetings via YouTube live streams and active participation via Zoom. Both YouTube and Zoom are accessible to the public for free. Participants are able to email in any questions or comments to be read during the City Council meetings as well.

Under the Brown Act, closed sessions of City Council meetings are not encouraged; however, the Act does provide guidance about exceptions when closed sessions can be held under special circumstances. Commonly, LAFCO utilizes the number of closed sessions a City Council holds during a year as an indicator of transparency since fewer closed sessions indicate better transparency levels. For the COOR, the number of closed sessions was evaluated. In the year 2020, the City of Oroville held a total of 30 public meetings, and 19 of these included closed sessions (Oroville, 2020). Most of the closed sessions were related to potential future litigation. Therefore, 63 percent of the meetings included closed sessions, which exceeds the 50 percent standard used to evaluate this metric. Therefore, this is an issue that needs improvement, and it is recommended that the City Council work to reduce the number of closed sessions held annually.

| Vision Statement |
| --- |
| **The City of Oroville will be a vibrant and thriving Community with strong economic, recreational, and cultural opportunities, where you can live, work, and play, all in a day.** |

Website

A functional website is an essential communication tool for a city. LAFCO utilizes website functionality as one indicator to determine the accountability and transparency of a Municipality/District. The City maintains a website located at: www.cityoforoville.org, which provides online services and general information about the City, such as City job listings, City museums, local recreation activities, financial information, and links to other local resources. The City's website is kept up to date with current and past meeting agendas and meeting minutes. The website does provide copies of certified annual financial statements and compensation reports as well. The City of Oroville does not seem to have a policy requiring that the COOR website be user-friendly and contain accurate and up-to-date information. It is recommended that the City adopt a policy requiring its website to be user-friendly and contain up-to-date information.

General Accountability

The COOR demonstrated accountability and transparency in its disclosure of information and cooperation with Butte LAFCO. The City cooperated with LAFCO's requests for information and participated in an interview with the MSR consultants. In general, the City works towards compliance with the wastewater regulations described in Appendix C.

CONTACT INFORMATION

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https://www.cityoforoville.org/home

The Superior Court of California, County of Butte, is required by law to impanel a grand jury. The major functions of a grand jury are divided into criminal indictments and civil investigations, and the civil investigation portion requires the majority of time. The civil or "watchdog" responsibilities of the grand jury include the examination of all aspects of local government, including cities and special districts, to ensure the county is being governed honestly and efficiently and county monies are being handled appropriately. If an agency is subject to many grand jury inquiries, this can indicate poor performance or a high number of complaints about an agency. In 2018, the City of Oroville was the subject of a grand jury report regarding additional sources of revenue for the City of Oroville. Due to an increased cost of doing business, the City has had to implement drastic staffing cuts, as well as a 10% cut in staff pay and/or benefits. The Grand Jury concluded that the City of Oroville has been left "with a demoralized, depleted staff" and that drastic measures must be taken to find new sources of revenue for the City. Of the nine recommendations made by the Grand Jury, six were implemented (Oroville, 2018). Recently, City-wide staffing levels and associated pay/benefits have been restored (personal communication, D. Nevers, 5/52022).

Litigation is expensive for public agencies due to the costs associated with preparing an administrative record, retaining attorneys, and preparing briefs. Therefore, avoidance of litigation

is an indicator of management's effectiveness in utilizing alternative dispute resolution mechanisms and is utilized as metric for LAFCO's determination. The City of Oroville is not currently involved in any active litigation (as of December 31, 2020) (Oroville Council Agendas, 2021). However, a review of City Council agendas for 2020 indicates that the City does anticipate potential future litigation related to changing its "at-large" election system to a "by-district" election system.

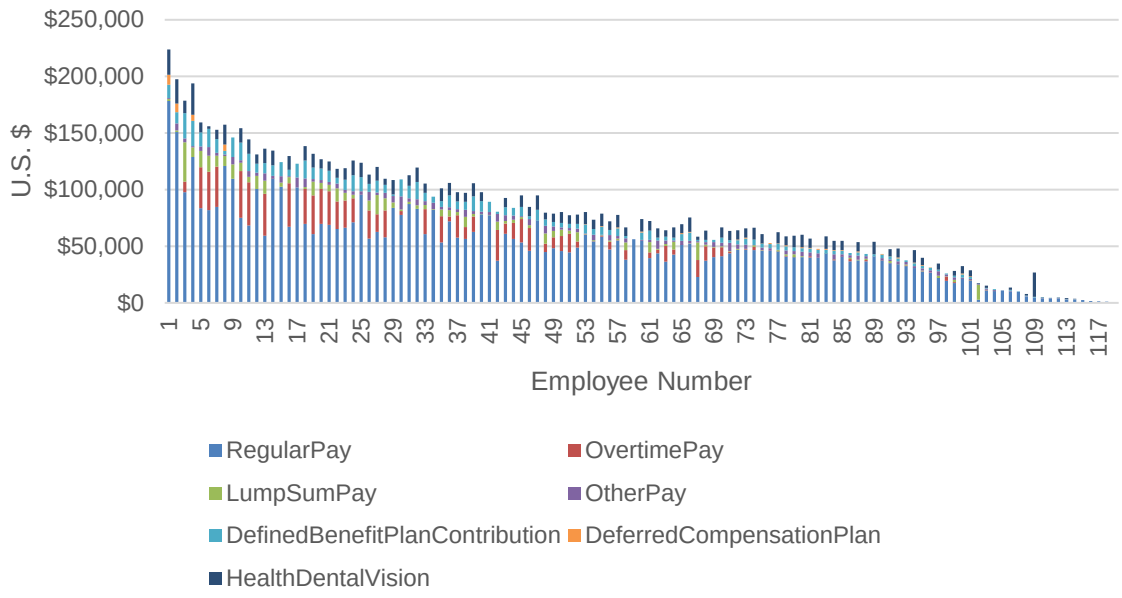
### *3.3.4 Management Efficiencies*

The City Administrator is appointed by and reports to the City Council and is responsible for directing City operations and overseeing and implementing policies on behalf of the City Council. An important part of management effectiveness includes the City adopting a City-wide mission and vision statement. The City's Mission statement is: "The City of Oroville is dedicated to serving the public, ensuring the safety and vitality of the community, and promoting prosperity for all." The City Vision Statement is shown in the box, above.

### *3.3.5 Staffing*

Oroville had city-wide staffing of 120 employees in the year 2020, as shown in Figure 3-4 below. This chart also shows compensation by category for each employee.

Figure 3-4: City Employee Compensation (2020)




Data Source: CA Auditor, Gov. Compensation Website, 2021

The Public Works Manager Sewer Division is immediately responsible for the Sanitary Sewer System with oversight from the Community Development Director (COOR, 2021d). Six (6) staff are dedicated to the Sewer Division, and those same six staff members are dedicated to the Sanitary Sewer System (COOR, 2021d).

The Sewer Division ultimately reports to the Assistant City Administrator for Community Development, as shown in Figure 3-5 (Oroville CAFR FY19/20, June 30, 2020). The City's Sewer System Management Plan reports that "The sanitary sewer crew consists of six workers and one manager. The City has adequately staffed the sanitary sewer crew with knowledgeable and trained crew members. At this time, the crew is meeting or exceeding maintenance expectations and completing many projects before the goal date" (COOR, SSMP, 2019).

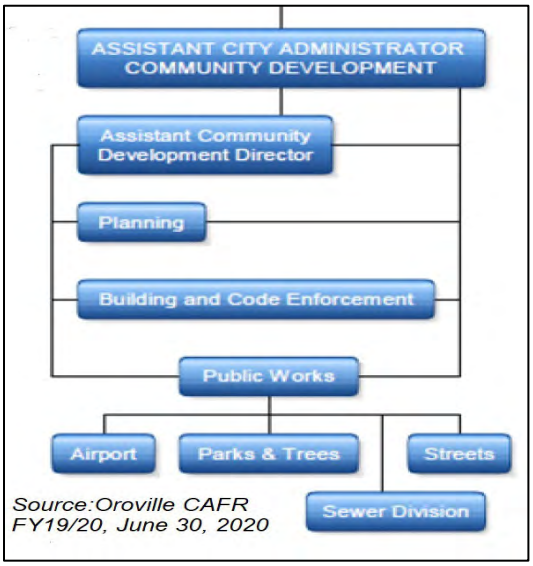



Figure 3- 5: Org Chart, Sewer Division

The City currently uses a combination of on-the-job training and conferences, seminars, and other opportunities to train the wastewater system staff. The California Water Environment Association offers workers who pass specific training a Collection System Maintenance certificate. The City's goal is to train its wastewater staff to allow them to obtain at least a Grade 2 or Grade 3 certificate (COOR, SSMP, 2019).

**Table 3-6: MSR DETERMINATIONS: ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENT STRUCTURE AND OPERATIONAL EFFICIENCIES**

| Number | Indicator | Determination |
|---|---|---|
| COOR-Acc-1 | Number of closed sessions during the year 2020 (ideally fewer than 50%). | In 2020, the City of Oroville held 19 closed sessions, which equates to 65% of the Council meetings. This is an issue that needs improvement. It is recommended that the City Council consider ways to reduce the number of closed sessions it holds in the upcoming years. LAFCO should reevaluate this metric when it next prepares an MSR or SOI for the City. |
| COOR-Acc-2 | Does the agency's Website comply with the 2016 updates to the Brown Act described in Government Code §54954.2 and enacted by Assembly Bill 2257? | Compliance with the 2016 updates to the Brown Act described in Government Code §54954.2 was evaluated in this MSR. The City of Oroville website partially complies with the Brown Act 2016 Updates described in AB2257. COOR makes its agenda available on its website as a link from the homepage, which directs to the "services" |

| | | |
|---|---|---|
| | | (continued)<br><br>tab and then to the nested "City Clerk" subtab. The nested sub-links from the home page do not meet the structural webpage agenda distribution requirements of AB2257. This is an item that needs improvement. It is recommended that the COOR update its website accordingly. |
| COOR-Acc-3 | Municipality has a functional website that lists contact information and contains financial statements, compensation reports, and other relevant public information. | Website functionality was evaluated in this MSR. The City's website is kept up to date with current and past meeting agendas and meeting minutes. The website does provide copies of certified annual financial statements and compensation reports as well. The City of Oroville does not seem to have a policy requiring that the COOR website be user-friendly and contain accurate and up-to-date information. It is recommended that the City adopt a policy requiring its website to be user-friendly and contain up-to-date information. |
| COOR-Acc-4 | Terms of office and next election date are disclosed for City Council members, and committee appointments are online. | Terms of office and next election date are not disclosed for City Council members on the City's website. This is an item that needs improvement. It is recommended that the City update its website accordingly. Committee appointments are posted in a PDF file online. |
| COOR-Acc-5 | Do elected City Council members submit required forms and receive required trainings as prescribed by the three state laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training? | 1) The City's Code of Ethics is consistent with the Political Reform Act's intent and is available to the public at the City's website. City Council Members have filed Form 700, Statements of Economic Interests, with the City Clerk. Compliance with Fair Political Practice Act was assessed by querying the FPPD Complaint and Case Information Portal. Query results for the COOR found one open complaint regarding two current City Council members (Janet Goodson and Art Hatley) with case number 2018-01102 opened on October 16, 2018, which remains pending. |

| | | |
|---|---|---|
| | | (continued)<br>2) Local government officials are required to take ethics training every two years consistent with Assembly Bill 1234 (Salinas, 2005). Ethics training for the City Council and city managers/supervisors is conducted on a biannual basis. This is a regularly recurring training. Therefore, COOR's City Council complies with AB 1234.<br>3) Local government officials must receive the required sexual harassment prevention two-hour training every two years consistent with Government Code 53237 et. seq. Sexual harassment prevention training for the City Council and City managers/supervisors is conducted on a biannual basis. This is a regularly recurring training. Therefore, COOR's City Council complies with Gov. Code 53237 et. seq. |
| COOR-Acc-7 | Current litigation and/or grand jury inquiry | In 2018, the City of Oroville was the subject of a grand jury report regarding additional sources of revenue for the City of Oroville. Due to an increased cost of doing business, the City staff has had to implement drastic staffing cuts as well as a 10% cut in pay and/or benefits. The Grand Jury concluded that the City of Oroville has been left "with a demoralized, depleted staff" and that drastic measures must be taken to find new sources of revenue for the City. Of the nine recommendations made by the Grand Jury, six were implemented. Recently, City-wide staffing levels and associated pay/benefits have been restored and most of the issues raised in the grand jury report have been resolved.<br><br>The City of Oroville is not currently involved in any litigation (Oroville, 2021). |

## 3.4: Growth and Population Forecasts

The growth and population projection for the affected area is a determination which LAFCO is required to describe, consistent with the MSR Guidelines from the Office of Planning & Research (OPR) as set forth in the CKH Act. This section provides information on the existing population and future growth projections for the City of Oroville. Historical and anticipated population growth

is a factor that affects service demand. Appendix A at the end of this MSR/SOI Update provides detailed demographic and socio-economic information for the County of Butte. Economic forecasts for the County of Butte are provided in Appendices B and C.

### *3.4.1 Existing Population*

There are approximately 18,863 residents within the City boundaries as of 2022 (CA DOF, 2022). This is a decline in population of 5.4 percent from the 2020 population of 18,888. Of the 18,863 residents within the City boundaries, it is estimated that 12,200 receive wastewater collection services from COOR. Detailed information regarding population demographics in Butte County is provided in Appendix A.

**Table 3-7: Existing Permanent Population, COOR, 2021 to 2022**

| Name of City | Population in Boundary(1) | Number of Registered Voters in Boundary(2) | Population in SOI only(3) |
|---|---|---|---|
| City of Oroville | 18,863 | 9,515 | 36,540 |

Sources:
(1) California Department of Finance. E-1 Population Estimates for Cities, Counties, and the State: January 1, 2021 and 2022. Sacramento, California.
https://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/.
(2). Registered Voter data provided by Butte County Elections Office, Denlay, Keaton, August 9, 2021.
(3): Calculated estimate based on an average of 2.16 persons per parcel in Butte County.

In addition to its permanent population, Oroville's wastewater system also provides services to temporary visitors to the area for both day use and overnight activities. For example, the Lake Oroville Recreational Area has approximately 1 million visitors annually. A portion of these visitors may utilize businesses located within the City's sewer service area. The City's historic downtown area, special events, and river access also attract visitors.

### *3.4.2 Existing Population in SOI*

COOR's SOI population (outside the City Boundary) is estimated to be 36,540 people based upon an average of 2.16 persons per Assessor's Parcel in Butte County, as listed in Table 3-7, above. Thus, more than twice as many people reside in the unincorporated SOI as within the City boundary. This is because of the SOI's large size at 33,744 acres, which is more than 3.8 times larger than the City boundary.

### *3.4.3 Projected Population Growth*

Projecting a city's future population is complicated due to varying annexation rates and census tracts that do not match City boundaries. Data from the California Department of Finance (DOF) was used to project population growth for Butte County, as shown in Table 3-8 below. To analyze the impact of anticipated future population growth of the City on the provision of wastewater services, two growth scenarios -- a "moderate" and a "low" scenario -- are presented in Table 3-8 below. In the "moderate" growth estimate, the DOF's population projection for the County of

**Table 3-8: Total Estimated & Projected Population (2020 – 2045)**

| | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | Percent Increase 2020 to 2045 | Numeric Increase 2020 to 2045 | CAGR 2020 to 2045 |
|---|---|---|---|---|---|---|---|---|---|
| County of Butte[1] | 206,362 | 230,691 | 236,874 | 242,240 | 246,453 | 249,457 | 20.9% | 43,095 | 0.76% |
| City of Oroville (Moderate)[2] | 18,888* | 21,113 | 21,679 | 22,170 | 22,555 | 22,830 | 20.9% | 3,942 | 0.76% |
| City of Oroville (Low)[3] | 19,440* | 19,621 | 20,052 | 20,550 | 21,457 | 22,524 | 15.9% | 3,084 | 0.59% |

*Sources:*
*1: California Department of Finance. Demographic Research Unit. Report P-2A: Total Population Projections, California Counties, 2010-2060 (Baseline 2019 Population Projections; Vintage 2020 Release). Sacramento: California. July 2021.*
*2: Population projection for COOR calculated as 9.15 percent of The County of Butte's population.*
*3: Low population estimate from BCAG Post Camp Fire Study 2020*
**Note: the City's 2022 population estimate from the CA DOF is 18,863 persons.*

Butte is utilized to extrapolate population growth rates for the City of Oroville. By the year 2045, it is estimated that COOR's existing boundary could encompass a population of 22,830 persons. This represents an average annual growth rate (i.e., compound rate) (CAGR) of 0.76 percent between the years 2020 and 2045. For the "low" growth estimate, data from the Butte County Association of Governments (BCAG) was utilized.

Approximately every four years, the Butte County Association of Governments (BCAG) prepares long-term regional growth forecasts of housing, population, and employment for the Butte County area. The BCAG's Planning Directors Group contributed towards the development of low, medium, and high scenario forecasts of housing, population, and employment. The Post-Camp Fire demographics were utilized in the Table above. Given that the 2022 population declined to 18,863, the low estimate from BCAG seems to be on-trend. The Oroville 2030 General Plan anticipates a "high" population growth rate and describes the location and policies to guide this growth. The addition of 3,940 more people to the COOR by 2045 is possible as the City has under-developed areas within existing boundaries that could potentially be available for more intensive residential development.

### *3.4.4 Existing Land Use*

Land-use is a factor that affects population growth and, therefore, demand for public services.

Boundary Area: Oroville's topography is typical of the Sacramento Valley, being a relatively flat alluvial area at an elevation of 150 feet mean sea level (msl) near the airport and Feather River, up to 400 feet msl in the eastern foothill area. Oroville's boundary area is divided into two parts: a smaller-sized western area; and the larger eastern area. The western area contains the Oroville Municipal Airport, accommodating private planes, charter flights, and private jets; and has a visitor and pilot lounge. An 18-hole golf course and club house are located next to the airport.

The eastern area of the City contains a range of land-uses, including residential, commercial, industrial, and open space. Oroville's historic downtown district contains many shops and cafés. Single-family and multi-family residential homes on a standard grid pattern of streets surround the historic downtown core. The primary commercial corridors are located along State Highways 70 and 162 (Oroville Dam Boulevard). The commercial corridor contains grocery stores, fast food facilities, and other consumer amenities. Oroville Hospital is a 153-bed facility located on Olive Highway. The City has two U.S. Post office locations, one on Myers Street and another on Robinson Street. Most of the higher-density residential subdivisions are located south and east of the Feather River. The south-central part of the City near Bagget Palmero Road contains industrial land-uses.

The City of Oroville has approximately 7,439 housing units as of January 1, 2021 (CA, DOF). The City's housing stock is older than for California as a whole. Only 15.8 percent of Oroville's homes were built after 1990 compared to 25.5 percent for all of California. Homes built after 1990 are more likely to have plumbing fixtures that are compliant with state and federal water and building standards. Additional information about housing in Oroville and Butte County is provided in Appendices A and B at the end of this MSR.

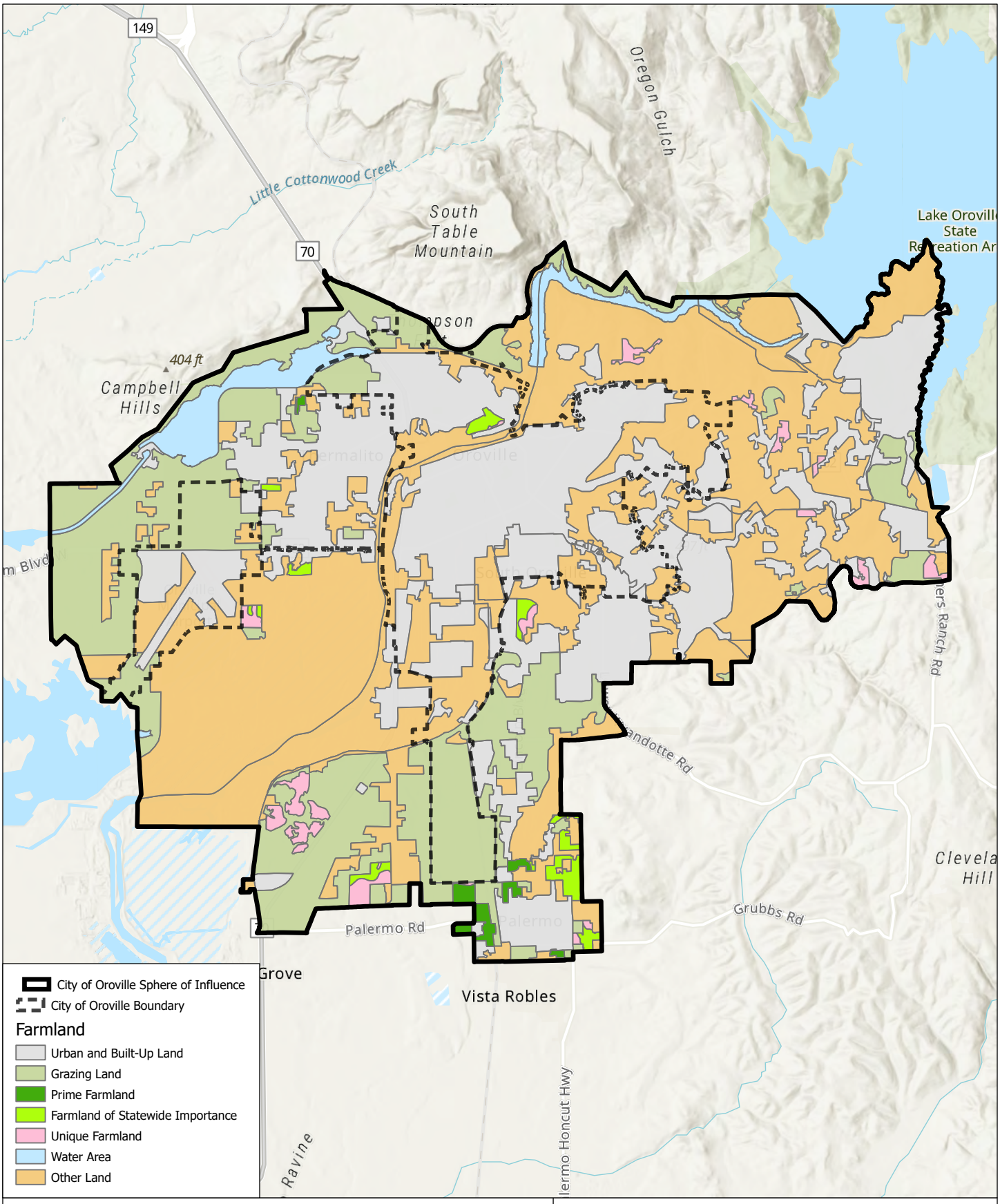
The City includes numerous parks operated by the Feather River Recreation & Park District, such as the Feather River Parkway, Gary Nolan Baseball Complex with Play Town USA, Nelson Park and Swimming Pool, and Riverbend Park. Oroville is located adjacent to Highway 70, which provides a north-south direction transportation corridor. Highway 70 allows direct connection to Interstate 5 and State Highway 99. The incorporated boundary area contains a relatively higher population density as compared to the undeveloped land surrounding the City. Agricultural land use is both a historic and currently active part of the community, as shown in Figure 3-6.

SOI Land-Use: A portion of the land in Oroville's SOI is currently developed with urban, suburban, and rural land-uses. Since the SOI remains unincorporated, the Butte County General Plan is the guiding land-use document, as described in the following pages. However, the City of Oroville 2030 General Plan anticipates potential future annexation of SOI areas, and the City's Plan designates those undeveloped and under-developed portions of the SOI as urban and suburban development densities with a minimum of one unit per acre. Additionally, BCAG's land-use model prepared as part of the post-Camp-Fire Study indicates that land available in the SOI may be suitable for future development, pending future studies and permits, as shown in Figure 3-9.

Open Space & Agriculture

Butte LAFCO aims to protect open space and agricultural uses. For purposes of this MSR analysis, open space data was derived from the County General Plan land-use data. In addition, the Farmland Mapping and Monitoring Program (FMMP) managed by the California Natural Resources Agency has provided data for agricultural land classifications in the Oroville Area, as shown in Figure 3-6. Some limited agricultural land remains within the City limits, and agriculture is more extensive throughout the SOI. Within the City boundaries, grazing and pasture land is the most common agricultural use. Outside the boundaries, but within the SOI, there is prime farmland and farmland of statewide importance that support citrus orchards, olive orchards, and other agricultural uses.

The City's provision of wastewater services to open space and agricultural areas (i.e., non-structural) within its boundaries is minimal. LAFCO has an interest in documenting the conversion of agricultural and open space lands to other land use types, such as residential use. The provision




# Figure 3-6
# COOR Farmland

*Map Date: 09/02/2021*
*Data Source: Butte LAFCO;*
*Farmland Mapping and Monitoring Program (FMMP)*

of municipal services, such as the COOR wastewater collection and conveyance services, can play a role in these types of land-use conversions. Additionally, COOR does have authority over land use within its boundary, and land-use decisions directly influence open space and agriculture.

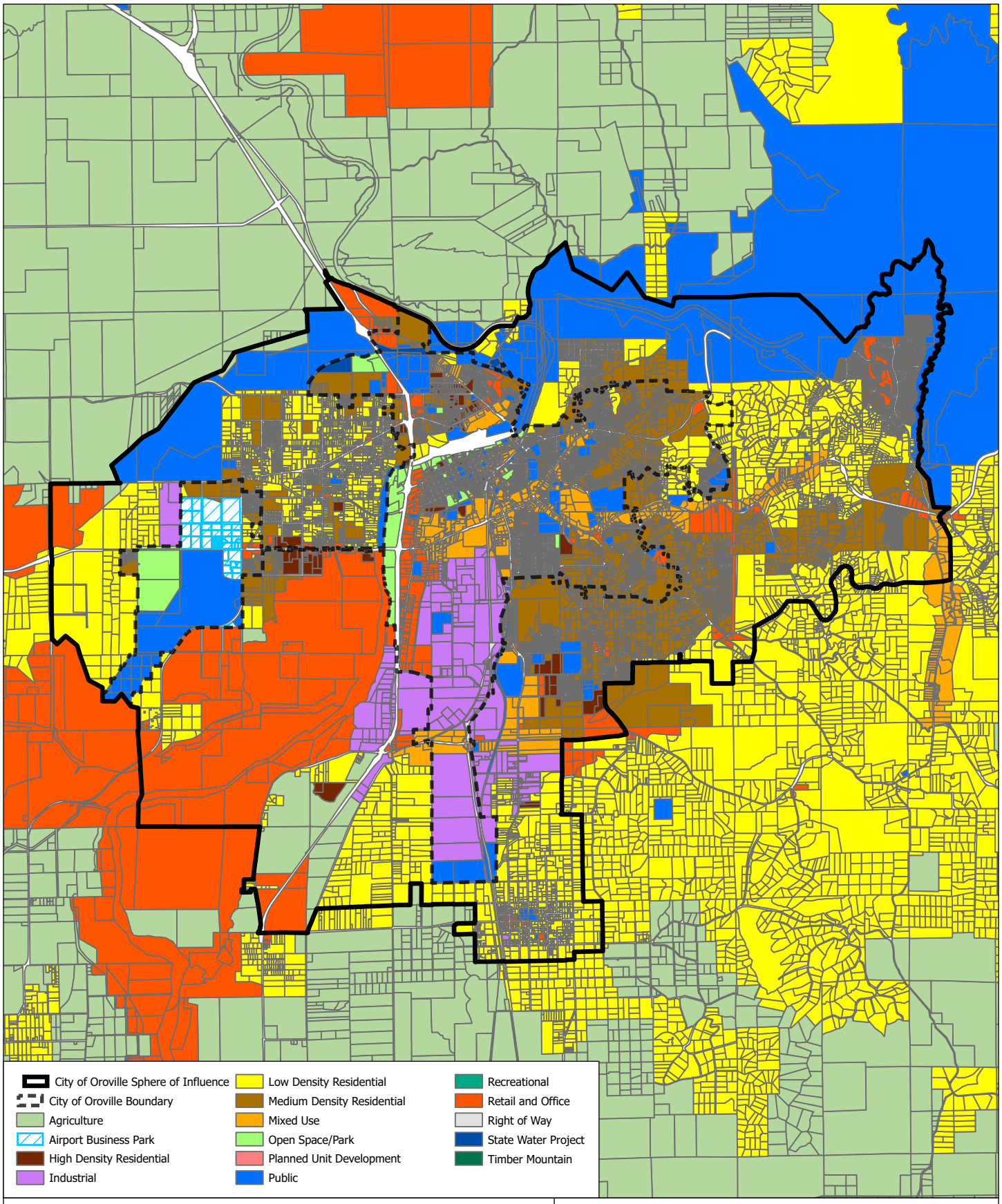
Oroville General Plan 2030

The Oroville 2030 General Plan was adopted in 2009 and updated in March 2015. The General Plan serves as a comprehensive guide for making decisions about land use, community character, circulation, open space, the environment, and public health and safety. The City General Plan contains guiding principles related to livability, enhanced mobility, a vibrant local economy, natural resources, environment, recreation, community infrastructure, health and safety, and an involved citizenry (COOR, 2015). The General Plan provides the legal foundation for the zoning ordinance and other ordinances. The General Plan recognizes the water and wastewater services provided to City residents by other service providers, including TWSD, LOAPUD, SFWPA, and the California Water Service Company. The City's general plan contains numerous policies regarding the provision of water and wastewater municipal services. The City of Oroville's 2022 – 2030 Draft Housing Element is available for public review and comment at: <*https://www.orovillehousingelement.com/*>.

Butte County General Plan 2030

The Sphere of Influence area is entirely unincorporated and subject to the land-use policies and regulations of Butte County. Most land-use decisions in the SOI, initiated by private property owners over the last decade, are secured via entitlements and land-use permits from Butte County and other agencies. In addition, the County plans for its future growth through its General Plan, which is a long-term comprehensive framework to guide physical, social, and economic development within the community's planning area. The General Plan contains a land-use map and associated policies that identify the types and intensities of permissible uses in relation to different land use designations. The Butte County General Plan 2030 was updated and adopted on October 26, 2010 (County Resolution No. 10-152) and Amended on November 6, 2012 (County Resolution No. 12-124).

The General Plan Housing Element was subsequently updated on August 26, 2014, through County Resolution No. 14-112. Butte County has opted to update its housing elements every eight years. The 2022 update to the Housing Element will aim to align with their Regional Transportation Plans (which are updated every four years) and the housing plans in the Regional Sustainable Communities Strategy (See BCAG). The County General Plan and associated housing element influence both the type and the rate of growth within the unincorporated areas, such as the City's SOI.




# Figure 3-7
# City and County General Plan

*Map Date: 09/02/2021*
*Data Source: Butte LAFCO;*
*Butte County Association of Governments (2021)*

Figure 3-7 (previous page) provides a map that merges the County's General Plan Land-Use Map in the SOI with the City's General Plan Land Use Map for the incorporated boundary through the use of crosswalks to graphically show the spatial relationships in land-use designations. Butte County is currently in the process of updating its General Plan to create a new General Plan 2040. Since the devastating Camp and North Complex Fires destroyed nearly 17,000 structures, including more than 14,000 homes, and displaced many more residents, an updated General Plan is needed to support the County's efforts to rebuild and create a more resilient future. The new General Plan update will address issues related to climate adaptation, environmental justice, and other new State laws.

### *3.4.5 Potential Future Development*

Future population growth within the City and its SOI depends on General Plan policies, zoning, and associated land-use designations in the region. The City General Plan and the County of Butte General Plan both provide a series of goals, policies, standards, and implementation programs to guide land use, development, and environmental quality in the area. Tables 3-9, 3-10, and 3-11 on the following pages list the new major projects that are in the planning and development stages within the City. As listed in Tables 3-9, 3-10, and 3-11, there is considerable room within the City boundary for infill development. The City Planning Division has prepared a map of proposed/approved infill development projects within the City boundary, as shown in Figure 3-8 below.

Figure 3-8: Infill Development Opportunities within the City and SOI

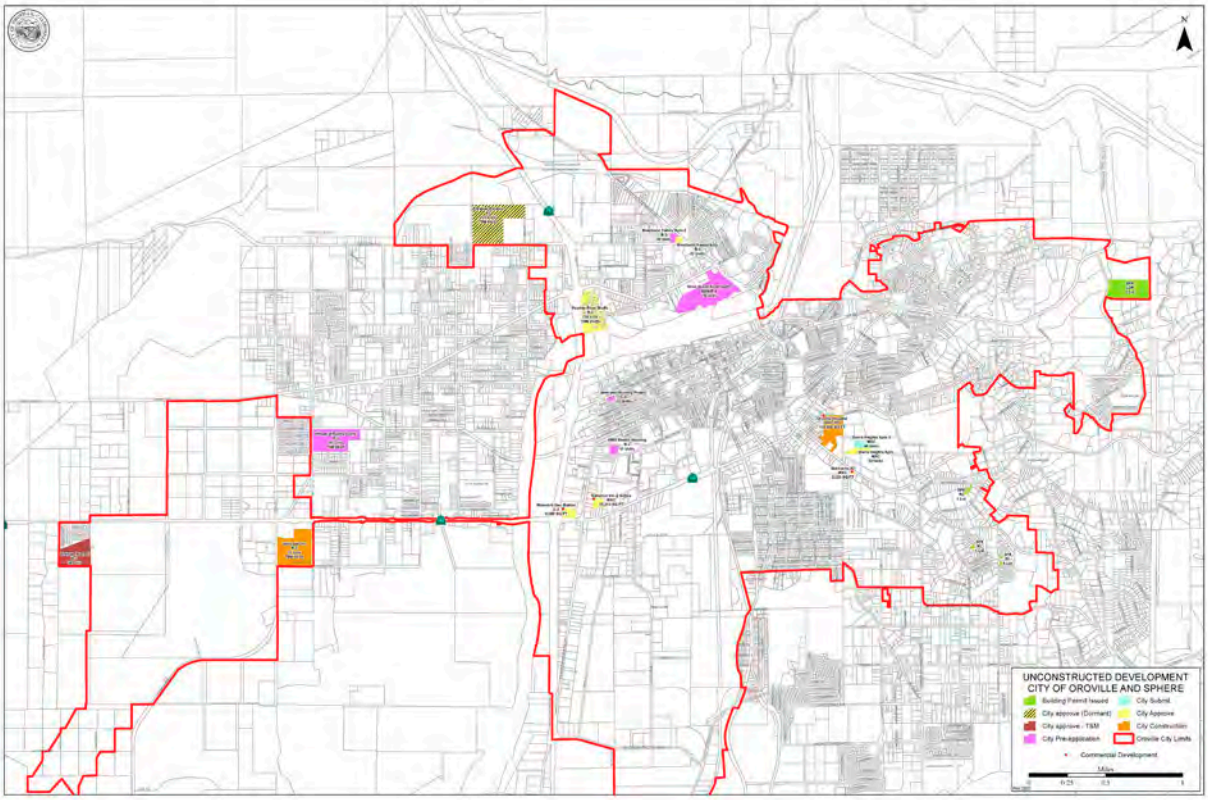


**Table 3-9: Single Family Residential Projects**

| Name of Development | Developer | Number of dwelling units | Project Type | Location | Status |
|---|---|---|---|---|---|
| Vista Del Oro | Crowne Communities | 71 units | Market Rate | Larkin & SR162 West N1: Thermalito | City Approve. Active Construction |
| Village at Ruddy Creek | --- | 97 units | Market Rate | 18th St & Feather Ave N1: Thermalito | City Approved. Annexation Approved |
| Linkside Place II | Genesis Engineering | 56 units | Market Rate | SR162 West & Christian Ave N1: Thermalito | City Approved TSM. Final Map Under Review |
| Acacia Estates | Individual developers | 14 units | Market Rate | Acacia Ave & Hawley Trail N6: Canyon Highlands | City Approved. Active Construction |

Total: 238 single-family units

Data Source: the City of Oroville, Webpage entitled "Current Applications & Projects. " Updated June 3, 2021. Retrieved on September 8, 2021 from: < *https://www.cityoforoville.org/services/planning-development-services-department/planning-division/planning-projects* >

**Table 3-10: Multi-Family Residential Projects**

| Name of Development | Developer | Number of dwelling units | Project Type | Location | Status |
|---|---|---|---|---|---|
| Riverbend Family Apartments | AMG & Associates | 72 units | Affordable Family | Table Mountain Blvd & Nelson Ave. N2: Table Mountain | City Approve. Building plans under review |
| Riverbend Family Apartments Phase 2 | AMG & Associates | 48 units | Affordable Family | Table Mountain Blvd & Nelson Ave. N2: Table Mountain | Submitted. Application Under Review |
| Olive Ranch Apartments Phase 1 | 2 Development Companies | 81 units | Affordable Family | SW Corner of Table Mountain Blvd & Grand Ave. N2: Table Mountain | City Approve. Active Construction |
| Olive Ranch Apartments Phase 2 | 2 Development Companies | 80 units | Affordable Family | SW Corner of Table Mountain Blvd & Grand Ave N2: Table Mountain | City Approve. Active Construction |

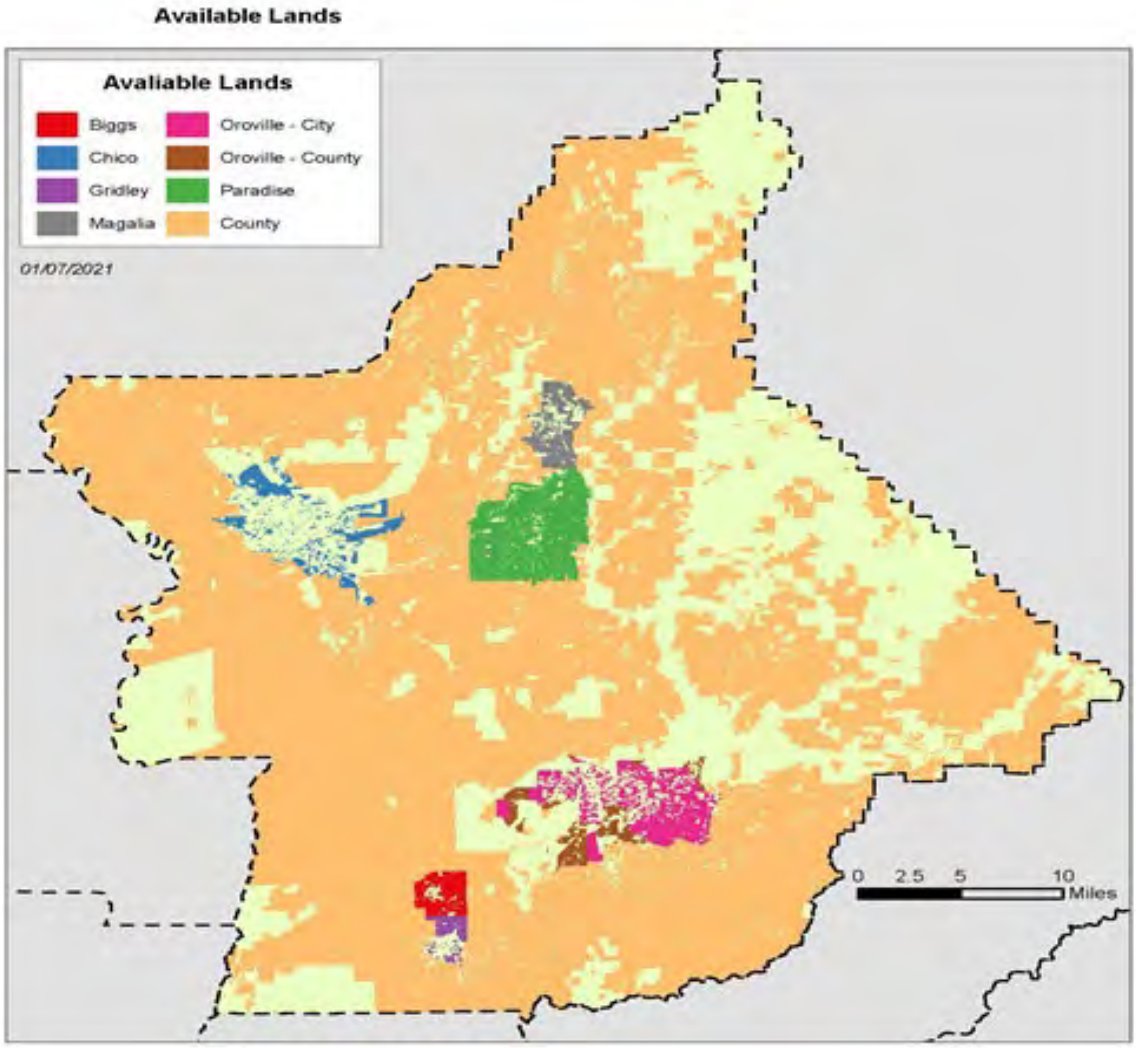
| | | | | | |
|---|---|---|---|---|---|
| Prospect View | AMG & Associates | 40 units | Permanent Supportive Housing | Nelson Ave (APN: 031-150-079). N2: Table Mountain | City Approve Expected CD Submittal Q4. 2021 |
| Base Camp Village II | Base Camp Village, Inc | 12 units | Market Rate | 86 Mono Ave. (APN: 031-051-027). N2: Table Mountain | City Approve |
| AMG Mitchell Ave | AMG & Associates | 36 units | Affordable Senior | Mitchell Ave (APN: 035-240-044). N7: Downtown | City Approve. Building plans under review |
| AMG Mitchell Ave Phase 2 | AMG & Associates | 36 units | Affordable Senior | Mitchell Ave (APN: 035-240-043). N7: Downtown | Submitted. Application Under Review |
| Oroville Veterans Village, Phase 1 | Veterans Housing Development Corporation | 12-unit townhomes | CalVet Home Loan | 711 Montgomery Street. Between 6th and 7th Ave N7: Downtown | City Approve |
| Oroville Veterans Village, Mitchell Corp Yard | Veterans Housing Development Corporation | 64 units | Affordable Veterans Housing | Mitchell Ave. Behind the City Corporation Yard N7: Downtown | Applicant designing and planning project |
| Sierra Heights Apartments | Willow Partners | 52 units | Affordable Senior | Executive Parkway & Hillview Ridge N9: Foothills | City Approve. Active Construction |
| Sierra Heights Apartments Phase 2 | Willow Partners | 48 units | Affordable Senior | Executive Parkway & Hillview Ridge N9: Foothills | City Approve. Active Construction |
| Cascade Apartments | Cascade Housing | 35 units | Affordable Family | Mitchell Ave (APN: 035-240-100). C2: Feather River Blvd North | Submitted. Application Under Review |
| Total: 619 multi-family units<br>Data Source: City of Oroville, Webpage entitled “Current Applications & Projects. “ Updated June 3, 2021. Retrieved on September 8, 2021 from: <*https://www.cityoforoville.org/services/planning-development-services-department/planning-division/planning-projects* > | | | | | |

**Table 3-11: Commercial Projects**

| Name of Development | Developer | Square Footage | Location | Status |
|---|---|---|---|---|
| Oroville Hospital | Sundt/Modern Building Joint Venture | 158,900 sq. ft. (5-story) | 2767 Olive Hwy. (APN: 013-260-081). C1: Oroville Dam/Olive Highway | City Approve. Active Construction |
| Starbucks | KDC Construction / Coastal Star Partners, LLC | 2,225 sq. ft. | 3004 Olive Hwy (APNs: 013-300-075 & -087). C1: Oroville Dam/Olive Highway | Construction Completed December 2020 |
| Maverik Fueling Station | Sierra View / Maverik, Inc. | 6,000 sq. ft. | 350 Oro Dam Blvd E (APN: 035-030-108). C1: Oroville Dam/Olive Highway | City Approve. Active Construction |
| Hampton Inn and Suites | Lenzi Incorporated | 55,253 sq. ft. (4 story) | 2355 Feather River Blvd (APN: 035-030-099). C1: Oroville Dam/Olive Highway | City Approve. Building Plans Under Review |
| Arby's | Kang Foods | 2,233 sq. ft. | 680 Oro Dam Blvd E (APN: 035-260-084). C1: Oroville Dam/Olive Highway | City Approve |
| Total: 224,611 square feet of commercial space<br>Data Source: City of Oroville, Webpage entitled "Current Applications & Projects. " Updated June 3, 2021. Retrieved on September 8, 2021 from: <*https://www.cityoforoville.org/services/planning-development-services-department/planning-division/planning-projects* > | | | | |

The State legislature has recently passed several new laws allowing the construction of accessory dwelling units (SB 9) and junior accessory units (aka 'granny flats') with the aim to increase the supply of housing. The City of Oroville and its SOI have many residential lots that have the potential to be developed with accessory dwelling units in the future. Additionally, BCAG's land-use model prepared as part of the post-Camp-Fire Study indicates that land available in Oroville's SOI may be suitable for future development, pending future studies and permits, as shown in Figure 3-9.

Figure 3-9: BCAG's GIS Model of Potentially Available Land




### *3.4.6 Local Hazard Mitigation Plan and Other Hazards*

The Butte County General Plan's Safety Element [which includes the Local Hazard Mitigation Plan (LHMP)], was adopted by the County Board of Supervisors on November 5, 2019. (Butte OEM, 2019). Butte County, along with five incorporated communities and ten special districts prepared the 2019 LHMP in order to make the County and its residents less vulnerable to future

hazard events. The City of Oroville is the subject of a dedicated appendix (D) in the LHMP. The LHMP indicates that the City's wastewater system has the potential to be impacted by natural hazards, including floods, liquefaction (moderate risk), and wildfires (moderate risk). For example, flooding can potentially send contaminated storm water into local sewer pipes.

Related to the Safety Element is the Butte County Climate Change Vulnerability Assessment, which was published July 2021. The Vulnerability Assessment recognizes that natural hazards can impact the wastewater collection, conveyance, treatment, and disposal system and associated buildings and infrastructure. The natural hazards identified in the Assessment include flooding, storms, drought, wind, and fires (Butte County, 2021b). Additionally, excessive summer heat could influence the ability of the City's public works staff and nearby service provider staff to work outside to repair or upgrade wastewater infrastructure.

In addition to experiencing local natural hazards, the City of Oroville has also experienced a local housing shortage. Since the Camp Fire, many Paradise residents have relocated to the cities of Chico and Oroville. As a result, the inventory of housing available for-sale has become extremely limited, and prices have increased. Additionally, rental housing vacancy rates have been low in Oroville since the fire occurred.

### *Determinations for Growth and Population*

Based on the information included in Sections 3.1 through 3.4, above, the following written determinations make statements involving each service factor which the Commission must consider as part of a municipal service review. The determinations listed below in Table 3-12 are based upon the data presented, and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution which the Commission formally adopts during a public meeting.

**Table 3-12: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA**

| Number | Indicator | Determination |
|---|---|---|
| COOR-Pop-1 | Existing Boundary. | The City of Oroville's geographic boundary encompasses 8,872 acres and includes 7,447 assessor parcels |
| COOR-Pop-2 | Existing Sphere of Influence | The original SOI study prepared for the City of Oroville was completed in 1985. Today, the City's SOI encompasses 33,744 acres and 16,917 assessor parcels. City staff indicated that it believes that the current configuration Sphere of Influence is adequate for projected future growth. |
| COOR-Pop-3 | Extra-territorial Services | The COOR does provide extra-territorial services to customers located outside of its City boundary. Specifically, the City provides wastewater collection services to 19 parcels outside the City boundaries. The City is requested to provide the details of the 19 parcels to LAFCo so that any boundary corrections are correctly mapped. |

| Table 3-12: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| COOR-Pop-4 | Projected population in years 2020 to 2045. | In the "moderate" growth estimate, the DOF's population projection for the County of Butte is utilized to extrapolate population growth rates for the City of Oroville. By the year 2045, it is estimated that COOR's existing boundary could encompass a population of 22,830 persons. This represents an average annual growth rate (i.e., compound rate) of 0.76 percent between the years 2020 and 2045. However, due to a decline in population from 2020 to 2021, potentially related to movement related to the Camp Fire, the "low" growth scenario may be more on-trend. |
| COOR-Pop-5 | City boundaries contain sufficient land area to accommodate projected growth. | Currently, the City's boundary area supports an average of two persons per acre, which is considered low population density. The City's General Plan suggests that future growth may occur within the COOR's boundary. The City's boundaries contain sufficient land area to accommodate projected growth. It is recommended that COOR utilize its GIS system to maintain a vacant land inventory list as recommended by Action 3.1.1 of the City's Housing Element. Additionally, prior to any annexation proposal, the City should prepare a land absorption study to demonstrate additional annexed lands are necessary to support expected growth beyond current boundaries. |
| COOR-Pop-6 | Effect that the City's service provision will have on open space and agricultural lands. | There are agricultural lands within the City's boundary and SOI. The City's land-use decisions do have a direct effect on agricultural land and open space. |

## 3.5 Disadvantaged Communities

LAFCO's MSRs typically describe Disadvantaged Unincorporated Communities (DUCs). DUCs are a census "block" where the annual median household income (MHI) is less than 80 percent of the statewide MHI. The statewide annual median household income (MHI) in California for 2019 was $75,235 (U.S. Census, 2021). Eighty percent of the statewide MHI (2019) equals $60,188.00, the threshold used to determine which geographic areas qualify for classification as disadvantaged communities. The year 2019 is utilized as the baseline year because it corresponds to the CALAFCO map. Please note that since Oroville is an incorporated City, there are no DUCs within its boundaries.

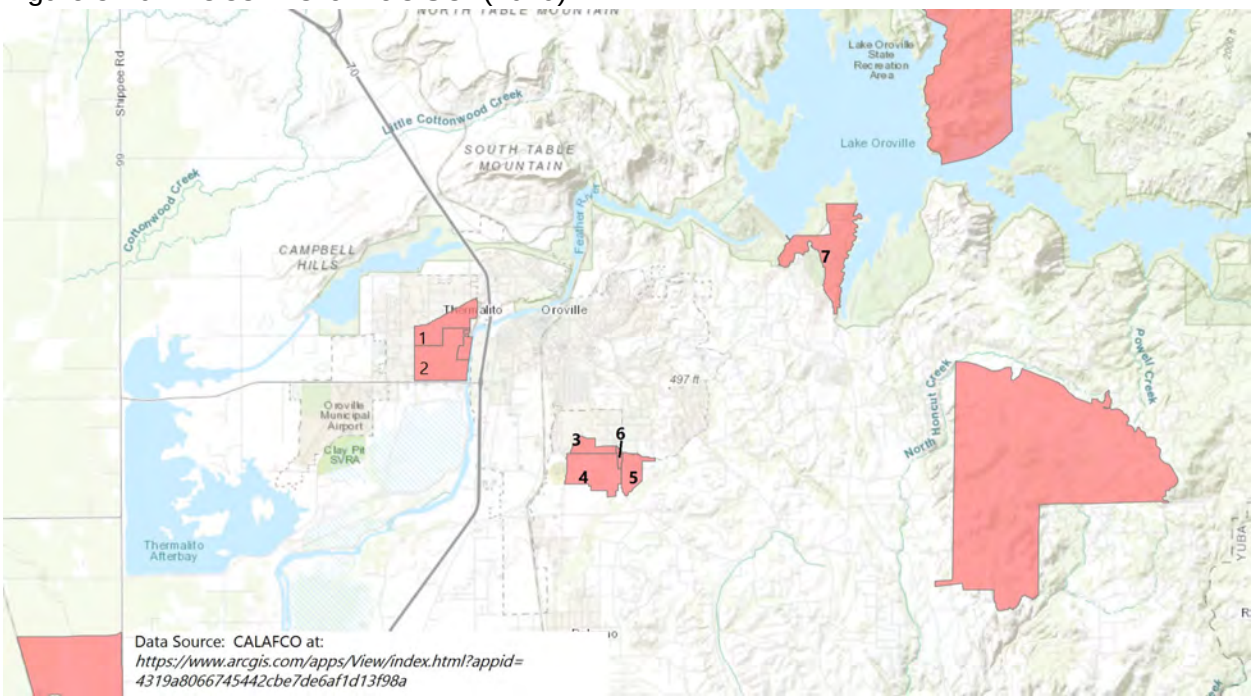
Disadvantaged Unincorporated Communities within the City's SOI

Disadvantage Unincorporated Communities (DUCs) within the City's Sphere of Influence is the topic of a mandated LAFCO determination. DUCs are defined as areas with the following features:

- Inhabited with ten or more homes adjacent or in close proximity to one another; and
- Either within a city's SOI, islands within a city boundary, or geographically isolated and have existed for more than 50 years; and
- The median household income is 80 percent or less than the statewide median household income.

As shown in Figure 3-10, there are seven census "blocks" with median household income below the state threshold in Oroville's SOI. These areas are classified as DUC's.

Figure 3-10: DUCs in Oroville's SOI (2019)




The seven census blocks are marked with numbers 1-7 in Figure 3-10 above and these numbers correspond to those listed in Table 3-13, below. Table 3-13 provides data for the year 2019 because that relates to the data CALFCO utilized to create the above map.

| Table 3-13: DUCs in Census Blocks (2019) | | | |
|---|---|---|---|
| **# on Map** | **Census Block #** | **2019 MHI Threshold** | **Block MHI (2019)** |
| 1 | Block Group 3, Census Tract 37 | $60,188 | $32,045 |
| 2 | Block Group 4, Census Tract 37 | $60,188 | $23,210 |
| 3 | Block Group 3, Census Tract 30.02 | $60,188 | $47,500 |
| 4 | Block Group 2, Census Tract 30.02 | $60,188 | $46,964 |
| 5 | Block Group 4, Census Tract 31 | $60,188 | $47,961 |
| 6 | Block Group 1, Census Tract 30.01 | $60,188 | $29,792 |
| 7 | Block Group 2, Census Tract 26.02 | $60,188 | $47,426 |
| *Data Source: 2019 data from CALAFCO Statewide DUC Map using American Community Survey 5-Year Data (2015-19) Updated Mar 2022.* | | | |

Please note that newer data based on the 2020 U.S. Census is slowly being released. The 2020 U.S. Census also created spatial changes such that the geographic layout of census tracts and census blocks may have significantly expanded or contracted. The statewide annual median household income (MHI) in California for 2022 is $88,930 (ESRI, 2022).

The unincorporated areas are provided public services from numerous local and state agencies[1]. Water service to the DUCs is provided by local water service purveyors that vary according to geographic service area as follows:

- South Feather Water and Power Agency provides water service to the eastern portion of the City boundary and its SOI, as shown in Figure 6-2.
- Thermalito Water and Sewer r District delivers water service to the northern portion of the City boundary and its SOI, as shown in Figure 7-2.
- California Water Service Company delivers water to the central and southern portion of the City
- Individual wells may be located on private parcels.

Wastewater collection and conveyance are provided to the City's SOI by the Thermalito Water and Sewer District in the northwestern part of the SOI, and by the Lake Oroville Area PUD in the eastern part of the SOI. Some parcels in the SOI rely upon septic tanks. Fire protection service is provided to the City's SOI by two agencies. The portions of the SOI to the north, west, and the east (to some extent) are provided fire protection by the Butte County Fire Department (BCFD)/CALFIRE. Butte County Fire/CALFIRE Department provides services to approximately1,550 square miles of Butte County and approximately 102,000 unincorporated residents from 42 fire stations. CALFIRE also contracts with the COOR to provide fire protection services to the community.

All of Oroville's SOI areas receive essential municipal services of water, wastewater, and structural fire protection (or acceptable private alternatives). Therefore, no communities within the existing COOR boundary or adjacent to the City's SOI lack public services, and no health or safety issues have been identified.

Disadvantaged Communities within the City Boundary

This paragraph describes Disadvantaged Communities (DACs) within the City limits. A DAC is a census tract where the annual median household income (MHI) is less than 80 percent of the statewide MHI. The statewide annual median household income (MHI) in California for 2019 was $75,235 (U.S. Census, 2021). However, this increased in year 2022 to a statewide annual median household income (MHI) in California of $88,930 (ESRI, 2022). Nevertheless, the year 2019 is utilized as the baseline year because it is the most recent year for which numerical and spatial (GIS) data is consistently available. Eighty percent of the statewide MHI (2019) equals $60,188.00, the threshold used to determine which geographic areas qualify for classification as disadvantaged communities. This analysis uses Census Tracts to determine DACs because this level of analysis provides the most uniform income data available statewide and Census Tract data is often used by the State agencies, such as the State Water Resources Control Board, to determine grant and loan awards. Data for this analysis were collected from the 2019 American Community Survey 5-Year Estimates at the census tract level.

12 census tracts lie within the City of Oroville's boundary and sphere of influence, as listed in Table 3-14 below. Eleven of the 12 census tracts have a median household income below $60,188 which classifies them as disadvantaged communities (DAC). The only census tract in the City of Oroville's boundary that was not classified as a DAC was census tract 26.01, which had a median household income of $66,750.

**Table 3-14: Median Household Income by Census Tract**

| Census Tract | Population (2020) | Square Miles | Median Household Income (2019) |
|---|---|---|---|
| 25 | 5,353 | 54.94 | 37,054 |
| 27 | 5,965 | 5.14 | 49,029 |
| 28 | 4,437 | 1.7 | 27,031 |
| 29 | 3,310 | 2.42 | 48,897 |
| 30.01 | 3,375 | 0.89 | 29,235 |
| 30.02 | 3,587 | 6.62 | 41,377 |
| 32 | 4,261 | 15.31 | 40,318 |
| 37 | 4,884 | 48.42 | 32,401 |
| 26.01 | 2,508 | 7.78 | 66,750 |
| 26.02 | 3,661 | 9.93 | 48,090 |
| 31 | 4,671 | 4.75 | 52,258 |
| 33 | 5,246 | 119.58 | 47,411 |

Source: US Census, 2019 American Community Survey 5-Year Estimates

All areas within the City boundaries receive water, wastewater, and structural fire protection services from City and/or its partners. No public health or safety concerns have been reported.

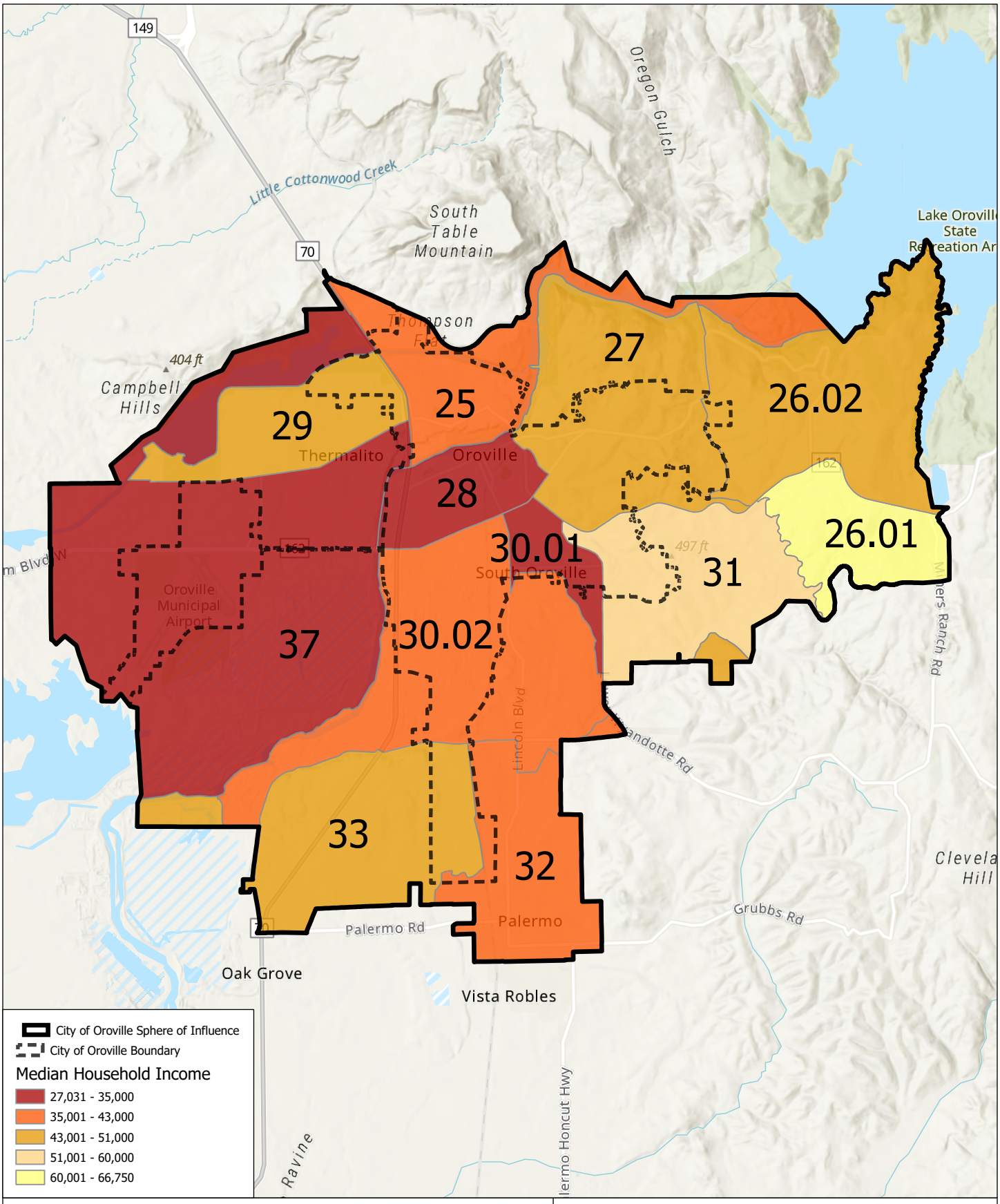



**Figure 3-10**
**COOR Census Tracts**

*Map Date: 00/02/2021*
*Data Source: Butte LAFCO; US Census Bureau*
*American Community Survey (ACS)*

In summary, there are several areas currently within the COOR's boundary that may be considered disadvantaged and several areas within the City's SOI that are considered disadvantaged unincorporated communities based upon the median household income being below 80 percent of the statewide average median household income. Due to the identified areas receiving essential municipal services of water, waste water, and structural fire protection service, there are not any communities within the existing COOR boundary and SOI that lack public services, and no health or safety issues have been identified.

### *Determinations for Disadvantaged Unincorporated Communities*

Based on the information included in Sections 3.5 above, the following written determinations make statements involving each service factor which the Commission must consider as part of a municipal service review. The determinations listed below in Table 3-15 are based upon the data presented, and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution which the Commission formally adopts during a public meeting.

**Table 3-15: MSR DETERMINATION: LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE**

| Number | Indicator | Determination |
|---|---|---|
| COOR-DUC-1 | The median household income is identified. The DUC threshold MHI (80 percent of the statewide MHI) is clearly stated. The MHI in the City's SOI is described. | There are no DUCs within the City's boundary. However, several areas within the City's SOI can be classified as a disadvantaged unincorporated community since the MHI is less than the $60,188.00 threshold for 2019. |
| COOR-DUC-2 | Potential DUCs are considered. The provision of adequate water, wastewater, and structural fire protection services to DUCs is considered. | All SOI areas receive essential municipal services of water, wastewater, and structural fire protection (or acceptable private alternatives). Therefore, no communities within the existing COOR boundary or in the City's SOI lack public services, and no health or safety issues have been identified. |

## 3.6: Wastewater Services

Notes on Drinking Water Services

The City of Oroville relies upon three water service providers for potable water. The Thermalito Water and Sewer District provides water to a portion of the City's boundary area and to portions of the City's SOI. South Feather Water and Power Agency provides water to a portion of the City's boundary area and to portions of the City's SOI. Cal Water Oroville is a private company

providing potable water to approximately 38.9 percent of the City's boundary and it does not provide water outside the City boundary. A small percentage of the City is unserved by potable water. The Feather River flows through the City of Oroville and the Feather River watershed is described in detail in Appendix I.

Unserved areas: There is a significant number of vacant lots and undeveloped acreage in the tail end of the Oroville Industrial Unit within the City's boundaries. Since this area is located outside of the CalWater Service Area and outside of the SFWPA boundary area, it does not receive potable water and does not have the infrastructure needed for conveyance of water. The City of Oroville should cause the preparation of a detailed GIS study of the three potable water providers in relation to the City's boundary and SOI. The unserved areas within the boundary and the SOI should be carefully delineated. A plan to provide water service to the City's SOI should be drafted (see potential options listed in Appendix C).

### *3.6.1 Wastewater Collection and Conveyance - Overview*

As described in Chapters 3, 4, 5, and 7 of this MSR, City residents receive wastewater services from a wastewater collection provider (either the City of Oroville, Thermalito Water and Sewer District or Lake Oroville Area Public Utility District). The City's wastewater collection system includes approximately 66 miles of sanitary sewer, approximately 1,350 sewer maintenance holes, and 7 sewage lift stations. The sewer system conveys wastewater to a treatment plant owned and operated by the Sewerage Commission - Oroville Region (SC-OR). SC-OR was created in 1973 under a joint powers agreement (JPA) between the City, Thermalito Water and Sewer District (TWSD), and the Lake Oroville Area Public Utility District (LOAPUD). The individual agencies maintain and operate their own wastewater collection systems that discharge into the SC-OR plant. This Chapter focuses only on the wastewater collection and conveyance provided by the City of Oroville (COOR) within its sewer service area. The City's wastewater infrastructure needs and deficiencies are evaluated in terms of supply, capacity, condition of facilities, and service quality in relation to operational, capital improvement, and finance plans.

#### *3.6.3.1: Collection System Services*

The City provides wastewater collection and conveyance services to approximately 3,703 residential and business sewer connections, as shown in Table 3-16 below (COOR, 2021d). One COOR connection may serve many individual customers. An average of 32.4 new connections per year has been added to the system over the past ten years. However, there is significant annual variability in the number of new connections added. There is an average of 3.3 persons per connection and this calculates to service provided to 12,200 people[2], which is 68 percent of the City's total population. The remaining portion of the City's residents receive wastewater collection and transmission services from the Lake Oroville Area Public Utility District (LOAPUD) or the Thermilito Water and Sewer District (TWSD).

[2] Based on 3.3 residents per water/sewer connection practical variable utilized by DWR.

| Table 3-16: Number of Customers for Key Municipal Services | |
|---|---|
| **Service** | **Number of Customers in 2021** |
| Sewer | 3,703 connections (COOR, 2021d) |

The City of Oroville (COOR) provides wastewater collection and conveyance services to the areas within COOR's existing boundary and to 19 parcels located outside the City boundary. Approximately 53 percent of the City's sewer service area is residential. The remaining 47 percent of the sewer area consists of commercial, industrial, and public uses. Most of the City's industrial area is located south of Oroville Dam Boulevard and west of the Union Pacific Railroad tracks (COOR, 2021d). There may be parcels within the City boundary and within the SOI that rely on individual septic systems. These septic systems are regulated by the Butte County Environmental Health Division. Generally, new septic systems require a minimum of a one-acre parcel and leach field replacement area. Additional data about septic systems was not readily available.

For property owners located outside the City's boundary but inside the SOI, the City has a standard process to request sewer service, whereby a written request must be made to the City Council by the property owner and subsequently approved by LAFCo through and Extension of Services Request. The requesting property owner would complete an "Outside Sewer Service Request Form" and submit the form to the Public Works Department, and they will take the necessary time to review the request and any other pertinent information prior to the acceptance of any fees. As part of this process, the requesting property owner is required to submit either: 1) An Annexation request (if property is contiguous to the City) - OR 2) an Irrevocable Agreement and Petition for Annexation, if the property is not contiguous to the City. A variety of fees are collected at the time of application, including: Application Fee, City Connection Fee (Per EDU), SC-OR Connection Fee, City Tap Fee, Sewer Lateral Fee, Encroachment Permit, and Sewer Impact Fees.

Water conservation programs such as low flow toilet rebates, leak detection pills, etc. can reduce water use and can also reduce the amount of wastewater generated. To further improve safety and service, the City has reinforced the California Plumbing Code requirements for Backflow Prevention Devices. Although Oroville does not have a backflow ordinance, the requirement for a backflow device is specified in 2019 SSMP, section 5.3.4-11. All new construction is reviewed by the City to determine if a backflow device is required.

Water Recycling: Since the COOR does not operate the wastewater treatment plant, it does not have direct access to treated wastewater that could be utilized as part of a water recycling program. However, COOR is a member of the SC-OR JPA and therefore could potentially participate in water recycling in the future. COOR contains numerous land-uses that could benefit from non-potable water including the golf courses and street tree landscaping.

Sewer EPA Categorical Users: Environmental Protection Agency (EPA) categorical users are significant industrial users regulated under a local pretreatment ordinance. Since the COOR does not operate the wastewater treatment plant, it does not have direct involvement with this regulation. SC-OR is the lead agency for industrial pretreatment (COOR, 2021d). Additional details about EPA Categorical Users is provided in Chapter 5.

Sewer Service Upon Annexation: The City generally does not require properties to connect to the sewer system just because they have been annexed, provided they receive sewerage service from an existing provider. For example, the City is considering annexation of the Thermalito area. The Thermalito Water and Sewer District already serves the area, and that will not change upon annexation. In another example, many homes operate with a home septic system. If a home currently has a septic system, it is not required to connect to the City's sewer system immediately upon annexation. However, if the septic system fails to operate under Health Department requirements, and there is a public sanitary sewer within 250 feet of the property line, the property owner will be required to hook up to sanitary sewer. Hook-up fees, construction assessments, and other costs are determined at the time of connection.

Treatment and Disposal: SC-OR is responsible for wastewater treatment and disposal as described in Chapter 5. COOR is a member of the SC-OR JPA.

#### *3.6.3.3: Plans*

The City of Oroville has two plans relevant to the current management of its wastewater conveyance and transmission service, as described below. Implementation of plan goals and policies are codified in the Municipal Code.

Sanitary Sewer Master Plan January 2013: This Master Plan included the development of a computerized hydraulic sewer model by Carollo Engineers. The calibrated model was used to analyze the capacity of the collection system based on four flow scenarios. Portions of this Plan were updated by the 2019 SSMP described below. However, several parts of this 2013 Master Plan remain relevant.

Sewer System Management Plan October 2019: The City's Sewer System Management Plan (SSMP) was updated in October 2019 and is the most recent comprehensive analysis of the City's wastewater collection system. The Sewer System Management Plan guides the proper management, operation, and maintenance of all parts of the COOR sanitary sewer system under its control. The SSMP aims to reduce and prevent sanitary sewer overflows (SSOs) and mitigate SSOs if they occur. The SSMP was updated to maintain compliance with State Water Resources Control Board Orders No. 2006-0003-DWQ and No. 2013-0058-EXEC. Please note that to some extent, the 2019 SSMP relies upon the computerized hydraulic sewer model by Carollo Engineers presented in the 2013 Master Plan. Therefore, it is useful to review both Plans. Although the SSMP, as updated in October 2019, is available at City Hall, upon request, it has not yet been properly posted to the City's website. It is recommended that the City update the Public Works webpage to allow readers easy access to the newer 2019 version. The City's SSMP was updated

on October 7, 2019, and adopted by the City Council on October 22, 2019. There is no further information or data beyond this date for the MSR (COOR, 2021d).

### *3.6.3.5: Permits*

The City's wastewater collection and conveyance system operate under permits from the State Water Resources Control Board (SWRCB), including Orders No. 2006-0003-DWQ and No. 2013-0058-EXEC. SWRCB Order No. 2006-0003-DWQ (Statewide General Waste Discharge Requirements for Sanitary Sewer Systems) was adopted by the SWRCB on May 2, 2006, and revised in 2008.

### *3.6.3.4: Water Quality Database Reports*

Overview

This section provides the results of database searches on water quality for City. Compliance of wastewater agencies with water quality regulations promulgated by the State Water Resources Control Board (State Water Board) and the Central Valley Regional Water Quality Control Board (Regional Water Board). These compliance documents are important to LAFCo. This type of information is especially important since a community cannot rely upon "dilution" as a solution to pollution during a drought. In addition, when local water supplies are scarce, keeping that supply at a high level of water quality is desirable.

California Integrated Water Quality System Project

The California Integrated Water Quality System (CIWQS) is a relational database used by the State and Regional Water Boards to track information about permit violations and enforcement activities. COOR has permits from the Central Valley Water Quality Control Board and is therefore classified as a "Permittee." Permittees are allowed to self-report their own permit violations to the CIWQS. A four-year term from January 1, 2015 to July 1, 2021, was queried in the CIWQS database. The database query results listed in Table 3-17 below show that there has been some activity within the City's boundary. The California Water Board implements the Federal Clean Water Act Section 401 Water Quality Certification (CER) program. Table 3-17 lists one CER, and it is related to some infill on a transportation project on May 17, 2018 and is not related to the sewer system. Two of the three NPDES items relate to the Butte County Mosquito & Vector Control District permits for their work along a shoreline. The third NPDES item relates to the permits for the Sewerage Commission-Oroville Region WWTP, including Order No. R5-2021-0044, WDID No. 5A040106001, and NPDES No. CA0079235 as adopted on August 13, 2021. The six SSO's relate to sanitary sewer overflows, described in more detail elsewhere in this document. The listed three storm water items happened to occur within the City's boundary but were not directly related to City activities since the permit owners are the Butte Community College District, Butte County Public Works, and Thermalito Union School District. The tank listed in Table 3-17 belongs to Sewerage Commission-Oroville Region and is related to the Water Board's Oder No. R5-2021-0044. The California Water Board has a Waste Discharge Requirements (WDR) Program such that waste discharges that can be exempted from the

California Code of Regulations requirements are issued waste discharge requirements and are regulated by the WDR Program. Typical discharge types include domestic or municipal wastewater, food processing related wastewater, and industrial wastewater. The five WDRs relate to Butte CSA (2), Butte Community College District, Golden Feather School District, and Thermalito Water & Sewer District. In summary, a query of the general CIQWS database did not reveal any red flags associated with the City's wastewater system.

**Table 3-17: CIWQS Database Query Results**

| City | CER | NPDES | SSO | Storm Water | Tanks | WDR | Total* |
|---|---|---|---|---|---|---|---|
| Oroville | 1 | 3 | 6 | 3 | 1 | 5 | 18 |

*Some facilities may be related to multiple programs. This field shows a unique count of facilities, so the total across a row may not sum.

- **CER - 401 Certification:** Clean Water Act Section 401 Certification; regulation of dredge and fill projects.
- **NPDES - National Pollutant Discharge Elimination System:** This is a federal program that regulates discharges of wastewater to waters of the United States.
- Data Source: *https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/CiwqsReportServlet?OWASP_CSRFTOKEN=DY2H-GVPT-A2ZW-E2BJ-75OP-4IWS-DP1F-93JX*

Sanitary Sewer Overflow Database

The State Water Board maintains a Sanitary Sewer Overflows (SSO) database from public/permitted systems and private lateral sewage discharges. This database is a specific module in the CIWQS. The State Water Board formalized the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems under Water Quality Order No. 2006-0003 (SSS WDRs), on May 2, 2006. All public agencies that own or operate a sanitary sewer system comprised of more than one mile of sewer pipes that convey wastewater to a publicly owned treatment facility must be covered under the SSS Waste Discharge Requirements. The SSS Waste Discharge Requirements requires enrollees, among other things, to maintain compliance with the Monitoring and Reporting Program. A 5.5-year term from January 1, 2015 to August 31, 2021, was queried in the CIWQS-SSO database. The results of the database queries regarding COOR are listed below in Table 3-18. During this 5.5-year timeframe, there were 19 Sanitary Sewer Overflow events in the City of Oroville.

In most cases, the Sanitary Sewer Overflows originated from sewer maintenance holes. The majority of the overflows were relatively small, and almost all of the spill material was recovered. However, some sewer overflows have leaked large amounts of sewage into surface water. For example, on December 14, 2015, 150,000 gallons of sewage spilled upstream of a creek due to roots from a tree entering a private lateral. None of the spill was recovered, and all 150,000 gallons of sewage reached surface water.

**Table 3-18: City of Oroville Sanitary Sewer Overflows**

| SSO Event ID | Region | Responsible Agency | Collection System | SSO Category | Start Date | SSO Address | SSO Volume | Volume of SSO Recovered | Volume of SSO that Reached Surface Water | SSO Failure Point | WDID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 873413 | 5R | Oroville City | Oroville CS | Category 3 | 2021-03-19 13:10:00 | 2150 3rd Street | 990 | 990 | 0 | Manhole | 5SSO10799 |
| 858337 | 5R | Oroville City | Oroville CS | Category 3 | 2018-09-09 09:00:00 | 2136 Pine Street | 200 | 0 | 0 | Gravity Mainline | 5SSO10799 |
| 844151 | 5R | Oroville City | Oroville CS | Category 2 | 2018-01-23 00:00:00 | City of Oroville | 9000 | 6000 | 0 | Gravity Mainline | 5SSO10799 |
| 858526 | 5R | Oroville City | Oroville CS | Category 3 | 2019-05-21 14:20:00 | 651 Safford Street | 6 | 6 | 0 | Gravity Mainline | 5SSO10799 |
| 812299 | 5R | Oroville City | Oroville CS | Category 3 | 2015-01-12 14:50:00 | Service Hole XX-2 | 100 | 50 | 0 | Gravity Mainline | 5SSO10799 |
| 859597 | 5R | Oroville City | Oroville CS | Category 3 | 2019-06-26 14:18:00 | 10 Highlands Boulevard | 230 | 230 | 0 | Gravity Mainline | 5SSO10799 |
| 820280 | 5R | Oroville City | Oroville CS | Category 1 | 2015-12-14 11:00:00 | Service Hole JJ28 | 150000 | 0 | 150000 | Upstream of spill point due to roots from a private lateral | 5SSO10799 |
| 814467 | 5R | Oroville City | Oroville CS | Category 3 | 2015-04-05 16:45:00 | Service Hole JJ-48 | 10 | 10 | 0 | Gravity Mainline | 5SSO10799 |
| 814469 | 5R | Oroville City | Oroville CS | Category 3 | 2015-03-30 09:30:00 | JJ78LH | 10 | 10 | 0 | Gravity Mainline | 5SSO10799 |
| 856863 | 5R | Oroville City | Oroville CS | Category 3 | 2016-09-27 17:56:00 | JJ39 | 5 | 0 | 0 | Manhole | 5SSO10799 |
| 856913 | 5R | Oroville City | Oroville CS | Category 3 | 2016-10-07 15:25:00 | DD8 | 4 | 4 | 0 | Service Hole | 5SSO10799 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 857068 | 5R | Oroville City | Oroville CS | Category 3 | 2016-12-11 13:45:00.0 | JJ66 | 50 | 0 | 0 | Lower Lateral (Public) | 5SSO10799 |
| 857070 | 5R | Oroville City | Oroville CS | Category 3 | 2017-01-25 06:30:00 | DD11D | 100 | 0 | 0 | Service Hole | 5SSO10799 |
| 857371 | 5R | Oroville City | Oroville CS | Category 3 | 2017-04-22 18:45:00 | T2LH | 25 | 22 | 0 | Upper Lateral (Public) | 5SSO10799 |
| 857373 | 5R | Oroville City | Oroville CS | Category 3 | 2017-12-21 17:37:00.0 | JJ48 | 20 | 10 | 0 | Manhole | 5SSO10799 |
| 858275 | 5R | Oroville City | Oroville CS | Category 1 | 2018-02-27 07:30:00 | 365 Table Mountain Boulevard | 700 | 1000 | 200 | Service Hole | 5SSO10799 |
| 858338 | 5R | Oroville City | Oroville CS | Category 3 | 2019-03-03 14:15:00 | 17 Highlands Boulevard | 7 | 7 | 0 | Gravity Mainline | 5SSO10799 |
| 865265 | 5R | Oroville City | Oroville CS | Category 3 | 2020-02-08 11:05:00 | 24 Valley View Drive | 200 | 150 | 0 | Lower Lateral (Public) | 5SSO10799 |
| 872085 | 5R | Oroville City | Oroville CS | Category 3 | 2020-01-12 15:20:00 | 3415 Oro Dam Boulevard | 510 | 0 | 0 | Gravity Mainline | 5SSO10799 |

Data Source: CIQWS Sanitary Sewer Overflow Database

#### *3.6.3.2: Wastewater Collection and Conveyance Service to the SOI*

The City does not provide wastewater service to the SOI, with the exception of 19 parcels described under the extra-territorial services section above. The provision of wastewater services to the SOI is provided primarily by TWSD and LOAPUD. Additionally, private septic systems are utilized by some property owners within the SOI under the regulation of the Butte County Environmental Health Division.

### *3.6.3.3 Storm Water*

Stormwater sometimes influences the collection and conveyance of wastewater because stormwater can infiltrate into pipes or other facilities. COOR does not have a Storm Water Resource Plan. Stormwater infiltration has traditionally not been considered a problem. There are no known areas of exfiltration. The City is not a municipal separate stormwater system (MS4) permitee under the Federal Clean Water Act, but still requires development to comply with Post Construction Standards. Within the City, stormwater is often stored and infiltrated on-site. Oroville's geology is conducive to this practice. The practice reduces infrastructure costs and increases aquafer recharging (COOR, 2021d). In the future, if drought becomes more prolonged, capturing water from floods and miscellaneous storms may become more critical in the community's water management strategy. Since TWSD relies partially on groundwater to serve a portion of Oroville, re-charging the groundwater table will continue to be a resource management concern.

## 3.7: Infrastructure and Public Facilities

### *3.7.1 Administrative Facilities*

The City's existing administrative and other facilities are located within City Hall on Montgomery Street in Oroville, CA. In addition, the City has a corporation yard at 1275 Mitchell Street in Oroville.

### *3.7.2 Collection System Infrastructure*

The City maintains approximately 69 miles of sanitary sewer gravity mains with approximately 1,350 sewer maintenance holes and over 2.1 miles of force mains. The City also maintains seven primary sewer lift stations, one secondary lift station, and two flow meters. The City currently operates and maintains seven wastewater pump stations; five of which were incorporated into the collection system hydraulic model. The pump stations owned and operated by the City are located on the fringes of the collection system and are therefore relatively small (COOR, 2021d). Average dry-weather wastewater flows conveyed through the City's collection system are 1.3 million gallons per day (MGD) (COOR RFI, 2021d).

Some of the City's sewer lines were built many decades ago, and therefore aging infrastructure is a management concern. While most of the City's sewer lines are located under a public roadway and within the right-of-way, it is possible that a few are located on private property or in easements. Private lateral lines located on private property connect a house to the City's main conveyance lines.

In the past, the City utilized four storage ponds on the east side of 5th Avenue across from the SC-OR WWTP. The ponds were previously pretreatment[3] lagoons for industrial users (COOR, 2021d). This site is commonly referred to as the Ehmann ponds and they were sold to Duke Sherwood Contracting. The City no longer has responsibility for this site. The Council's March 19, 2019 meeting minutes indicate this site required environmental clean-up. The site had been cleared and now ready to go into "regular use", per the City Council.

Infrastructure development and maintenance is an integral part of the service that the COOR provides. The COOR has a Capital Improvement Plan as part of its FY 18/19 Budget. Please refer to Section 3-8, Finances, below for additional detail.

Wastewater Treatment Plant

The Sewerage Commission-Oroville Region (SC-OR) provides wastewater treatment and disposal for the Oroville Region through its operation of the wastewater treatment plant located on South 5th Avenue, south of downtown Oroville. Average dry weather wastewater flows conveyed through the City's collection system to the wastewater treatment plant are 1.3 MGD (COOR RFI, 2021d). Due to the recent Camp Fire affecting the nearby Town of Paradise, Oroville's population has fluctuated, and future residential, commercial, and institutional development have been approved by Oroville as described in Section 3-4, above. Future expansion of the wastewater treatment plant is possible to keep up with demand. The wastewater treatment plant is expected to grow to approximately 6.45 MGD through build-out per the Sewer Master Plan Update in 2013 by Carollo (COOR SSMP, 2019).

SC-OR has several other improvement projects completed or underway as described in Chapter 5 of this MSR. Specifically, work is on-going to construct the new influent pump station for the wastewater treatment plant. The new pump station has a designed 15 million gallons-per-day (MGD) pumping capacity, and will include new valves, diversion boxes, flow meter, and Supervisory Control and Data Acquisition control center as detailed on SC-OR's website at: <*https://www.sc-or.org/influent-pump-station-project*>

[3] In general the Clean Water Act allows the US EPA to require industrial users to "pre-treat" water before it is sent to the local wastewater treatment plant. Pre-treatment is the responsibility of the industrial user.

### *3.7.3 Existing Capacity of City Infrastructure*

The City's existing average dry weather flow (ADWF) is estimated to be 1.3 million gallons per day (mgd) (COOR, 2021d). Peak wet weather flow (PWWF), defined as a peak instantaneous flow rate occurring during a 10-year reoccurrence interval storm event, was 4.99 mgd in 2019 (COOR, 2021d). City staff reports there have been no incidents in the past 5 years when peak flows exceeded the capacity of the City's sewer collection system (COOR, 2021d). Average Daily Flows are 185 thousand gallons, as listed in Table 3-19 (COOR, CAFR, 2021). The City of Oroville's wastewater collection system has sufficient capacity to service projected future needs through the year 2045 (COOR, 2021d). The capacity to serve proposed new urban and suburban development is carefully planned by the COOR's Public Works/Sewer Division. Decisions about whether or not to issue "will serve letters" for wastewater service to new/proposed development is part of that process. City staff indicates that "will-serve" letters are a minor issue because the City has adequate capacity within its system of sewer pipes. Will-serve letters are more important to SC-OR (COOR, 2021d). Will-serve letters should not be issued to parcels located outside of the COOR boundary as they cannot guarantee service via annexation governed by LAFCo.

The City can expand capacity of the collection system to address any future projected increase in demand for wastewater service. For example, a public works project currently in the planning and engineering phases, aims to install a new large sewer bypass line along Oro Dam Boulevard to convey future flows. The City's 2013 Sanitary Sewer Master Plan identified capacity increases that would be required the meet the growth envisioned by the 2030 General Plan. The City has adopted and collects connection fees to help fund the capacity increases (COOR, 2021d).

**Table 3-19: Connection and Flow Data Time Series**

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|
| New Connections[1] | 10 | 62 | 11 | 62 | 11 | 14 | 15 | 27 | 72 | 40 |
| Average Daily Flows (thousands of gallons) | 116 | 103 | 156 | 149 | 150 | 152 | 183 | 157 | 163 | 185 |

[1] New wastewater connections are provided by the City but administered by Sewerage Commission - Oroville Region.

Data Source: COOR, CAFR, 2021

The wastewater collection and conveyance system has 69 miles of sewer lines and a maximum daily conveyance capacity of 120,000 gallons, as shown in Table 3-20 below.

| Table 3-20: Max Daily Capacity | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Function** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| Sewer Lines (miles) | 66 | 66 | 66 | 66 | 66 | 66 | 69 | 69 | 69 | 69 |
| Storm Drain lines (miles) | 31 | 31 | 31 | 40 | 40 | 40 | 41 | 41 | 41 | 41 |
| Maximum Daily Capacity (thousands of gallons) | 166.21 | 105 | 106 | 106 | 106 | 106 | 106 | 120 | 106 | 120 |
| [1] Wastewater treatment services are provided through the Sewerage Commission - Oroville Region (SCOR). Wastewater and storm drain pipelines are installed by the City, but administered by SCOR. | | | | | | | | | | |
| Source: City of Oroville, CAFR, 2021 | | | | | | | | | | |

### *3.7.4-Equipment*

Vehicles are a major portion of the equipment utilized by City Public Works Staff as listed in Table 3-21, below. Currently, all the vehicles used are gasoline/diesel (i.e., fossil fuel) powered vehicles. The California Air Resources Board (CARB) approved a new rule on Aug 25, 2022 which requires new car sales in California to be zero-emission vehicles (ZEVs) by 2035. While it is not yet clear whether new electric vehicle laws will apply to the type of trucks utilized by the City, it is likely that sometime in the future, the City may be asked to consider purchasing or retrofitting vehicles reliant upon an alternative energy source such as electricity,biogas, hydrogen, or other source. The price per gallon of gasoline has risen in 2022; therefore, alternative fuel/energy for vehicles can sometimes be cheaper.

| Table 3-21: Major Sewer System Equipment Inventory | | |
|---|---|---|
| **Equipment Number** | **Major Equipment Type** | **Year Purchased** |
| 1 | Vactor Combination Truck | 2001 |
| 2 | Ford F-350 Service Truck | 2012 |
| 3 | Ingersoll Rand 63KVA Portable Electric Generator | 2000 |
| 4 | Ford F-250 Service Truck | 1992 |
| 5 | QUES Closed Circuit Televising Van | 2009 |
| 6 | Vac-Con Combination Truck | 2012 |
| Data Source: COOR SSMP, 2019 | | |

Workers who clean sewer pipelines are provided with the equipment necessary to complete the task, including: personal protective equipment (hardhat, steel toe boots, gloves, eye/face protection, and hearing protection); calibrated gas detector; proper safety cones, barricades, flagging, signs or other traffic control devices; confined space equipment (tripod, harness, and ventilation blower); sanitary sewer system map book; combo sewer cleaner; warthog sewer cleaning nozzle; six-wire skid ("proofer") in sizes that will be encountered during the day; root saw; debris traps in the sizes that will be encountered during the day; maintenance hole hook or pick-ax; measuring wheel; and disinfectant (COOR SSMP, 2019).

### *3.7.5 Maintenance*

The facilities and infrastructure on which COOR depends have varying ages. COOR has an active Operation and Maintenance Program as described in its SSMP, 2019, which includes:

- Proactive, preventive, and corrective maintenance of gravity sewers;
- Ongoing CCTV inspection program to determine the condition of the gravity sewers;
- Rehabilitation and replacement of collection system facilities that are in poor condition; and
- Periodic inspection and preventive maintenance for lift station and force main facilities (COOR, 2019).

In addition, the COOR has implemented collection system Best Management Practices (BMPs), and addresses preventative maintenance and scheduled replacement of aging infrastructure. The City proactively cleans all sewer pipelines 12 inches in diameter and smaller every two years, and it preventively cleans sewers with a history of problems every 1, 2, or 3 months. The City's standard operating procedure for sewer cleaning is included in the 2019 SSMP. Gravity sewer cleaning is scheduled using paperwork orders. The City attempted to transition to a computer-based maintenance management system to initiate work orders, record completed work, and compile a maintenance history for each sewer system asset, but the software has since been abandoned. The condition of the entire system (sized greater than 6 inches) is visually inspected every five years and cleaned as needed. In addition, the City uses CCTV to determine the cause of its gravity sewer blockages and SSOs (COOR, 2019). The lift station and force mains also receive regular maintenance.

There are several measures of integrity for a wastewater collection system, including peaking factors, efforts to address infiltration and inflow (I/I), and inspection practices. The COOR undertakes testing and other measures to ensure the integrity of the system. Some portions of the City's wastewater collection system that are over 100 years old and have not been rehabilitated may be subject to inflow and infiltration (I/I). To address this issue, the City has rehabilitated and relined sanitary sewer pipes and performed other repairs, such as internal patching and maintenance hole repairs. As a result, the number of sanitary sewer overflows has decreased significantly from 10 years prior; however, the I/I remains a problem during wet weather events (COOR, 2021d). In 2007, the City completed an "Inflow/Infiltration Study," and this report is now 14 years old. It is recommended that the City update this I/I study as soon as possible.

### *3.7.6: Recently Completed Projects*

All wastewater collection and conveyance systems require continual maintenance, including capital improvement projects and other upgrades needed to improve aging infrastructure. In the years 2016 to 2017, the City completed several projects as listed below:

- Project 1A constructed approximately 10,074 feet of new sewer main in Oro Dam Boulevard from south of Stanford Avenue (MH JJ1) to 5th Avenue (MH 12). A Caltrans encroachment permit was needed for the portion of construction within Highway 162. The facilities included in Project 1A consisted of removing 34 feet of 8-inch gravity pipe, construction of 3,074 feet of 15-inch gravity pipeline, 4,053 feet of 18-inch gravity pipeline, and 2,947 feet of 21-inch gravity pipeline.
- Project 1B replaced 1,315 feet of 6 inch to 10-inch sewers within an off-road easement (MH JJ24), Stanford Avenue, and Oroville Dam Boulevard (to MH JJ1). The facilities included in Project 1B consisted of 831 feet of 12-inch gravity pipeline and 483 feet of 15-inch gravity pipe.
- Project 1C replaced 192 feet of 6-inch sewer fronting and through Grace Baptist Church property along Oroville Dam Boulevard. The facilities included in Project 1C consisted of 192 feet of 10-inch gravity pipe.
- Project 1D consisted of replacing parallel 10-inch sewers with a single 18-inch sewer along Montgomery Street. The facilities included in Project 1D consisted of the abandonment of 365 feet of 10-inch gravity pipeline, the abandonment of 176 feet of 15-inch gravity pipeline, and the installation of 1,076 feet of gravity pipeline.
- Project 1E consisted of replacing 238 feet of 6-inch sewers with a 10-inch pipeline along Table Mountain Boulevard. The facilities included in Project 1E consisted of 238 feet of inch gravity pipeline.
- Project 1F replaced 2,632 feet of 8 inch to 10-inch sewers with a 15-inch pipeline along Table Mountain Boulevard (MH TT9 to MH TT1). This project also included replacing 285 feet of the 8-inch sewer with a 12-inch sewer (MH SS1 to MH NN15).
- Project 2I replaced approximately 1,038 feet of 6-inch sewer main along Montgomery Street with a 10” sewer main (MH A3LHN to MH 21).

During the years 2019 to 2020, the City Public Works Department completed the following sewer infrastructure projects:

- Oroville Sewer Project 1D consisted of replacing two 10-inch sanitary sewers with one 18-inch pipe. This project included constructing approximately 1,075 feet of 18-inch sanitary sewer pipe and the abandonment of 1,075 feet of sanitary sewer pipe. The project included removing and replacing four sanitary sewer maintenance holes and abandoning two sanitary sewer maintenance holes. In addition, 22 laterals must be reconnected to the new sanitary sewer pipe. The project area is along Montgomery Street from Oliver Street to Myers Street. Project 1D connects to the existing sewer at each intersection. The project construction period was from May 2020 to July 2020.
- Oroville Sewer Project 1F consisted of replacing 6- to 10-inch sanitary sewers with the 15-inch sanitary sewer. This project includes the construction of approximately 72 feet of 8-inch and 2,025 feet of 15-inch sanitary sewer pipe, abandonment of 1,340 feet of sanitary

sewer pipe, installation of 3 sanitary sewer maintenance holes, and abandonment of 5 sanitary sewer maintenance holes. The project also required 105 feet of storm drain and storm drain maintenance hole relocation. The sanitary sewer replaced an existing sewer line with pipe sizes ranging from 8 to 10 inches and connected to the existing system north of Table Mountain Boulevard and Nelson Ave and south of Riverview Terrace and Table Mountain Boulevard. The project construction period was from March 2020 to May 2020.

### *3.7.7 Future Wastewater Capacity/Demand*

Future demand for sewer services is influenced by population and land-use as well as any new development occurring within the City as well as future areas of annexation. To address future demand for wastewater services, the City updated the Sewer System Management Plan in 2019 and aims soon to update the Sewer Master Plan (2013). With regard to treatment capacity, the Sewerage Commission - Oroville Region has completed a recent master plan addressing anticipated needs through 2040 (COOR, 2021d). SC-OR's Master Plan may provide an estimated demand for wastewater service outside the City of Oroville's current boundary (i.e., within the SOI). Capacity is available r to address planned or proposed development. Specifically, SC-OR currently has capacity for over 2,300 new homes (2,300 EDUs) (COOR, 2021d).

New development occurring within the City's existing boundaries could result in an increase in demand for sewer services and the need for additional infrastructure. Although the COOR's collection and conveyance infrastructure is generally sized to accommodate anticipated growth for the next several years, incremental planning is required on a project-by-project basis to ensure adequate capacity. Good planning requires close coordination between the City's Public Works Department and Planning Division regarding future growth. For example, when a new residential neighborhood is constructed, the private developer typically builds the sewer pipeline collection system, sized only to serve the specific new neighborhood. Management and maintenance of these pipelines are typically specified in the project conditions of approval and could include: 1) maintenance by private HOA or 2) transfer of ownership/maintenance to the COOR.

One factor that influences the City of Oroville's ability to collect wastewater and provide public service to customers is the existing spatial distribution of its infrastructure. For example, the terrain in some regions of the City prevents feasible access to install sewer infrastructure without also installing new and costly sewage pump stations (COOR, 2021d). Another factor is the age of its existing infrastructure.

### *3.7.8: Wastewater Facilities (SOI)*

Parcels within the SOI are currently unincorporated and are located within the jurisdiction of Butte County. These parcels may receive wastewater collection and conveyance from the following:

- Thermalito Water and Sewer District;
- Lake Oroville Area PUD, or
- Private septic systems.

New development occurring within the SOI is typically evaluated by Butte County and by the City to consider potential impacts on the provision of sewer services. Generally, new development in the SOI is responsible for constructing all sanitary sewer lines serving each development. Such connections may also require a LAFCo approved annexation to access facilities.

### *3.7.9-Capital Improvement Plan*

The City's 2019 Sewer System Management Plan contains a detailed capital improvement plan (CIP) and schedule, as shown in Table 3-22 below. Since 2010, the City has spent approximately $2 million on capital equipment and system rehabilitation (slip lining, pipe patching, etc.). The City continues to undertake rehabilitation projects, such as repairing, relining, and replacing existing pipes that are structurally deficient and/or subject to re-occurring tree root infestation and or subject to excessive infiltration and inflow and repair or replacement of deficient maintenance holes. The City is planning to spend about $3.1 million between 2020 and 2029 on wastewater projects listed in the CIP COOR, SSMP, 2019.

**Table 3-22: Capital Improvement Program**

| Project No. | Project Title | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 | FY 23/24 | FY 24/25 | FY 25/26 |
|---|---|---|---|---|---|---|---|---|
| 1 | Oroville Dam Boulevard Relief Sewer | | √ | √ | | | | |
| 2 | Stanford Avenue Sewer | √ | √ | | | | | |
| 3 | Grace Baptist Church | √ | | | | | | |
| 4 | Montgomery Street Sewer | √ | | | | | | |
| 5 | Table Mountain Boulevard Sewer | √ | | | | | | |
| 6 | Grand Avenue Sewer | | | | | √ | | |
| 7 | Downtown Sewer | | | √ | | | | |
| 8 | 5th Avenue Sewer | | | √ | | | | |
| 9 | Feather River Boulevard Sewer | | | | √ | | | |
| 10 | Oroville Industrial Park Sewer | | | | √ | | | |
| 11 | Olive Highway Expansion | | | | | √ | | |
| 12 | Oroville Quincy Highway Expansion | | | | | | √ | |
| 13 | Dry Creek Pump Station and Pipeline Expansion | | √ | | | | | |
| 14 | Zepher Way Expansion | | | | | | √ | |
| 15 | Orange Avenue Sewer | | | | √ | | | |
| 16 | Larkin Rd Bypass Sewer | | | | | | | √ |
| 17 | West Oroville Dam Boulevard Expansion | | | | | | | √ |
| 18 | TWSD East Interceptor | | | | | | | √ |
| 19 | Ruddy Creek Pump Station Upgrade 1 | | | | | √ | | |

Additional CIP projects will be added as televising, condition assessment, and flow monitoring (I&I investigation) of the collection system progresses.
Data Source: COOR, SSMP, 2019

In addition to the projects listed above, an update to the existing CIP is currently in progress (COOR, 2021d).

### *3.7.10. Infrastructure Needs and Deficiencies*

Infrastructure needs or deficiencies (i.e., I&I, pipelines, tanks, reservoirs, electrical power, etc.) are described by COOR staff as related to the lift stations which need to be rehabilitated (COOR, 2021d). Updating aging infrastructure is a continual management concern. Although not directly related to the City's area of responsibility, a potential future challenge to the provision of services and infrastructure may include the capacity of the SC-OR Wastewater Treatment Plant reached on a first-come, first-serve basis.

Flooding is a local hazard identified in the Local Hazards Mitigation Plan (LHMP). If flooding risk increases in the future due to changes in precipitation, then it may become necessary for the City to upgrade its wastewater and storm drain systems. Ideally, the collection and conveyance wastewater system and the storm drain system could accommodate projected changes in precipitation and flooding. For example, enhance wastewater system capacity to prepare for increased flows and strengthen facilities against extreme events. For example, over the next five years, the City aims to upgrade the Orangewood and Olive Glen pump stations (personal communication, D. Nevers, 5/5/2022).

Complaints:
The City of Oroville does have a system to address complaints about both the wastewater and the storm drain system. If a maintenance hole or storm drain inlet is clogged and not accepting runoff or if a flood is detected, residents are advised to contact Public Works at (530) 538-2420 during regular business hours. After normal business hours, urgent complaints can be directed to the City Police Department at (530) 538-2448.

**Table 3-23: MSR DETERMINATION: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES**

| Number | Indicator | Determination |
|---|---|---|
| COOR-PUB-1 | Has the Agency has been diligent in developing plans to accommodate the infrastructure and service needs of current and future constituents? Regularly reviews and updates its service plans to help ensure that infrastructure needs and deficiencies are addressed in a timely manner. | The City of Oroville has two plans that are relevant to the current management of its wastewater conveyance and transmission service:<br>• Sanitary Sewer Master Plan January 2013<br>• Sewer System Management Plan October 2019 |

| | | |
|---|---|---|
| | | (continued)<br><br>Implementation of plan goals and policies are codified in the Municipal Code. The City has been diligent in updating its plans to accommodate the infrastructure and service needs of current and future constituents and to help ensure that infrastructure needs and deficiencies are addressed in a timely manner. Although the Sewer System Management Plan, as updated in October 2019, is available at City Hall, upon request, it has not yet been properly posted to the City's website. It is recommended that the City update the Public Works webpage to allow readers easy access to the newer 2019 version. In 2007, the City completed an "Inflow/Infiltration Study," and this report is now 14 years old. It is recommended that the City update this I/I study as soon as possible and it should incorporate data from the January to March 2023 winter storms. |
| COOR-PUB-2 | The City meets infrastructure needs for existing and future demands on the wastewater system. | The City's infrastructure relates to wastewater collection and conveyance only. The City's wastewater collection system includes approximately 69 miles of sanitary sewer pipes, approximately 1,350 sewer maintenance holes, and 7 sewage lift stations. The sewer system conveys wastewater to a treatment plant owned and operated by the Sewerage Commission - Oroville Region. The City's sewer pipes are configured such that expansion into new geographic areas is possible if needed. However, new pumps or lift stations may be needed depending on the elevation of any future expansion area. |
| COOR-PUB-3 | Is there duplicate infrastructure by other agencies nearby? | Several nearby agencies offer wastewater services similar to that of the City of Oroville However, the City's sewer service area where the City is the only provider is smaller than the City boundary. TWSD and LOAPUD also provide wastewater collection services within the City boundary. However, the service areas do not seem to overlap. |

| | | |
|---|---|---|
| COOR-PUB-4 | The Agency has preventative maintenance measures and has planned for the replacement of aging infrastructure. | The City's 2019 SSMP contains a detailed capital improvement plan and schedule. Since 2010, the City has spent approximately $2 million on capital equipment and system rehabilitation (slip lining, pipe patching, etc.). The City continues to undertake rehabilitation projects, such as repairing, relining, and replacing existing pipes that are structurally deficient and/or subject to re-occurring tree root infestation and or subject to excessive infiltration and inflow and repair or replacement of deficient maintenance holes. The City is planning to spend about $3.1 million between 2020 and 2029 on wastewater projects listed in the CIP COOR, SSMP, 2019. However, due to the City's past financial challenges, its plans have not been consistently implemented, resulting in a deficit in maintenance. |
| COOR-PUB-5 | Evaluation of agency's capacity to assist with and/or assume services provided by other agencies. | In the recent past, the City has experienced financial challenges which have prevented the City from retaining staff engineers and other professionals necessary for the City to serve a leadership role by assisting with and/or assuming services provided by other agencies. Retention of staff engineers and associated institutional knowledge of the wastewater system is an area that needs improvement. However, the City has close collaborative relationships with the nearby independent wastewater providers such as TWSD, SC-OR, and LOAPUD. |

# 3.8: Financial Ability To Provide Services

### *3.8.1 Introduction to Financial Metrics*

LAFCO is required by the CKH Act to make a determination regarding the financial ability of the City of Oroville to provide public services. This Chapter provides an overview of financial health and provides a context for LAFCO's financial determinations. The audited Comprehensive Annual Financial Reports (CAFR) from the City for the fiscal years 2018, 2019, and 2020 are this Chapter's primary source of information. Based on recent recommendations from the Little Hoover Commission, this determination on the financial ability to provide services is based upon several key financial performance indicators that LAFCOs throughout the State consider in MSRs.

Two state databases provide City-wide financial summaries, including:

- California Auditor's website at: <*https://www.auditor.ca.gov/local_high_risk/lhr-main-landing*>.
- State Controller's Office at: <*https://cities.bythenumbers.sco.ca.gov*> runs the Government Financial Reports database that includes detailed financial data from 58 California counties and more than 450 cities, as well as pension-related information for state and local government.

Although this MSR provides some city-wide financial data to set the context, the main focus of this analysis is the Sewer Enterprise Fund. Enterprise Funds are used to separately account for self-supporting operations. The City's budget and Certified Annual Financial Reports are the primary information source for data related to the Sewer Enterprise Fund, and these reports are posted on the City's website at: <*https://www.cityoforoville.org/services/finance-department*> (COOR, 2021f). City-wide finances are analyzed in more detail within Oroville's city-wide MSR 2022. COOR tracks the finances of the wastewater enterprise fund separately. Financial analysis for the COOR's enterprise system associated with the wastewater collection and conveyance system is analyzed in this section.

### *3.8.2: Financial Policies & Transparency*

The City of Oroville prepares and approves an annual budget with a fiscal year that begins on July 1st and ends on June 30th. It is COOR's practice to present a draft budget to the City Council for final approval prior to the beginning of the next fiscal year. The City maintains budgetary controls, and these controls ensure that the budget serves as the foundation for financial planning and control for the City. Expenditures authorized in the final budget ordinance are appropriated at the Fund level, and in the case of the General Fund, at the department or program level. All amendments to the budget at these levels can only be approved by the City Council. The City Manager has the authority to transfer funds within a given fund and between department appropriations to ensure that programmatic budgets may adapt throughout the year to evolving circumstances. Budgets for the past five fiscal years and the audited Comprehensive Annual Financial Reports (CAFR) for the past five fiscal years are available to the public via the City's website[4].

Every year the City of Oroville publishes an audited Comprehensive Annual Financial Report. The California Government Code requires an annual independent audit of the City's financial records by a certified public accountant who serves as independent auditors. The most recent audit that has been published is the independent audit for Fiscal Year (FY) 2019/2020, which ended June 30th, 2020, and was approved by the City Council ten months later, on April 4, 2021. As of this writing, the CAFR for the FY20/21 was not yet posted to the City's website. There are

[4] Oroville's budgets are available on-line at: *https://www.cityoforoville.org/services/finance-department/city-budget* . Oroville's audited Comprehensive Annual Financial Reports are available on-line at: *https://www.cityoforoville.org/services/finance-department/comprehensive-annual-financial-report-cafr*

four types of audit opinions: unqualified, qualified, adverse, and disclaimer. An unqualified opinion is a clean opinion meaning the entity passed its audit. A qualified opinion means the entity passed the audit with notable exceptions. A disclaimer or adverse opinion essentially means the entity flunked its audit. The CAFR for FY19/20 was performed by Chavan & Associates, LLP, an accounting firm. The auditors expressed their opinion that the City's financial statements the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, business-type activities, each major fund, and the aggregate remaining fund information of the City of Oroville, as of June 30, 2020, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America. The City uses the accrual basis of accounting under which revenues are recognized when earned, and expenses are recorded when liabilities are incurred (COOR, CAFR, 2021f).

A City's financial policies function as business rules that ensure an agency's transactions are recorded consistently and correctly. The City's Municipal Code is the primary governance revenue and finance as outlined in the Code's Chapter 3, which covers the following topics:

- Chapter 3.04 Taxation In General
- Chapter 3.08 Assessments
- Chapter 3.12 Levy And Collections
- Chapter 3.16 Uniform Local Sales And Use Taxes
- Chapter 3.18 Transactions And Use Tax
- Chapter 3.20 Uniform Transient Occupancy Tax
- Chapter 3.24 Real Property Transfer Tax
- Chapter 3.28 Telephone, Gas, Water, Electricity, And Television Cable Users Tax
- Chapter 3.32 Development Impact Fees
- Chapter 3.36 Health Facilities Financing Law
- Chapter 3.40 Cannabis Business Tax

COOR's Accounting Policies are described in its CAFR, and a few policies are summarized below:

- The Financial Reporting Entity is the City of Oroville.
- The City has elected to serve as the successor agency of the Oroville Redevelopment Agency, which formerly was a blended component unit of the City.
- The accounts of the City are organized on the basis of funds, each of which is considered a separate accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, liabilities, fund equity, revenues, and expenditures or expenses, as appropriate.
- The City's Annual Financial Report is presented on an "economic resources" measurement focus and the accrual basis of accounting. Accordingly, all of the City's assets, deferred outflows of resources, liabilities, deferred inflows of resources (including capital assets, infrastructure assets, and long-term liabilities) are included in the accompanying Statement of Net Position.
- The Sewer Fund is an enterprise fund used to account for the activities related to the City's sewage collection system and the collection and remission of fees on behalf of SC-OR for

sewage treatment. The revenues of this fund principally consist of fees charged to customers connected to the sewer system.

- (Source: COOR, CAFR, 2021f)

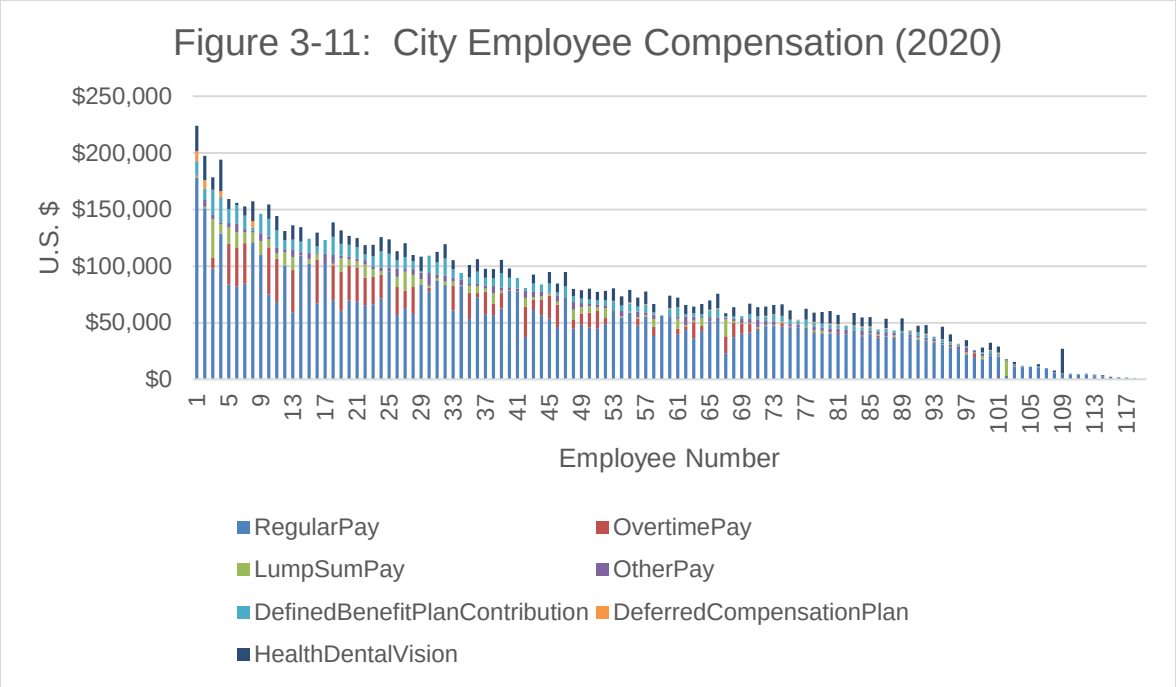
Additionally, COOR also has a "General Fund Reserve Policy" which states that in order "to maintain the City's ability to meet unforeseen events such as cash flow shortfalls, economic downturns, local disasters, emergencies or any unforeseen events, the City has established a General Fund Reserve. The City will maintain a minimum level of Unassigned Fund Balance in the General Fund equivalent of 15% to 100% of the adopted budget operating appropriations. All uses of the reserve require City Council approval". This Reserve Policy was revised on 02/16/16 and became effective on 10/19/21. Readers are invited to view the list of COOR's accounting policies in the comprehensive annual financial report. In addition, Oroville's financial policies contained in the Municipal Code and CAFR are available to the public via its website.

Data Transparency

Financial data transparency promotes accountability and provides information to citizens about what their local government is doing. Transparency allows residents to stay informed and learn about local government revenue, spending and debt. The City Director of Finance makes regular reports to the Board of Directors regarding Fund Balance, and this information is available to the public via the meeting agenda packet.

Oroville's 2019 CAFR was awarded the prestigious Certificate of Achievement for Excellence in Financial Reporting by the Government Finance Officers Association, representing public finance officials throughout the United States and Canada. This award represents the City's 23rd consecutive award, and it is the highest form of recognition for excellence in state and local government reporting. To be awarded a Certificate of Achievement, the government had to publish an easily readable and efficiently organized Comprehensive Annual Financial Report that satisfied both accounting principles generally accepted in the United States of America and applicable legal requirements (COOR, CAFR, 2021f).

Transparency with salary data is also an important attribute for cities in California. For example, the City of Oroville provides competitive compensation and a benefits package to full-time, regular employees, as shown in Figure 3-11 below. In addition, the City of Oroville forwards a report to the California State Controller for Government Compensation in California per Government Code Section 53891. Oroville had city-wide staffing of 120 employees in the year 2020, as shown in Figure 3-11 below. This chart also shows compensation by category for each employee.




Data Source: CA Auditor, Gov. Compensation Website, 2021

### *3.8.3: City-Wide Financial Summary*

The California Auditor has developed a Fiscal Health On-line Dashboard for all cities within the State. The California Auditor's analysis has concluded that the City of Oroville's Overall Risk of Financial Distress was LOW in FY 2019/2020 and 2018/2019. For FY 2017/2018 and 2016/2017 the overall risk was "moderate". The Auditor's risk assessment was based on many fiscal variables, which are summarized in Figure 3-12 below and the following paragraphs.

Figure 3-12: CA Auditor's Fiscal Health Dashboard – City of Oroville

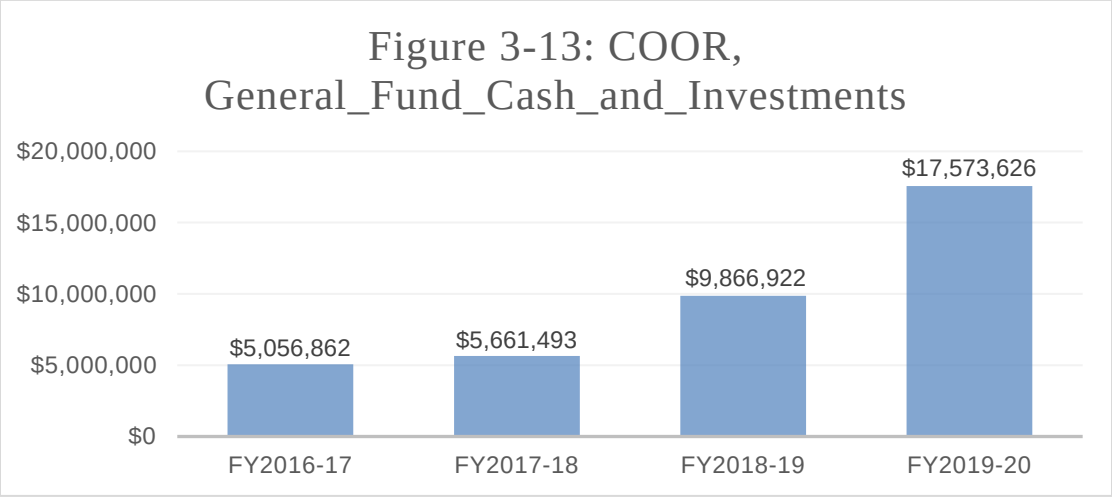

*Data Source for Figure 3-12: CA Auditor, 2021*

General Fund Reserves

This City has enough funds set aside in reserves to cover its expenses for about 12 months in the event of a fiscal emergency, such as an economic recession, and its reserves have been growing, on average, by 68 percent annually (CA Auditor, 2021).

Cash and Investments (Liquidity)

This City has enough cash and investments to cover 656 percent of its unpaid bills at year-end. Similar to a checking account balance, this indicator measures the cash and investments a City has in its general fund at the end of the fiscal year to pay its bills. To be low risk, a City should have enough cash and investments to pay 150 percent of its bills in the near future (CA Auditor, 2021).

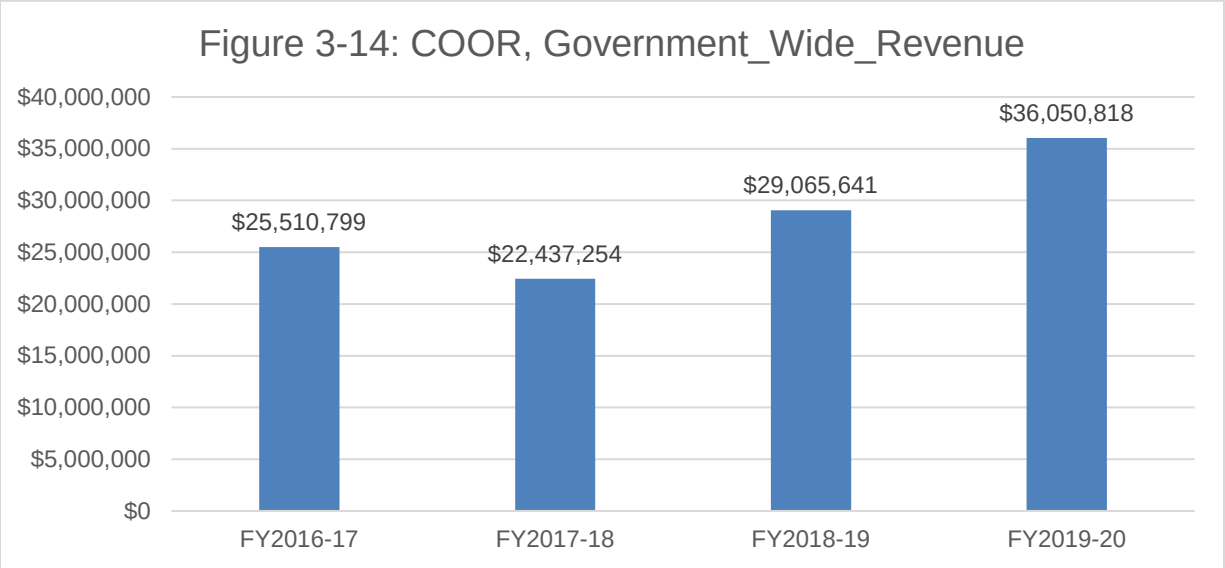



*Data Source for Figure 3-13, above: CA Auditor, 2021*

### *3.8.4: Revenues, Expenditures, and Net Position*

#### Revenues

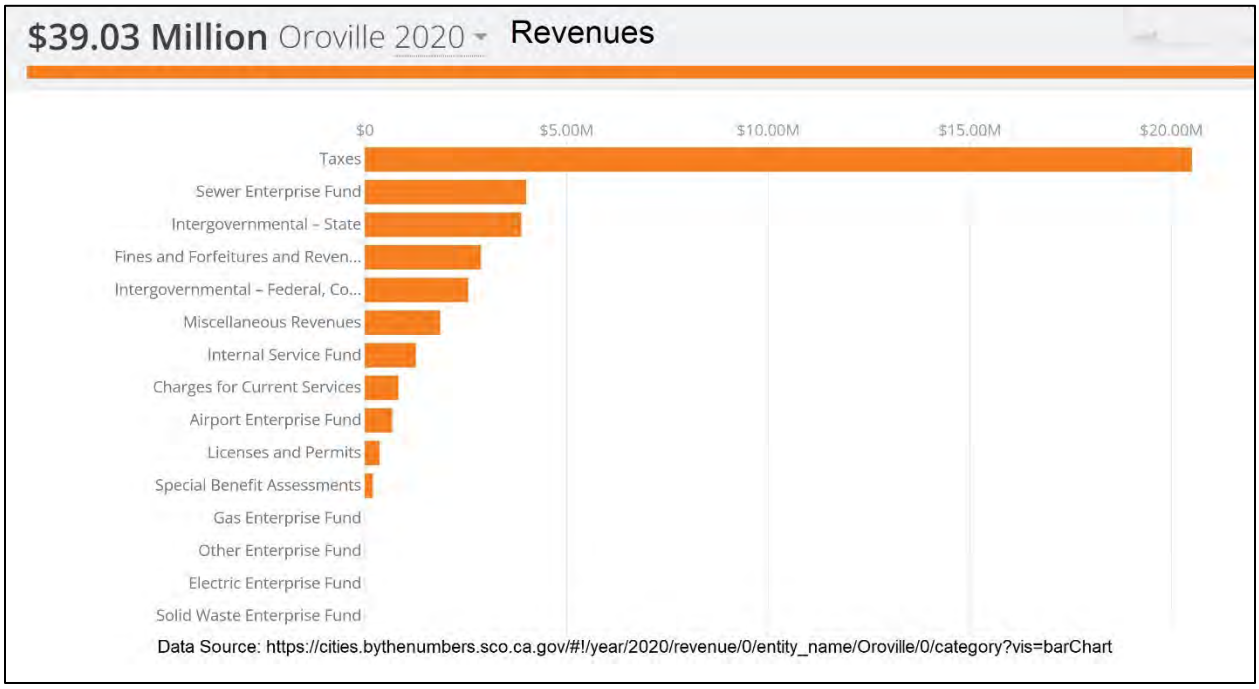
Oroville's City-wide revenues have increased, on average, 33 percent annually over the last few years. Substantial growth in general fund revenues gives the City greater flexibility to respond to economic changes and pay rising costs of services (CA Auditor, 2021).




*Data Source for Figure 3-14, above: CA Auditor, 2021*

COOR has multiple sources of revenue, including property tax, sales tax, fees for services, and permit fees. The California State Controller's Office (SCO) has a webpage entitled "Cities Financial Data," which contains revenues and expenditures as reported by 482 California cities in an open data format. The data that the City of Oroville reported to SCO was queried, and the results indicate that in FY2020, Total Revenues were $39,034,595, as shown in Figure 3-15 and Table 3-24, below.

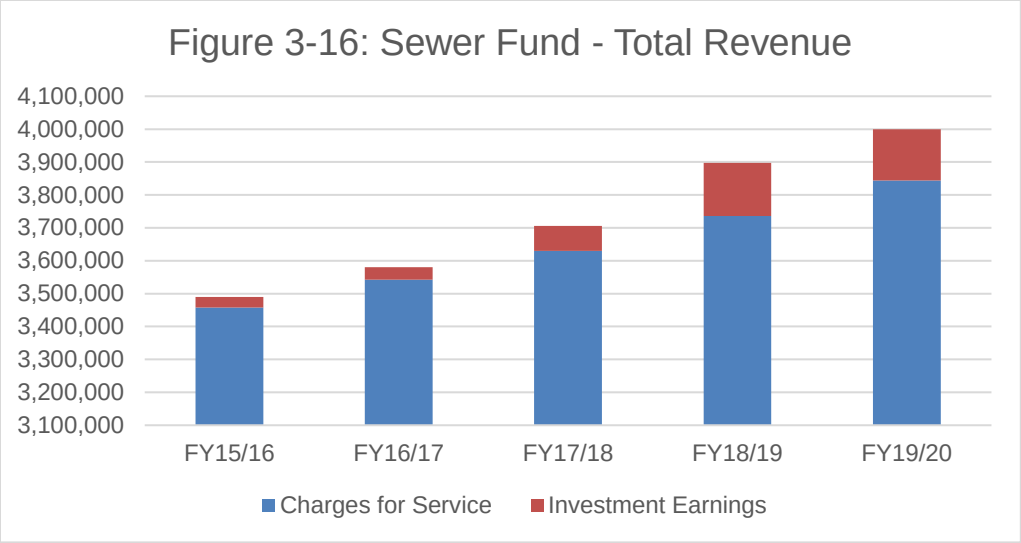
Figure 3-15: City-wide Revenues, FY19/20




| Table 3-24: City-wide Revenues FY2020 | | |
|---|---|---|
| **Revenue Category** | **Amount** | **Percent** |
| Taxes | $20,508,520 | 52.54% |
| Sewer Enterprise Fund | $3,999,306 | 10.25% |
| Intergovernmental – State | $3,880,403 | 9.94% |
| Fines and Forfeitures and Revenue from Use of Money and Property | $2,880,242 | 7.38% |
| Intergovernmental – Federal, County, and Other Taxes In-Lieu | $2,562,045 | 6.56% |
| Miscellaneous Revenues | $1,869,231 | 4.79% |
| Internal Service Fund | $1,264,416 | 3.24% |
| Charges for Current Services | $831,966 | 2.13% |
| Airport Enterprise Fund | $678,141 | 1.74% |
| Licenses and Permits | $363,015 | 0.93% |
| Special Benefit Assessments | $197,310 | 0.51% |
| **Total** | **$39,034,595** | |
| *Data Source: https://cities.bythenumbers.sco.ca.gov/#!/year/2020/revenue/0/entity_name/Oroville/0/category?vis=barChart* | | |

**Revenues – Sewer Fund**

The Sewer Fund is an enterprise fund used to account for the activities related to the City's sewage collection system and the collection and remission of fees on behalf of SC-OR for sewage treatment. The revenues of this fund principally consist of fees charged to customers connected to the sewer system. Investment earnings also contribute a small amount of non-operating revenue to the Sewer Fund, as shown in Figure 3-16 below.

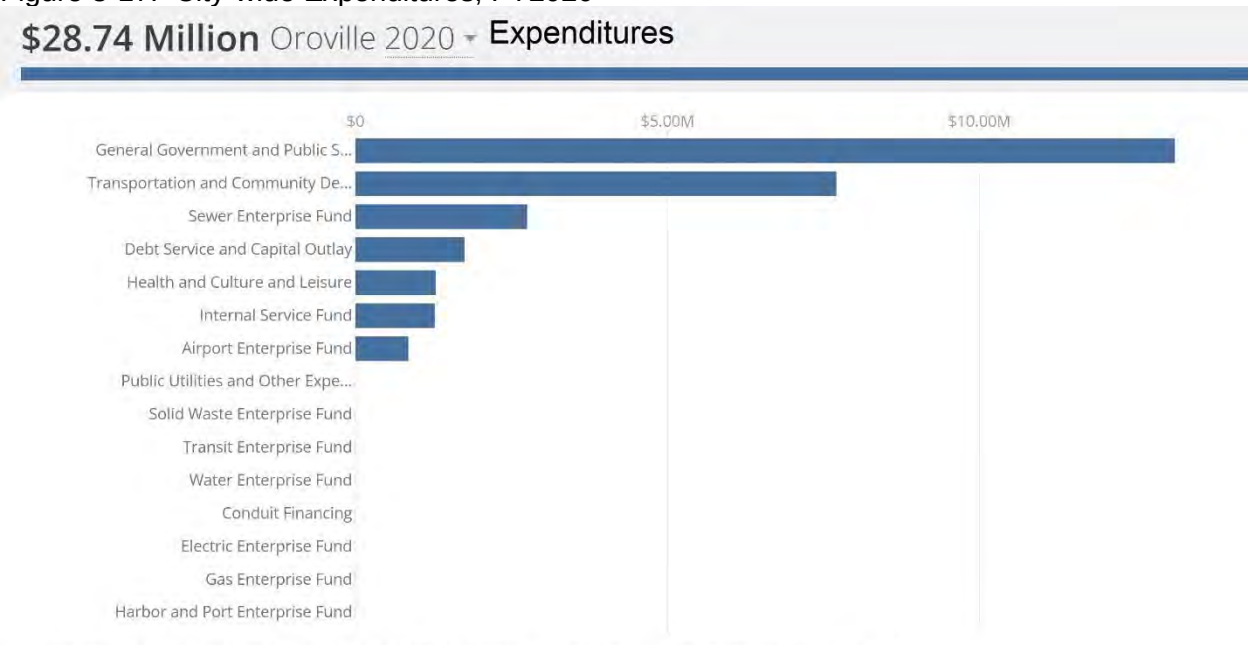



*Source for Figure 3-16: COOR CAFR for FY15/16, FY16/17, FY17/18, FY19/20*

## Expenses

City-wide expenditures in FY2020 were $28.74 million in several categories, including General Government and Public Safety, Transportation and Community Development, Debt Service and Capital Outlay, Health and Culture and Leisure, and Internal Service Fund as shown in Figure 3-17 and Table 3-25 (SCO, 2021). In addition, the City has two enterprise funds, the Sewer Enterprise Fund and the Airport Enterprise Fund.

Figure 3-17: City-wide Expenditures, FY2020

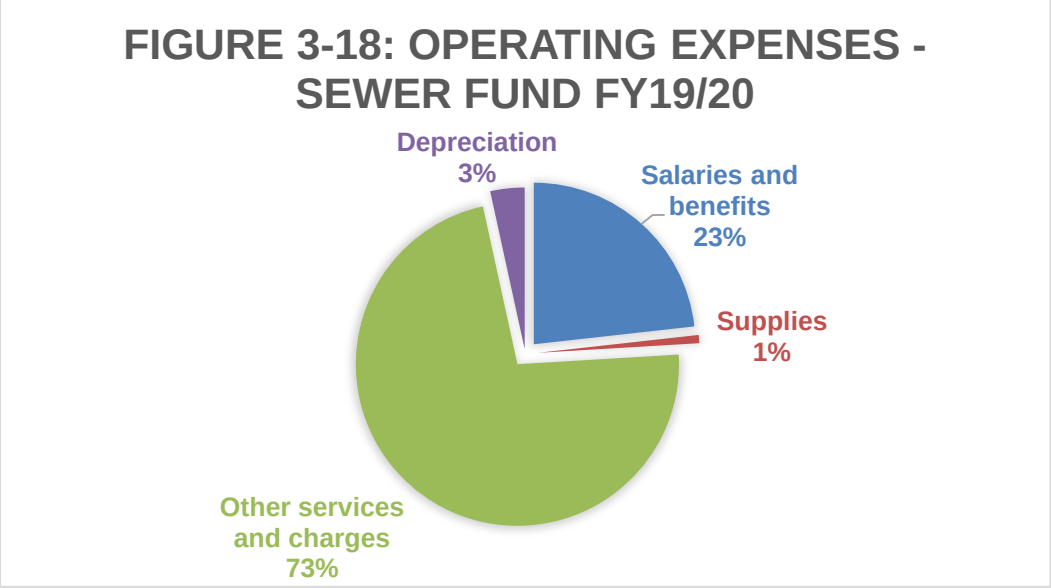



*Data Source: https://cities.bythenumbers.sco.ca.gov/#!/year/2020/operating/0/entity_name/Oroville/0/category?vis=barChart*

| Table 3-25: City-wide Expenditures FY2020 | | |
|---|---|---|
| **Expenditure Type** | **Amount** | **Percent** |
| General Government and Public Safety | $13,135,829 | 45.71% |
| Transportation and Community Development | $7,706,975 | 26.82% |
| Sewer Enterprise Fund | $2,750,158 | 9.57% |
| Debt Service and Capital Outlay | $1,746,414 | 6.08% |
| Health and Culture and Leisure | $1,284,618 | 4.47% |
| Internal Service Fund | $1,269,943 | 4.42% |
| Airport Enterprise Fund | $845,742 | 2.94% |
| Total for FY2020 | $28,739,679 | |
| *Data Source: SCO, 2021* | | |

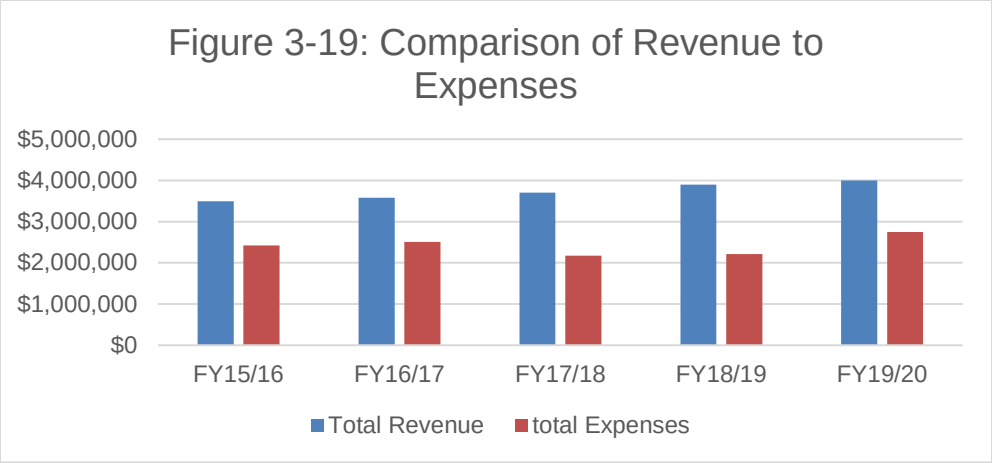
### Sewer Fund Expenses

In FY19/20, the Sewer Fund had four types of expenses. The largest expense category was "Other Services and Charges" at $1,994,496. This is followed by the expense for salaries and benefits at $639,039, depreciation at $94,205, and supplies at $22,418, as shown in Figure 3-18 below.




*Source for Figure 3-18: COOR CAFR for FY15/16, FY16/17, FY17/18, FY19/20*

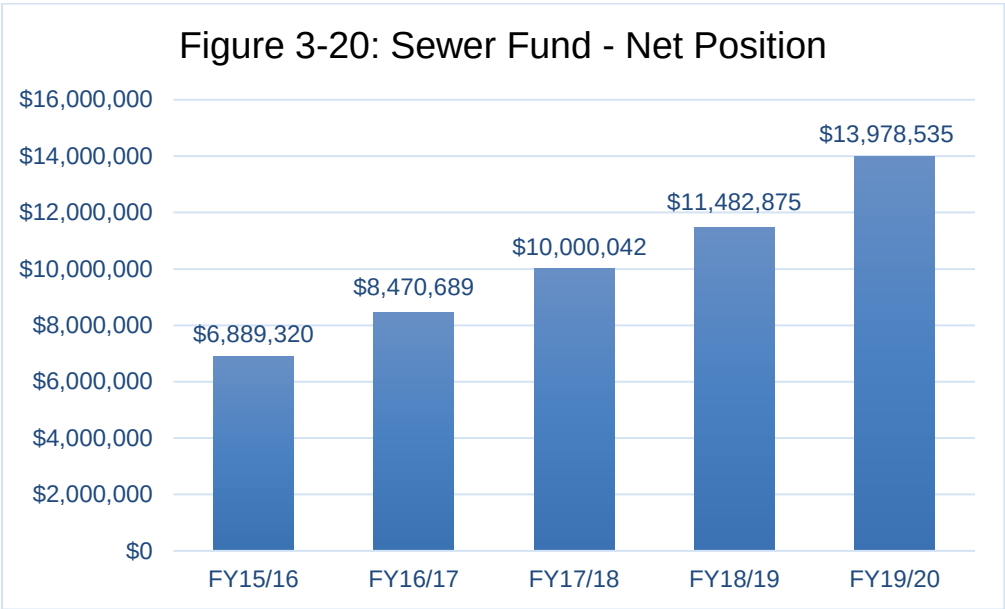
The Sewer Fund expenses for FY19/20 were $2,750,158, which was less than Total Revenue ($3,999,306). Total Revenue exceeded Total Expenses in each of the five study years, as shown in Figure 3-19 below and this key performance measure indicates the Sewer Fund is solvent and has the capacity to cover its costs.




*Source for Figure 3-19: COOR CAFR for FY15/16, FY16/17, FY17/18, FY19/20*

### Sewer fund: Net Position

The Statement of Net Position for the Sewer Fund provided in Table 3-26 below, includes all of the Sewer Fund's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, which provide information about the nature, and amounts, of investments in assets and obligations to creditors. In addition, the Net Position provides the basis for computing rates of return, evaluating the capital structure of the Sewer Fund, and assessing financial flexibility. On June 30, 2020, the Fund's total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $13.98 million. This figure is referred to as the net position as shown in Figure 3-20, below (COOR, CAFR, 2021f).




*Source for Figure 3-20: COOR CAFR for FY15/16, FY16/17, FY17/18, FY19/20*

The Net Position for the Sewer Fund has increased in each of the five study years from FY15/16 to FY19/20, as shown in Figure 3-20. The Sewer Fund had a total net position of $13,978,535 as of June 30, 2020, as shown in Table 3-26 below (COOR, CAFR, 2021f).

| Table 3-26: Statement of Net Position – Sewer Fund, June 30, 2020 | |
|---|---|
| | **Sewer Fund** |
| **ASSETS**<br>Current assets: Cash and investments | $9,815,746 |
| Accounts receivable | 151,360 |
| Interest receivable | 28,825 |
| Inventory | - |
| **Total current assets** | **9,995,931** |
| Noncurrent assets:<br>Capital assets: Nondepreciable | 389,414 |
| Depreciable, net | 4,406,662 |
| Total capital assets, net | 4,796,076 |
| Total Noncurrent assets | 4,796,076 |
| **Total assets** | **$14,792,007** |
| **DEFERRED OUTFLOWS OF RESOURCES** | |
| Pension adjustments | $466,192 |
| **LIABILITIES**<br>Current liabilities: Accounts payable | $17,250 |
| Payroll related liabilities | 20,422 |
| Other payables and accruals | - |
| Total current liabilities<br><br>Non-current liabilities: Net pension liability | 37,672<br><br>1,106,896 |
| **Total liabilities** | $1,144,568 |
| **DEFERRED INFLOWS OF RESOURCES** | |
| Pension adjustments | $135,096 |
| **NET POSITION**<br>Net Investment in capital assets | $4,796,076 |
| Unrestricted | 9,182,459 |
| **Total net position** | **$13,978,535** |
| *Data Source: COOR, CAFR, 2021f* | |

### *3.8.4: Capital Improvement Plan*

The City has a Capital Improvement Program that includes the rehabilitation and replacement of its collection system assets where conditions warrant. The public works field crews maintain a list of known structural problems to provide input to the Public Works Engineering Division on the Capital Improvement Program. The Sewer System Management Plan adopted in October 2019 states that the sewer system projects are included in the City's Capital Improvement Program. The CIP for the wastewater system is shown in Table 3-27 below.

Table 3-27: Wastewater Capital Improvement Program

| Project Number | Project Title | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 | FY 23/24 | FY 24/25 | FY 25/26 |
|---|---|---|---|---|---|---|---|---|
| 1 | Oroville Dam Blvd Relief Sewer | | ✓ | ✓ | | | | |
| 2 | Stanford Avenue Sewer | ✓ | ✓ | | | | | |
| 3 | Grace Baptist Church | ✓ | | | | | | |
| 4 | Montgomery Street Sewer | ✓ | | | | | | |
| 5 | Table Mountain Blvd Sewer | ✓ | | | | | | |
| 6 | Grand Avenue Sewer | | | | | ✓ | | |
| 7 | Downtown Sewer | | | ✓ | | | | |
| 8 | 5th Avenue Sewer | | | ✓ | | | | |
| 9 | Feather River Blvd Sewer | | | | ✓ | | | |
| 10 | Oroville Industrial Park Sewer | | | | ✓ | | | |
| 11 | Olive Highway Expansion | | | | | ✓ | | |
| 12 | Oroville Quincy Highway Expansion | | | | | | ✓ | |
| 13 | Dry Creek Pump Station and Pipeline Expansion | | ✓ | | | | | |
| 14 | Zepher Way Expansion | | | | | | ✓ | |
| 15 | Orange Avenue Sewer | | | | ✓ | | | |
| 16 | Larkin Rd Bypass Sewer | | | | | | | ✓ |
| 17 | West Oroville Dam Blvd Expansion | | | | | | | ✓ |
| 18 | TWSD East Interceptor | | | | | | | ✓ |
| 19 | Ruddy Creek Pump Station Upgrade 1 | | | | | ✓ | | |
| Additional CIP projects will be added as televising, condition assessment, and flow monitoring (I&I investigation) of the collection system progresses | | | | | | | | |

### *3.8.5: Reserves*

In California, many cities have accumulated reserves. There are no standards guiding the size and use of reserve funds. Reserve funds are useful for COOR because their contribution towards capital improvement projects reduces the potential need to accumulate a high debt load. The California Government Code allows the City to invest, provided the issuers' credit ratings are acceptable to the City and approved percentages and maturities are not exceeded. To maintain the City's ability to meet unforeseen events such as cash flow shortfalls, economic downturns, local disasters, emergencies, or any unforeseen event, the City established a financial reserve. The City aims to maintain a minimum level of Unassigned Fund Balance in the General Fund equivalent of 5% to 15% of the adopted budget operating appropriations. All uses of the reserve require City Council approval. The City Council may direct the usage of reserves for the following:

- To provide resources to make up for temporarily decreased revenues, such as State subventions.
- To provide temporary resources in the event of an economic downturn.
- To provide resources to meet emergency expenditures in the case of flood, fire, earthquake, landslides, or other disasters.

- Whenever the reserves are used, the reserve shall be replenished as soon as possible (COOR, CAFR, 2021f).

### *3.8.6: Outstanding Debts and Liabilities*

For local government agencies, liabilities typically include current liabilities such as accounts payable, salaries payable, bond interest payable, and long-term liabilities such as serial bonds payable, installments payable, and contracts payable. Specifically, the City of Oroville has several types of debt, including pension obligation bonds, USDA COP loan, PG&E retrofit loan, equipment lease, net pension liability, total OPEB liability, and compensated absences as listed in Table 3-28.

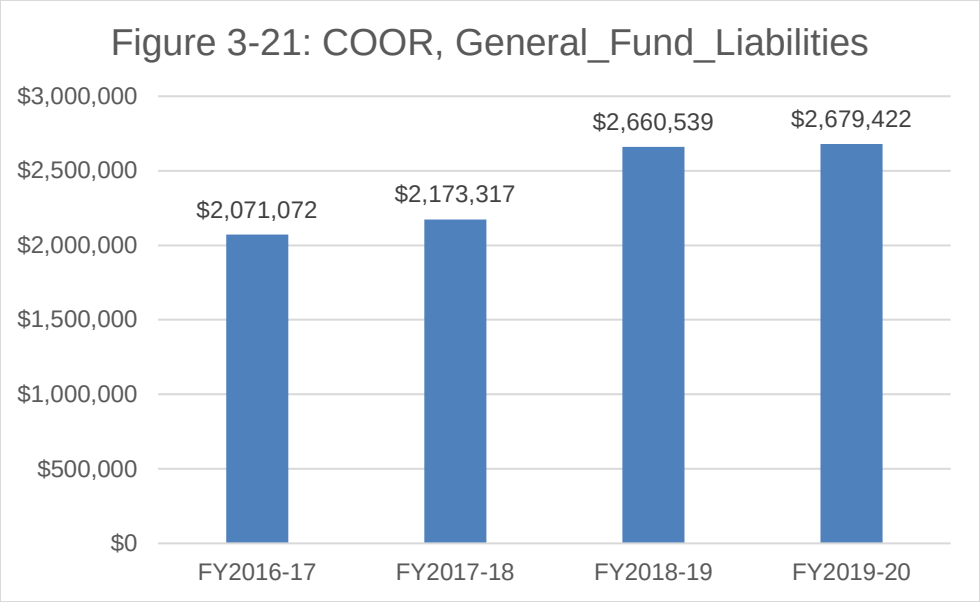
Table 3-28: Outstanding Long-Term Obligation as of June 30, 2020

| | Governmental Activities | |
|---|---|---|
| | 2020 | 2019 |
| Pension Obligation Bonds | $ 2,830,000 | $ 3,445,000 |
| USDA COP loan | 477,900 | 502,500 |
| PGE Retrofit Loan | 117,117 | 144,144 |
| Equipment Lease - Solar Equipment | 2,438,490 | 2,508,792 |
| Net Pension Liability | 22,103,076 | 20,411,278 |
| Total OPEB Liability | 1,992,951 | 1,890,869 |
| Compensated absences | 760,612 | 653,278 |
| Total outstanding long-term obligations | $ 30,720,146 | $ 29,555,861 |

| | Business-Type Activities | |
|---|---|---|
| | 2020 | 2019 |
| Net Pension Liability | $ 1,595,803 | $ 1,464,953 |

*Source: COOR, CAFR, 2021f*

The California Auditor indicates that the City's long-term debts equate to only 11 percent of the City's total government revenues, indicating it has substantial capacity to pay its debts. To be low risk for debt burden, a City's debt should ideally not exceed 40 percent of total government revenue (CA Auditor, 2021).




### *3.8.7: Pension Payments*

COOR contributes the pension payments to the California Public Employees Retirement System (CalPERS), a multiple-employer public employee defined benefit pension plan on behalf of its full-time employees. CalPERS provides retirement, disability, and death benefits to plan members and beneficiaries. CalPERS acts as a common investment and administrative agent for participating public entities within the State, including COOR. Copies of CalPERS' annual financial report may be obtained from its executive office at 400 Q Street, Sacramento, California 95811. The pension contribution requirements of plan members and COOR are established and may be amended by the COOR City Council. CalPers recognizes that the scale and multi-faceted nature of climate change presents a systemic risk to retirement portfolios across the board. The risks include:

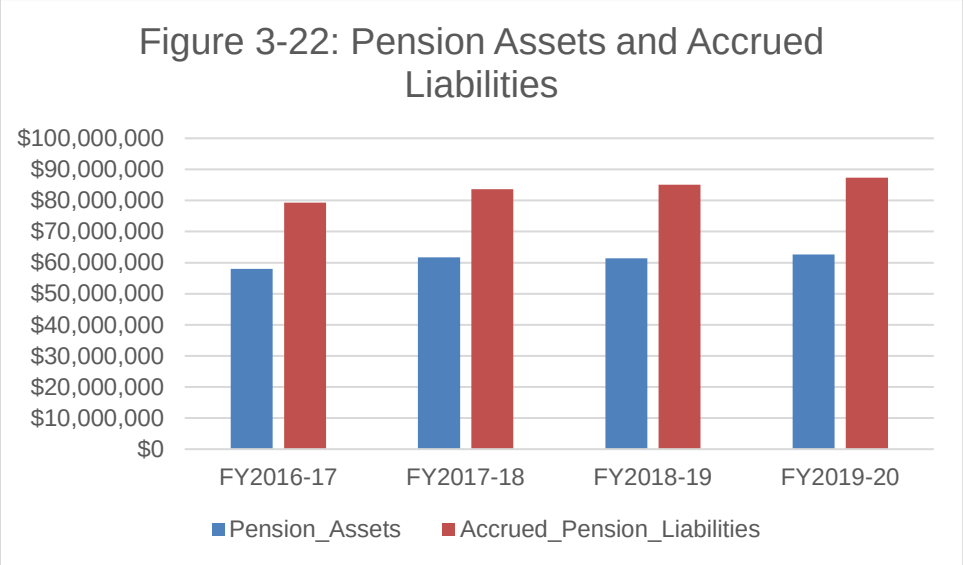
- disruption to portfolio companies' supply chains and operations,
- heightened volatility to financial markets,
- reduced economic growth,
- fixed assets (e.g., real estate), and
- impacts to the financial success of existing business models and portfolio companies

CalPers has implemented its Sustainable Investments Program in an attempt to mitigate these systemic risks (CalPers, n.d.)

The CAFR for FY19/20 states that "The City makes contributions based on a pay-as-you-go basis as approved by the authority of the City's Board. Total benefit payments included in the measurement period were $140,000. The actuarially determined contribution for the measurement period was $263,044. The City's contributions and benefit payments were 1.98% of covered employee payroll during the measurement period June 30, 2019 (reporting period June 30, 2020). Employees are not required to contribute to the plan. There have been no assets accumulated in a trust to provide for the benefits of this plan for the measurement period" (COOR,

CAFR, 2021f). In FY18/19, the net pension liability for the City was $1,464,953. In FY19/20, this liability increased to $1,595,803, as shown in Table 3-28, above (COOR, CAFR, 2021f).

Pension Obligations: Oroville's unfunded pension obligations are substantial compared to its total government revenues. A City's unfunded pension obligations represent the amount of additional funds it would need to set aside to make all promised pension payments to its employees. Greater unfunded pension obligations mean that a City will have to make higher contributions to its pension plan over time (CA Auditor, 2021).




Pension Funding

This City's pension plan has enough assets to fund 72 percent of employees' pension costs. A City that has a pension plan without sufficient assets may have to make higher contributions over time. For a City's pension funding to be low risk, the City should have enough assets in its pension plan to fund more than 80 percent of the cost of pension benefits already earned by its employees (CA Auditor, 2021).

Pension Costs: Oroville's current annual contributions to its pension plan are moderate compared to its total government revenues. This indicator measures how much the City currently needs to contribute to its pension plan annually to ensure the plan can afford to pay employees in the future. For a City's pension costs to be low risk, annual pension contributions should not exceed 5 percent of the City's total government revenue (CA Auditor, 2021).

Future Pension Costs: This City's projected annual payments to its CalPERS pension plan in the fiscal year 2027-28 are significant compared to its current total government revenues. This indicator projects the future annual amount the City will need to contribute to its pension plan to ensure the plan can afford to pay retired employees. For a City's pension costs to be low risk, annual pension contributions should not exceed 5 percent of the City's total government revenue (CA Auditor, 2021).

Retiree Health and Dental Obligations (Other Post-Employment Benefits Obligations): Oroville's unfunded obligations for retiree health and dental benefits are relatively small compared to its total government revenues. A City's unfunded obligations for retiree health and dental benefits represent the amount of additional funds it would need to set aside to make all promised payments to its employees for other post-employment benefits. Greater unfunded retiree health and dental obligations mean that a City will have to make higher contributions to its OPEB plan over time (CA Auditor, 2021).

Retiree Health and Dental Funding (Other Post-Employment Benefits Funding): This City's OPEB plan covers other post-employment benefits like health and dental for retired employees, has enough assets to fund 0 percent of employees' OPEB costs. A City with an OPEB plan without sufficient assets may have to make higher contributions over time. For a City's OPEB funding to be low risk, the City should have enough assets in its OPEB plan to fund more than 80 percent of its employees' OPEB costs (CA Auditor, 2021).

The medical plans offered to Oroville's retirees consist of two PPO options (Gold and Silver) and HDHP-10, offered through Golden State Risk Management Authority (GSRMA). Medical premiums for non-Medicare eligible retirees are equal to the premiums for active employees (COOR, CAFR, 2021f). The net OPEB liability during the year ended June 30, 2020 was $1,992,951 (COOR, CAFR, 2021f).

### *3.8.8: Rates*

COOR has adopted standard rates for monthly wastewater service fees and wastewater connection fees, as shown in Table 3-29 below. The monthly fee for wastewater services is a total of $37.41 per month, and this fee is split between the City's collection fee and the SC-OR treatment fee. New development that would like to connect to the City's wastewater collection system is charged a city sewer connection charge which is $696 per single-family home plus additional charges, such as development impact fees that could include a $427.25 Sewer Collection Facility Fee and/or a $6,638 SC-OR connection fee.

## City Sewer Connection Charges (Resolution 5889)

| FEE TYPE | FEE | FEE |
|---|---|---|
| Residential and Commercial | | $696.00 per EDU |
| Industrial | | $2,856.50 per EDU |
| Sewer Service Agreement Application Fee | | $435.00 |
| Sanitary Sewer Main Tapping Fee | | $331.32 |
| | | |
| Sewer Service Charges (Resolution 8530)<br>Residential, Commercial, Industrial, & Mobile Home (per EDU) | | |
| City Charges (Collection)[1] | $23.56/mo[2] | $282.72/yr |
| SC-OR Charges (Treatment)[1] | $15.85/mo | $190.20/yr |
| Total | $37.41/mo | $472.92/yr |
| (1) Sewer service charges are placed on the property owners tax bill.<br>(2) Includes $1.32 per month per EDU for the East Trunk Line maintenance charge. | | |

*Data Source for Table 3-29 above: COOR Public Works Department Fee Schedule on Website*

The City Council's Resolution No. 5889 authorized increases to the City's sewer connection fees by 3.1% in accordance with the Engineering News Record Construction Cost Index (personal communication, D. Nevers, 5/5/2022).

### *Determinations: Financial Ability to Provide Services*

Based on the information included in Sections 3.8 above, the following written determinations make statements involving each service factor which the Commission must consider as part of a municipal service review. The determinations listed below in Table 3-30 are based upon the data presented, and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution which the Commission formally adopts during a public meeting.

Table 3- 30: MSR Determinations - COOR Financial Ability to Provide Services

| Number | Indicator | Determinations |
|---|---|---|
| COOR-FIN-1 | Summary financial information presented in a standard format and simple language. | COOR's Comprehensive Annual Financial Reports and Budgets are prepared annually, and they clearly and transparently present financial information. Oroville's 2019 CAFR was awarded the prestigious Certificate of Achievement for Excellence in Financial Reporting by the Government Finance Officers Association. |
| COOR-FIN-2 | City has a published policy for reserve funds, including the size and purpose of reserves and how they are invested. | The City's published policy for reserve funds is available from the City's Finance Department. The General Fund Reserve Policy describes the purpose and suggested size of reserves. |

| | | |
|---|---|---|
| | | However, the Policy does not indicate how reserve funds should be invested. This is an item that needs improvement. It is recommended that the next time the City updates its General Fund Reserve Policy it should add a statement about how reserve funds should be invested. |
| COOR-FIN-3 | Other financing policies are clearly articulated. | COOR's Comprehensive Annual Financial Report contains a list of its accounting policies. Additionally, the Municipal Code describes several financial policies, with specific procedures for purchases and procurement practices. The City's Municipal Code is readily available on the COOR's website. |
| COOR-FIN-4 | Compensation reports and financial transaction reports that are required to be submitted to the State Controller's Office are posted to the City website. | Required reports on employee wages are sent to the California State Controller for Government Compensation. Although the City's Master Salary Scale is not directly posted to a webpage, it is available using the "search" feature on the COOR website. |
| COOR-FIN-5 | Revenues exceed expenditures in 50% of studied fiscal years. | Total Revenue exceeded Total Expenditures in each of the five study years. |
| COOR-FIN-6 | Increases or decreases in net position | Changes to the Net Position are shown in Figure 3-20, to be a steady increase, year to year. For example, in FY19/20, the Net Position increased by 2,750,158 from the previous year. |
| COOR-FIN-7 | Tax Revenues/Connection Ratio | The Sewer Fund operates as an enterprise fund within the City and therefore does not utilize tax revenue. Therefore, the Tax Revenues/Connection Ratio is zero. |
| COOR-FIN-8 | Rates were adopted by the City Council | COOR's City Council adopted the fee schedule for the Public Works Department through Resolution #5889. |
| COOR-FIN-9 | Rates are consistent with requirements of the State Water Resources Control Board, and the process for adopting rates are consistent with Proposition 218 | Rates for sewer service provided to City residents include both the City's fees for collection and SC-OR's fees for treatment and disposal. The City's rates were approved by Council Resolution No. 5889 and the fee can increase by 3.1% in accordance with the Engineering News Record Construction Cost Index. |
| COOR-FIN-10 | Rates are readily available to constituents | Rates are displayed on the City's website for the Public Works Department at: <*https://www.cityoforoville.org/services/public-works-department/engineering-division/engineering-fees*>. |

### *3.8.9: Risk Management*

Managing risks in cities is a method commonly utilized to reduce unforeseen costs. The City of Oroville maintains insurance to cover normal business activities regarding financial risk. Specifically, the City carries several insurance policies with the Northern California Cities Self-Insurance Fund (NCCSIF), a joint powers authority (COOR, RFI 2021d). Additionally, the City is not currently involved in any legal actions that may affect its financial status (COOR, RFI, 2021d).

### *3.8.10: Memberships & Resource Sharing*

Membership in professional organizations is a way that cities can leverage their expertise and the expertise of their colleagues in similar cities to efficiently provide mutual assistance, share information, and support professional development. COOR does maintain mutual aid, automatic aid agreements, and/or memberships in several organizations. Specific to wastewater, COOR is a member of the JPA called Sewerage Commission – Oroville Region.

## 3.9 Joint Power Authorities

Effective January 1, 2017, Government Code §6503.6 and §6503.8 require LAFCo to be a repository for all Joint Powers Authority Agreements (JPA) within a county related to municipal service provisions. COOR participates in two JPAs as listed in the following paragraphs.

Northern California Cities Self Insurance Fund (NCCSIF): The City is a member of this public entity risk pool for liability and workers' compensation purposes. The NCCSIF consists of twenty Northern California Member Cities. The purpose of the Authority is to arrange and administer insurance programs for the pooling of self-insured losses and to purchase excess liability coverage. All member cities share administrative costs of the Authority equally (5.00 percent) and have equal control over budgeting and financing activities. In addition, each member city has a representative on the Board of Directors. The City paid $898,026 in quarterly and annual premiums and assessments to the Authority for liability and worker's compensation insurance during FY 19/20.

Sewerage Commission - Oroville Region (SC-OR): SC-OR was organized under a joint powers agreement between the City of Oroville, Thermalito Water and Sewer District, and Lake Oroville Area Public Utility District. SC-OR's primary purpose is to provide sewage treatment and disposal services to the local government member entities. Each member sends two representatives (one voting, one non-voting) to SC-OR's Board of Directors that constitutes the entire governing board. No participating member entity has access to SC-OR's resources or surpluses, nor is any participant liable for SC-OR's debts or deficits. Further, the City of Oroville does not have any equity interest in SC-OR. Each member entity is required to collect and remit SC-OR's sewer treatment and system regional facility charges. For the year ended June 30, 2020, the amount remitted to SC-OR by the City of Oroville totaled $1,504,698.

# 3.10: Cost Avoidance and Facilities Sharing

This section highlights cost avoidance practices given necessary service requirements and expectations. Ideally, proposed methods to reduce costs would not adversely affect service levels. In general, wastewater systems have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, COOR pursues an array of cost avoidance techniques that each contributes incrementally towards keeping costs at a reasonable level. Specifically, COOR carefully utilizes its budgeting processes to serves as one means to avoid unnecessary costs.

Additionally, COOR participates in two Joint Powers Authority (SC-OR and NCCSIF) to reduce costs for wastewater treatment and disposal. Overhead is currently minimized to the greatest extent feasible (COOR, 2021d). There is little opportunity for further cost savings because the system has been deprived of maintenance for many years (COOR, 2021d).

Facilities Sharing:
Joint Agreements: Wastewater collected by the City's collection system is treated and disposed of at the WWTP owned and operated by SC-OR. The City does not own or operate any wastewater treatment facilities (COOR, 2021d).

Mutual aid: The City of Oroville provides wastewater collection services to a portion of the City's boundary area. The other JPA members provide wastewater services to some areas within the City's jurisdictional boundary, and mutual aid is provided among members on an as-needed basis (COOR, 2021d).

Misc. Partners: The City participates in several programs related specifically to wastewater services including: 1) California Water Environment Association, 2) USAN 811 / Underground Service Alert / Call before you dig, and 3) emergency services agreement with Duke Sherwood Contracting for emergency services on the system (personal communication, D. Nevers, 5/5/2022).

Reorganization: It is sometimes beneficial for an agency to pursue structural and/or jurisdictional reorganizations to save money, avoid future overhead costs and increase efficiency and transparency to its customers. COOR staff has indicated that there are no functional or structural reorganizations that the City of Oroville is evaluating to benefit recipients of the department's services or improve the provision of wastewater collection services at this time (COOR, 2021d). The COOR should consider evaluating the opportunity to reorganize its collection system with TWSD north of the Feather River and with LOAPUD south/east of the Feather River.

| Table 3-31: MSR DETERMINATION: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| COOR-SHA-1 | The Agency collaborates with multiple other agencies for the delivery of services within its boundary. | The City collaborates with multiple other agencies to deliver services within its boundary, including SC-OR, TWSD, and LOAPUD. The COOR should consider evaluating the opportunity to reorganize its collection system with TWSD north of the Feather River and with LOAPUD south/east of the Feather River. |
| COOR-SHA-2 | Agreements for mutual aid or any other appropriate agreement (i.e., Tax Sharing Agreement) are periodically reviewed to ensure fiscal neutrality. | The City is a member of the wastewater JPA (aka SC-OR), along with TWSD and LOAPUD. TWSD and LOAPUD also provide wastewater services to some geographic areas within the City's jurisdictional boundary. The three members of the JPA, along with SC-OR, provide each other with mutual aid assistance on an as-needed basis.<br><br>While the current organization of sewer services between three collection agencies and the wastewater treatment plant (SC-OR) effectively delivers sewer services to the Oroville region, this duplication of services should be evaluated to determine if a reorganization of service providers and/or boundaries would result in a more transparent and cost-effective provision of sewer services. At present, both LOAPUD and TWSD provide sewage collection services within COOR boundaries. It is recommended that the City initiate dialogue with the its sewage collection partners to consider potential reorganization options that would allow for greater efficiencies, cost savings and offer a more streamlined approach that would benefit not only current users, but new development interests as well. |

| | | |
|---|---|---|
| COOR-SHA-3 | The City periodically examines other practices and opportunities that may help reduce or eliminate unnecessary costs. Ideally, there is a balance between cost efficiency and risk reduction strategies. | Wastewater systems generally have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, COOR pursues an array of cost avoidance techniques that each contributes incrementally towards keeping costs at a reasonable level. Specifically, COOR carefully utilizes its budgeting processes to serves as one means to avoid unnecessary costs. Additionally, COOR participates in two joint powers authorities (SC-OR and NCCSIF) to reduce costs for wastewater treatment and disposal. Overhead is currently minimized to the greatest extent feasible (COOR, 2021d). There is little opportunity for further cost savings because the system has been deprived of maintenance for many years. |

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# Chapter 4: Lake Oroville Area Public Utility District

*Figure 4-1: LOAPUD's Administrative Office - Photo courtesy of Google maps*

This chapter presents a Municipal Service Review (MSR) for the Lake Oroville Area Public Utility District (LOAPUD), which details the district formation, boundary, government structure, population and land use, disadvantaged communities, and the provision of wastewater services and facilities. Based on the information in this report, written determinations that make statements involving each service factor that the Commission must consider as part of the MSR are presented. The determinations are based upon data presented in this Chapter for the Lake Oroville Area Public Utility District and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

## Table of Contents

# 4.1 Agency Profile and Overview

## *4.1.1 Agency Profile*

| | |
|---|---|
| **Type of Agency:** | Public Utility District |
| **Principal Act:** | California Public Utility District Act. Public Utilities Code §§ 15501-18055 |
| **Functions/Services:** | Wastewater collection and conveyance |

| | |
|---|---|
| **Main Office:** | 1960 Elgin Street, Oroville, CA 95966 |
| **Mailing Address:** | Same |
| **Phone No.:** | (530) 533-2000 |
| **Web Site:** | https://www.loapud.com/ |
| **General Manager**: | David Goyer at email: manager@loapud.com |
| **Alternate Contact:** | Kelly Hamblin at email: acct_payable@loapud.com |

| | |
|---|---|
| **Meeting Schedule:** | The Board of Directors meets the 2nd Tuesday of every month at 2:00 pm. |
| **Meeting Location:** | District Office located at 1960 Elgin St., Oroville, CA 95966. |
| **Date of Formation:** | 1938 |

| | |
|---|---|
| **Area Served:** | Serving approximately 8,582 acres (13.4 square miles) |
| **Authorized Services:** | Sewage Collection |

| | |
|---|---|
| **Population** | 12,768 permanent residents |
| **Number of sewer connections** | 5,733 sewer connections |
| **Gross Revenue** | $2.49 million |
| **Expenditures** | $2.02 million |
| **Principal LAFCo:** | Butte LAFCO |
| **Other LAFCo:** | None |

### 4.1.2 Agency Overview

The Lake Oroville Area Public Utility District (LOAPUD) is a Public Utility District operating under the Public Utilities Code §§ 15501-18055, and it has the potential to provide a range of public services[1]. However, LOAPUD's only LAFCo approved service is to provide wastewater collection and conveyance to the local community. LOAPUD provides service to the unincorporated areas east and south of the City of Oroville (see Figure 4-3) and to a small area within the incorporated City of Oroville. LOAPUD collects wastewater from its customers and conveys it to Sewerage Commission-Oroville Region (SC-OR) facilities for treatment and disposal. The District's sewer system is considered a "satellite collection system" to SC-OR. LOAPUD is located in Butte County on the east side of California's Sacramento Valley. The Feather River is the area's major drainage, and it drains into the Sacramento River as described in Appendix I. Elevations in the District range between approximately 200 feet and 1,000 feet above sea level. This is the fourth Municipal Service Review for LOAPUD, and the dates associated with the previous MSRs are listed in Table 4- 1.

Table 4-1: Three Previous MSRs for LOAPUD

| Name of MSR Document | Date MSR approved |
|---|---|
| Domestic Water and Wastewater Service Providers Municipal Service Review | June 1, 2006 |
| Wastewater Service Providers- Oroville Region Municipal Service Review | 2009 |
| Chapter 5 Update (prepared in conjunction with a SOI Update) | July 10, 2013 |

## 4.2 Agency Formation and Boundary

### 4.2.1 Formation

The District was formed in 1938 and was originally called the North Burbank Public Utility District. Until 1977, this District owned and operated a wastewater treatment plant on South 5th Avenue that provided treatment, disposal, and collection services. With the creation of the Sewerage Commission-Oroville Region Joint Powers Authority in 1971, the district ceased providing wastewater treatment services. In 1988, the district name was changed to Lake Oroville Area Public Utility District to describe better the entire service area (LAFCo, 2013).

[1] Public Utilities Code §15501 et seq. authorizes "Powers and Functions: Maintain the infrastructure to provide electricity, natural gas, water, power, heat, transportation, telephone service, or other means of communication, or the disposition of garbage, sewage, or refuse matter."

### *4.2.2-Boundary*

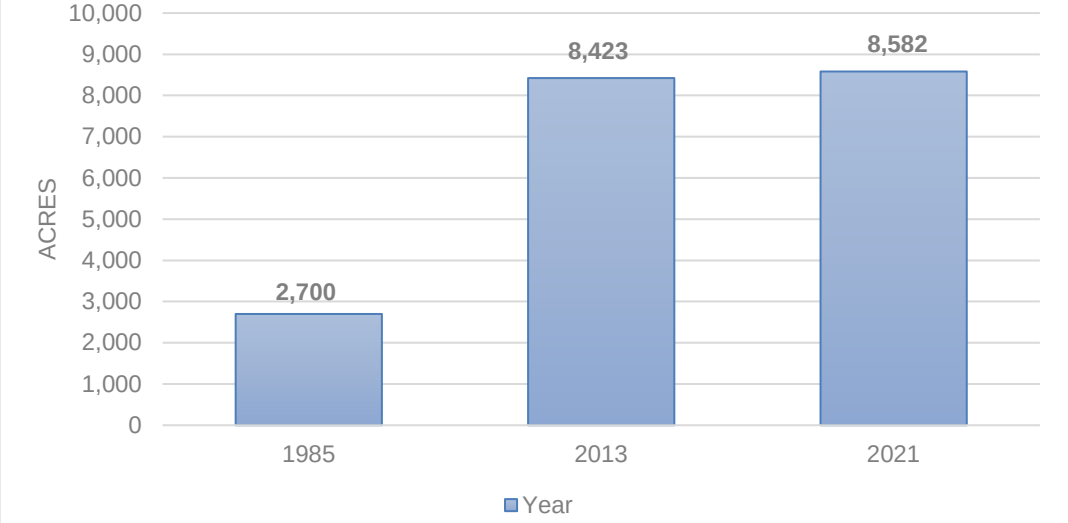
The geographic boundary of Lake Oroville Area Public Utility District encompasses approximately 8,582 acres or 13.4 square miles, as seen in Figure 4-2 (next page). The boundary includes 5,558 assessor parcels (LAFCo GIS, 2020). The LOAPUD boundary area has a larger northern area adjacent to Lake Oroville. The boundary line extends into Lake Oroville because the boundary line follows the County Assessor's parcels that are located within the water. The middle portion of the LOAPUD boundary has a patchy distribution. The southern part of the boundary area includes the unincorporated community of South Oroville and a small portion of the City of Oroville (see Chapter 3).

LOAPUD is bounded by the City of Oroville and California Water Service (Cal Water) to the east and Lake Oroville to the north. The South Feather Water and Power Agency boundaries and SOI significantly overlap with the boundaries and SOI of the LOAPUD. This results in situations where a customer may receive wastewater collection service from LOAPUD and water service from the SFWPA. Alternatively, customers may receive water from Cal Water, depending on their specific location. LOAPUD is bounded to the south by unincorporated Butte County.

Boundary History

In 1985 the boundary for LOAPUD encompassed 2,700 acres, and the District was known as the North Burbank Public Utility District. (LAFCo, 2013). In 2013, the boundary area grew to 8,423 acres, as shown in Figure 4-2. Since then, LOAPUD has had five annexations adding 125.36 acres into its boundary area from 2013 to 2021, as listed in Table 4-2 below.

Figure 4-2: Boundary Size History



| Table 4-2: Recent Annexations to LOAPUD | | | |
|---|---|---|---|
| **Agency** | **Year** | **Acres** | **Location** |
| LOAPUD | 2013 | 1.3 | Autrey Lane - 078-270-019 |
| LOAPUD | 2016 | 61.9 | Olive Hwy - 068-160-019, -066, -076, -077, and 068-341-030 |
| LOAPUD | 2018 | 3.15 | Oak Knoll Way - 078-270-017 |
| LOAPUD | 2019 | 51.19 | Ophir Road - 078-090-043 and -044 |
| LOAPUD | 2020 | 7.82 | Ophir Road - 078-090-053 |
| Total | 5 | 125.36 | |
| *Data Source: Butte LAFCo files* | | | |

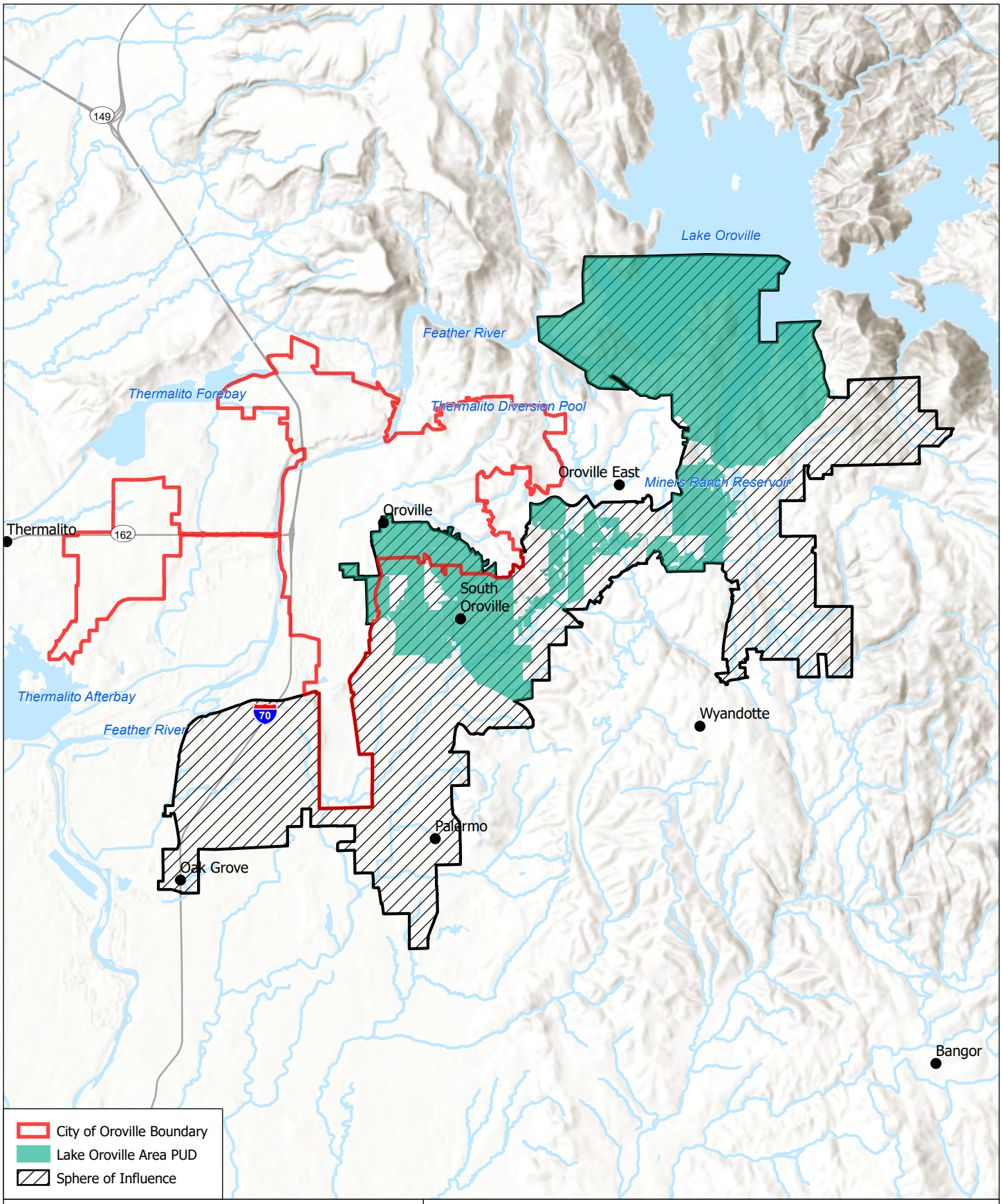
Most areas within the boundary receive wastewater collection and conveyance service from the LOAPUD. There are no other agencies that offer this service within the boundary area. However, the City of Oroville also provides wastewater collection and conveyance in the adjacent incorporated area.

### *4.2.3 Sphere of Influence*

This section briefly describes the existing Sphere of Influence (SOI) for the Lake Oroville Area Public Utility District. In this document, additional details can be found in Appendix K, SOI Options. Butte LAFCo adopted the original SOI for the LOAPUD in 1985. The SOI was updated in 2013 with significant expansions, adding 9,700 acres (1,826 parcels) to the SOI in order to bring the Palermo area into the SOI. LAFCo adopted Resolution Number 11-0213/14 on July 10, 2013. An environmental impact report (SCH #2013012036) was prepared for the 2013 SOI expansion. Today, the District's SOI encompasses 20,295 acres and includes 8,013 parcels, as shown in Table 4-3 below. As part of this MSR preparation process, District staff indicated that the Sphere of Influence area is adequate for future needs (LOAPUD, 2021a).

| Table 4-3: Geographic Summary (2021) for LOAPUD | | | |
|---|---|---|---|
| | **Boundary Area** | **SOI** | **Total Boundary & SOI** |
| Total Acres | 8,582 | 20,295 | 28,877 |
| Square Miles | 13.4 | 31.7 | 45.1 |
| Number of Assessor Parcels | 5,558 | 8,013 | 13,571 |
| *Source: Butte County GIS Data, 2020* | | | |

LOAPUD's SOI overlaps significantly with the City of Oroville's SOI. The City of Oroville also provides wastewater collection services to City residents. Generally, if areas are annexed into the City, the annexed areas have the opportunity to retain their existing wastewater collection service provider.




# Figure 4-4
# Boundary and Lake Oroville Area PUD & City Limits

*Map Date: 09/29/2021*
*Data Source: Butte LAFCO*

There has been an informal conversation with one Rancheria parcel owner about the potential to amend the sphere of influence at some future date. This preliminary conversation did not yield any specific details to inform this MSR.

### *4.2.4 Extra-Territorial Services*

LOAPUD does not provide extra-territorial services outside its District boundary (LOAPUD, 2021a). The District maintains cooperative agreements described in "Facilities Sharing," Section 4.9, below.

## 4.3: District Governance and Accountability

This section describes how performance, accountability, transparency, and public engagement relate to the public's trust in local government. LAFCo is required by the CKH Act to make specific determinations regarding a municipality's government structure and accountability. LAFCo previously studied the "Accountability For Community Service Needs, Including Governmental Structure And Operational Efficiencies" of the LOAPUD in its 2013 MSR Update, and the information presented therein remains accurate. Therefore, this section focuses on presenting updated data for this determination topic.

### *4.3.1: Government Structure*

The LOAPUD is a local government agency structured as a Public Utility District consistent with its Principal Act, the California Public Utility District Act, as codified in the Public Utilities Code §§ 15501-18055. A five-member Board of Directors, elected at large by the District's voters, is responsible for setting policy and general administrative procedures. All registered voters who reside within the District boundaries are eligible to vote for and/or run for a seat on the District Board of Directors. The Board of Directors appoints the General Manager. The General Manager appoints department heads.

Figure 4-3: Flagpole at LOAPUD's Office

### *4.3.2 District Board*

The District operates under the direction of the elected District Board. Each elected Board Member serves for a term of four years. Five people are elected to the Board of Directors (Butte LAFCo, 2013a). Board members are eligible to receive an annual stipend of $4,800 for

attendance at regular and special Board meetings and committee meetings. However, in 2020 two Board members chose to receive less than the maximum stipend (CA Auditor, 2021).

The current Board of Directors members, their committee appointments, and their term of office expiration dates are shown in Table 4-4 below. The terms of office for the District Board Members are available online through the District website under the "Board Members" tab. However, the webpage does not disclose the next election date. In addition, the committee appointments are not directly disclosed on the District's webpage. One can word search "committee" at the top of the web page and find when the Board Members were going to be appointed to a committee position; however, there is not a list that indicates which committee is associated with a specific Board Member. For example, when one views the URL <*https://www.loapud.com/board-meetings*>, the appointments are not listed. Furthermore, even if the committee agendas are located, for example, the Personnel Committee agenda for January 28, 2021, there is no list of the committee members involved. This is an item that needs improvement as follows: 1) LOAPUD should take appropriate steps to post Board Committee appointments online, 2) meeting agendas for Board Committees should list the Committee members, and 3) agendas should be posted on the District website.

Table 4-4: Lake Oroville Area Public Utility District Board of Directors

| Name | Title | Term End | Committee Appointments |
|---|---|---|---|
| Angela Mastelotto | President | 12/6/2024 | 2021-2022 Budget Financial Advisory Committee |
| Dee G. Fairbanks | Vice President | 12/6/2024 | 2021-2020 Budget Personnel Advisory Committee, Budget Financial Advisory Committee 2021-2022 |
| Bill Sharman | Director | 12/13/2022 | 2020-2021 Budget Personnel Advisory Committee, Budget Financial Advisory Committee 2019-2020 |
| Richard Salvucci | Director | 12/13/2022 | 2021-2022 Budget Financial Advisory Committee |
| Robert Marciniak | Director | 12/13/2022 | 2021-2022 Budget Financial Advisory Committee |

*Source: District/City website at: https://www.loapud.com/*

The District Board of Directors meets on the 2nd Tuesday of every month at 2:00 pm. The Board of Directors regularly meets at the Lake Oroville Area Public Utility District Office at 1960 Elgin St., Oroville, CA 95966.

All meetings of the District Board and other advisory boards are open to the public in accordance with the Brown Act. Each District Board meeting agenda includes a public comment period for items not on the agenda. Additionally, the Board's meeting minutes reflect that the public is invited to speak on all items included on the agenda. All meeting agendas are publicly posted on the LOAPUD website at: https://www.loapud.com/. Additionally, meeting agendas are distributed via the following communication methods: email, posted to the kiosk in front of the office, and hand-

delivered. Agendas are not sent to the local newspapers (LOAPUD, 2021a). The District and its representatives have a solid record of adherence to the requirements of the Brown Act, the Political Reform Act, and similar laws (LOAPUD, 2021a).

In California, elected members of special district boards are required to comply with three laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training. A description of these three state laws is provided in Chapter 2, Introduction. An assessment regarding the compliance with these three ethics and accountability laws by elected board members of each of the subject water or wastewater-related agencies was made as part of this MSR process as listed below:

- Political Reform Act: Each district is required to have a conflict-of-interest code/policy. LOAPUD's adopted conflict of interest code is enacted as Board Policy No. 1020, adopted initially on February 8, 1984, and amended on February 8, 2005. LOAPUD's conflict of interest policies are publicly available on the District Website at <*https://www.loapud.com/board-policy-no-1020-conflict-of-interest#body_file-34da7246-572e-4071-94cf-06e9734ab4a7*>. The Political Reform Act also requires special district board members to disclose all personal economic interests by filing a "Statement of Economic Interests" with Butte County. LOAPUD staff and Board members file the Statement of Economic Interests annually with Butte County (personal communication, D. Goyer, 2022). Compliance with the Political Reform Act was also assessed by querying the Fair Political Practices Commission (FPPC) Complaint and Case Information Portal <*https://www.fppc.ca.gov/enforcement/complaint-and-case-information-portal.html*>. Query results for the LOAPUD found no complaints or violations (FPPC, 2022).

- Assembly Bill 1234 (Salinas, 2005): Local government officials are required to take ethics training every two years. Compliance with this law was assessed for each of the five agencies studied in this MSR. LOAPUD Board members have submitted their ethics training certificates on the District website. These certificates can be accessed on the "District Transparency" tab, using the "Board Members Ethics Certificates." Each of the five Board members has completed this training on the dates listed in Table 4-5 below. Please note that the training certificate posted on the District website for Director Sharman has expired (as of August 2, 2022). However, Board Member Sharman's Ethics Certificate is in the process of being updated, and LOAPUD's web page will soon reflect this update. Therefore, LOAPUD's Board is mostly in compliance with AB 1234.

- Government Code 53237 et. seq.: Special district board members must receive the required sexual harassment prevention two-hour training every two years. Compliance with this law was assessed for each of the five agencies studied in this MSR. LOAPUD Board members have submitted their sexual harassment prevention training certificates on the District website. These certificates can be accessed on the "District Transparency" tab, using the "Board Members Ethics Certificates." Based on the certificates, the most recent training was conducted on May 20, 2021, for a Board member. Director Sharman's

updated training certificate was not yet posted on the District's website as of August 1, 2022; however, staff has indicated that the updated certificate will soon be posted (D. Goyer, personal communication, July 2022). Therefore, LOAPUD's Board mostly complies with Gov. Code 53237 et. seq.

Table 4-5: Board Compliance with AB1234 and GC 53237

| Name | Title | Ethics Training Certificate Date | Prevention Training Certificate Date |
|---|---|---|---|
| Angela Mastelotto | President | 05/07/2022 | 05/07/2022 |
| Dee G. Fairbanks | Vice President | 01/19/2021 | 01/19/2021 |
| Richard Salvucci | Director | 05/19/2021 | 05/20/2021 |
| Robert Marciniak | Director | 05/17/2021 | 05/17/2021 |
| Bill Sharman | Director | 01/16/2019* | 01/16/2019* |

*Note: * indicates an expired certificate posted on the webpage as of 2August 2022, and the web page is in the process of being updated*

*Data Source: LOAPUD, March 2022 from <https://www.loapud.com/board-members-ethics-certificates>*

### *4.3.3 Accountability and Transparency*

Brown Act

The Brown Act is described in Chapter 2, Introduction, of this MSR. All meetings of the District Board and committees are open to the public in accordance with the Brown Act. The agenda for each meeting includes a public comment period, and agendas are made available 72 hours before meetings. Any written document that relates to an agenda item is available for public inspection at the same time the writing is distributed to the members of the Board of Directors. Written documents are made available at the District Office and on the District website: <*https://www.loapud.com/board-meetings*>. Agendas are also distributed via email upon request. The District and its representatives have a solid record of adherence to the requirements of the Brown Act, the Political Reform Act, and similar laws (Butte LAFCo MSR, 2006).

The State Legislature updated the Brown Act in 2016 as codified in Government Code §54954.2 (Assembly Bill 2257). These new Brown Act requirements prescribe the methods and location by which an agenda must be accessible on an agency's website for all meetings, as detailed in the Introduction, Chapter 2. The new requirements include retrieving, downloading, searching, and indexing meeting agendas. As part of this MSR, the website for each of the five agencies was evaluated to determine if meeting agendas are made available to the public in a manner compliant with AB2257. The LOAPUD Board's current meeting agenda is posted directly on the District's primary homepage website. Additionally, a direct "Quick" link to the recent and archived Board agendas can be accessed directly from the homepage. An alternative pathway to Board agendas is provided through a dropdown menu "Who We Are/Board Meetings." Finally, the meeting minutes are posted directly under the meeting agenda. Therefore, the District website agenda

distribution does comply with the requirements of the Brown Act 2016 Updates described in AB2257.

Assembly Bill (AB) 361, approved in September 2021, added Section 11133 to the CA Government Code regarding open meetings for state and local agencies using teleconferences. AB 361 authorizes a local agency to use teleconferencing for public meetings during the Covid-19 global pandemic (and other declared state of emergency). When holding a teleconference meeting, local agencies are required to give notice of the meeting and post agendas to allow members of the public to access the meeting. Agencies are also required to include an opportunity for all persons to attend via a call-in option or an internet-based service option and to conduct the meeting in a manner that protects the statutory and constitutional rights of the parties and the public appearing before the legislative body. AB 361 had a sunset clause. On Jan 05, 2022, Governor Newsome signed Executive Order N-1-22 extending the sunset clause and permitted agencies to continue holding public meetings via teleconference through March 31, 2022. During the Covid-19 global pandemic experienced in the year 2020 to 2021, the LOAPUD held its Board meetings via teleconference using the phone features of Zoom (an online meeting platform). All meetings were/are accessible by the public for free through a meeting ID, passcode, and a dial number posted on the meeting agenda. Today, as of March 2022, Board meetings continue to be conducted via Zoom.

Under the Brown Act, closed sessions of Board meetings are not encouraged; however, the Act does provide guidance about exceptions when closed sessions can be held under special circumstances. Commonly, LAFCo utilizes the number of closed sessions a Board holds during a year as an indicator of transparency since fewer closed sessions indicate better transparency levels. For the LOAPUD, the number of closed sessions was evaluated. In 2020, the LOAPUD held one closed session. This low ratio of closed sessions indicates that staff and the Board work together in a transparent manner to provide excellent management to reduce the number of conflicts, litigation, staff disputes, and property issues that might otherwise necessitate a closed session.

Website

The Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8) requires that special districts have a functional website. The requirements of this Act are described in the Introduction, Chapter 2. LAFCo uses compliance with the Special District Transparency Act as one indicator to determine the accountability and transparency of a District.

LOAPUD's website is kept updated and is easily navigable with current and past agenda packets available for download. In addition, the District's website has a tab entitled "Contact Us" that provides the phone number, the address, and the office hour availability. Finally, from the primary homepage, the "Who We Are" tab contains several important sub-tabs, including:

- The "Our Staff" sub-tab includes the contact information of the General Manager and the Clerk of the Board.
- "District Transparency" sub-tab provides access to:
    - "LOAPUD Audits" sub-sub-tab, which contains the annual financial statements.

- "Local Agency Government Compensation Report" sub-sub-link directs readers to California's compensation database at: <*https://publicpay.ca.gov/Reports/SpecialDistricts/SpecialDistrict.aspx?fiscalyear=2014&entityid=2179*>.

The District does not seem to have a policy requiring that the LOAPUD website be user-friendly or contain up-to-date information. The next time LOAPUD updates its website, it is recommended that it consider adding a feature to allow community members to sign up for a free electronic subscription service that will send automatic email notifications when a new meeting agenda is available. Otherwise, the LOAPUD website does share helpful public information such as public advisory, helpful tips, and study reports. The District's website complies with the requirements of the Special District Transparency Act.

General Accountability

The Board of Directors has adopted several Board policies directing the management of the utility. Many of these Board policies are posted on the District's website, including the following:

- Policy No. 1020 Conflict of Interest
- Policy No. 3025 Investment of District Funds
- Policy No. 4010 Directors' Code of Ethics
- Policy No. 4030 Remuneration & Reimbursement
- Policy No. 5010 Board Meetings
- Policy No. 7080 Sewer Service Charge Delinquencies

CONTACT INFORMATION

Lake Oroville Area Public Utility District

1960 Elgin Street, Oroville CA 95966

https://www.loapud.com/

Phone: (530) 533-2000

However, several Board policies are not posted on the website, including the Board's Policy #3065, Sewer Use Regulations. Therefore, when LOAPUD next restructures its website, it is recommended that the complete catalog of Board policies be posted online.

The LOAPUD demonstrated accountability and transparency in disclosing information and cooperation with Butte LAFCo. The District cooperated with LAFCo's requests for information and participated in an interview with the MSR consultants. Wastewater Regulations are described in Appendix C. In general, the District works toward compliance with these regulations.

Butte County is required by law to impanel a grand jury. The primary functions of a grand jury are divided into criminal indictments and civil investigations, with the civil investigation portion, requiring the majority of time. The grand jury's civil or "watchdog" responsibilities include examining all aspects of local government, including cities and special districts, to ensure the county is being governed honestly and efficiently and county monies are handled appropriately. If an agency is subject to many grand jury inquiries, this can be indicative of poor performance or a high number of complaints about an agency. The Butte County grand jury has not investigated Lake Oroville Area Public Utility District in recent years (Butte County Superior Court, 2022).

Litigation is expensive for public agencies due to the costs of preparing an administrative record, retaining attorneys, and preparing briefs. Therefore, avoidance of litigation is an indicator of management's effectiveness in utilizing alternative dispute resolution mechanisms. The Lake Oroville Area Public Utility District is not currently involved in any litigation.

### *4.3.4 Management Efficiencies*

Butte LAFCo's 2013 MSR Update for the LOAPUD adequately describes management structure and efficiencies. This paragraph describes several updates to information from 2013. The General Manager is appointed by and reports to the Board and is responsible for directing District operations and overseeing and implementing policies on behalf of the Board. In November 2021, General Manager Scott McCutcheon left the District, and a new General Manager, David Goyer, was hired. A vital component of the General Manager's duties is implementing the Sewer System Management Plan (2013), including the Spill Response Plan and associated Chain of Communication Plan. Additionally, the General Manager is responsible for day-to-day work activities associated with managing this local public utility district. An important part of management effectiveness includes the District adopting a District-wide mission statement. The LOAPUD Mission statement is: "The mission of the Lake Oroville Area Public Utility District is to provide dedicated service and efficient wastewater collection at a reasonable price to all customers."

### *4.3.5 Staffing and Training*

LOAPUD's staffing structure remains similar to the organizational chart presented in LAFCo's July 2013 MSR and SOI Update. Today, the Lake Oroville Area Public Utility District has 12 regular employees, including eight full-time employees and four part-time employees, as of 2020 (CA Auditor, 2022). The staff positions include the following:

- General Manager
- Clerk of the Board
- Field Operation Supervisor
- Foreman
- Utility Worker II
- Utility Worker II
- Utility Worker I
- Utility Worker I
- Operator
- Office Clerk
- A/P Clerk
- Administrative Aide

District staff includes office staff and field operations staff. Office staff functions include dispatch, documentation, billing and accounting, public record requests, announcements, regulatory compliance, customer service, and provision of information to the Board of Directors. Field operations staff are responsible for the physical operations and maintenance of the District's infrastructure, including inspection, preventive maintenance, cleaning, and repairs (LOAPUD,

2022). Employees receive a compensation package that could include the following, depending on the specific position: regular pay, overtime pay, lump sum pay, other pay, defined benefit, health-dental-vision insurance, and a retirement contribution. The compensation data for the year 2020 for the eight regular full-time employees and the four non-regular or part-time employees is reported by LOAPUD to the California Auditor, as shown in Figure 4-11 in the Finance section. The District provides all new employees with an orientation program, including completing an "Employee Safety Orientation Checklist." In addition, the utility is subject to all of the rules and regulations of Cal OSHA. LAOPUD's personnel training is detailed in its 2021 Sewer Operations and Maintenance Plan (LOAPUD, 2021b).

### *4.3.6 Determinations for Governance and Accountability*

Based on the information included in Sections 4.1 through 4.3 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a Municipal Service Review. The determinations listed below in Table 4-6 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

Table 4-6: MSR DETERMINATIONS: ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENT STRUCTURE AND OPERATIONAL EFFICIENCIES

| Number | Indicator | Determination |
|---|---|---|
| LOAPUD-Acc-1 | Number of closed sessions during 2020 (ideally fewer than 50%). | For the LOAPUD, the number of closed sessions was evaluated. In 2020, the LOAPUD held one closed session, which is well below the 50 percent threshold, which indicates that LOAPUD does a very good job in providing transparency. |
| LOAPUD-Acc-2 | Does the agency's Website comply with the 2016 updates to the Brown Act described in Government Code §54954.2 and enacted by Assembly Bill 2257? | Compliance with the 2016 updates to the Brown Act described in Government Code §54954.2 was evaluated in this MSR. LOAPUD's website agenda distribution does comply with the requirements of the Brown Act 2016 Updates described in AB2257, in that meeting agendas are retrievable, downloadable, searchable, and indexable. The LOAPUD Board's current meeting agenda is posted directly on the District's primary homepage website. Additionally, LOAPUD makes its agenda and minutes available in .pdf format on its website through a direct "Quick" link to the recent and archived accessed directly from the homepage. An alternative pathway to Board agendas is provided through a dropdown menu "Who We Are/Board Meetings." The meeting minutes are posted directly under the meeting agenda. Board packets for both regular and special meetings are listed. |

| | | |
|---|---|---|
| | | (continued)<br>However, several Board policies are not posted on the website, including the Board's Policy No. 3065, Sewer Use Regulations. Therefore, when LOAPUD next restructures its website, it is recommended that the complete catalog of Board policies be posted online. |
| LOAPUD-Acc-3 | Compliance with the Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8) requires special districts to have a functional website that lists contact information and contains financial statements, compensation reports, and other relevant public information. | Compliance with the Special District Transparency Act (Gov. Code, §6270.6 and 53087.8) was evaluated in this MSR. The LOAPUD's website complies with the Special District Transparency Act by listing contact information, posting financial statements, compensation reports, and other relevant public information. It is recommended that the LOAPUD adopt a policy requiring its website to be user-friendly or contain up-to-date information. In addition, it is recommended that the next time LOAPUD updates its website, it considers adding a feature to allow community members to sign up for a free electronic subscription service that will send automatic email notifications when a new meeting agenda is available. |
| LOAPUD-Acc-4 | Terms of office and next election date are disclosed for District Board members, and committee appointments are online. | LOAPUD's current Board of Directors members and terms of office are available online through the District website under the "Board Members" tab. However, the webpage does not disclose the next election date. In addition, the committee appointments are not directly disclosed on the District's webpage, and this is an item that needs improvement. |
| LOAPUD-Acc-5 | Do elected Board members submit required forms and receive required trainings as prescribed by the three state laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training? | LOAPUD's elected Board members must submit required forms and receive required trainings as prescribed by the three state laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training:<br>1) The Political Reform Act: LOAPUD's adopted conflict of interest code is enacted as Board Policy No. 1020 originally adopted on February 8, 1984, and amended on February 8, 2005. LOAPUD's conflict of interest policy is available to the public at the District Website: <*https://www.loapud.com/board-policy-no-1020-conflict-of-interest#body_file-34da7246-572e-4071-94cf-06e9734ab4a7*>. |

| | | |
|---|---|---|
| | | (continued)<br>The Political Reform Act also requires special district board members to disclose all personal economic interests by filing a "Statement of Economic Interests" with the District Clerk or Butte County. All required LOAPUD Staff and Board members file the "Statement of Economic Interests" annually with Butte County. Additionally, there have been no complaints to the CA FPPC regarding filing Economic Statements of Interest required under the Political Reform Act.<br>2) Ethics training as required by AB 1234: LOAPUD posts ethics training certification on its website at: <*https://www.loapud.com/board-members-ethics-certificates*>. Training is offered regularly. Each of the five Board members has completed this training. However, Director Sharman is in the process of completing the certification again and the LOAPUD web site will soon be updated. Therefore, LOAPUD's Board is mostly in compliance with AB 1234.<br>3) Special district board members must receive the required sexual harassment prevention two-hour training every two years per Gov. Code 53237 et. seq. LOAPUD posts certification of the prevention training on its website. Training is offered regularly. Each of the five Board members has completed this training. However, Director Sharman's training certificate is in progress and an updated certificate will soon be posted to the website. Therefore, LOAPUD's Board mostly complies with Gov. Code 53237 et. seq. |
| LOAPUD-Acc-6 | Current litigation and/or grand jury inquiry | The Butte County grand jury has not investigated Lake Oroville Area Public Utility District (Butte County). Lake Oroville Area Public Utility District is not currently involved in any litigation. This indicates that LOAPUD's management team is successfully using alternative dispute resolution methods. |

## 4.4: Growth and Population Forecasts

The growth and population projection for the affected area is a determination that LAFCo is required to describe, consistent with the MSR Guidelines from the Office of Planning & Research (OPR) as set forth in the CKH Act. This section provides information on the existing population

and future growth projections for the Lake Oroville Area Public Utility District. Historical and anticipated population growth is a factor that affects service demand. Appendix A at the end of this MSR/SOI Update provides detailed demographic and socio-economic information for The County of Butte. Economic forecasts for The County of Butte are provided in Appendix B.

### *4.4.1 Existing Population*

According to calculations, there are approximately 12,768 residents within the District boundaries as of 2020, assuming an average of 1.8 residents per registered voter. U.S. Census data was included in this calculation; however, census tracts do not directly correspond with District boundaries. The population data presented in Table 4-7 below provides a close approximation of the existing population for the District. Detailed information regarding population demographics in Butte County is provided in Appendix A.

Table 4-7: Existing Permanent Population, LOPAUD, 2020

| Name of District / Type | Population Boundary | Number of Registered Voters in Boundary | Population in SOI only |
|---|---|---|---|
| LOAPUD Lower Estimate | 11,839* | 7,099*** | 17,068* |
| LOAPUD Medium Estimate | 12,768** | 7,099*** | 17,068* |
| LOAPUD Higher Estimate | 14,046**** | 7,099*** | 17,068* |

Data Source:
* Calculated based on 2.13 persons per parcel average in unincorporated Butte County. It also incorporates 2020 CA DOF population data and 2021 GIS data.
**Calculated based on 1.7985 residents per registered voter
***Registered Voter data provided by Butte County Elections Office, Denlay, Keaton, August 9, 2021.
**** calculated based on 2.45 persons per connection (consistent with SFWPA, UWMP, 2021g).

Butte LAFCo's 2013 MSR Update for the LOAPUD estimated a population of approximately 12,000 people. Although LAFCo did not provide information about how its 2013 population estimate was calculated, it nevertheless is very close to the "Lower Estimate" shown in Table 4-7 above. Since 2013, the population in the District has fluctuated. The "Medium Estimate" is utilized in this MSR as the most probable population level.

### *4.4.2 Existing Population in SOI*

The population in LOAPUD's SOI and outside the District Boundary is estimated to be 17,068 people based on an average of 2.13 persons for each Assessor's Parcel.

### *4.4.3 Projected Population Growth*

Projecting the future population for a District is complicated due to varying annexation rates and census tracts that do not match District boundaries. Since the LOAPUD's boundary overlaps with the SFWPA boundary, these two districts will likely have the same future growth rate. Three

scenarios of the future growth estimates are shown in Table 4-8 below. The 0.76% and the 0.88% Average Annual Growth Rate (AAGR) (similar to a compound interest rate calculation) are the same rates used in Chapter 6 for the SFWPA. The AAGR is based on data from the California Department of Finance (DOF), which provides population projections at the County level, and the growth rate for the County of Butte is utilized to extrapolate population growth rates for both LOAPUD and SFWPA. By 2045, it is estimated that LOAPUD's existing boundary will encompass a population of 14,521 persons under the medium growth scenario. This represents an average annual growth rate of 0.82 percent between 2020 and 2045.

Table 4-8: Total Estimated & Projected Population (2020 – 2045)

| Year | Low Growth | Medium Growth | High Growth |
|---|---|---|---|
| 2020 | 11,839 | 12,768 | 14,046 |
| 2025 | 12,296 | 13,300 | 14,762 |
| 2030 | 12,770 | 13,854 | 15,516 |
| 2035 | 13,263 | 14,432 | 16,307 |
| 2040 | 13,775 | 15,033 | 17,139 |
| 2045 | 14,306 | 15,660 | 18,013 |
| | | | |
| Percent Increase 2020 to 2045 | 20.84% | 22.65% | 28.24% |
| Numeric Increase 2020 to 2045 | 2,467 | 2,892 | 3,967 |
| AAGR 2020 to 2045 | 0.76%* | 0.82%** | 1%*** |

*Data Sources:*

** AAGR is the Average Annual Growth Rate. Since LOAPUD has a geographic overlap with SFWPA, their growth rates will be similar. The 0.76% AAGR was utilized in Chapter 6 for SFWPA and is based on a population projection calculated as a percentage of The County of Butte's future growth as projected by the California Department of Finance. Demographic Research Unit. January 2021. Table P-1: Total Estimated and Projected Population for California and Counties: July 1, 2010 to July 1, 2060 in 1-year Increments.*

***AAGR of 0.82% is an average of the 0.76% and the 0.88% rate used for SFWPA 2020 UWMP. This information was used to establish the control total for BCAG's high forecast scenario for housing at 0.88 percent.*

****Consistent with LOAPUD's 2021 SSMP use of a 1 percent growth rate.*

The addition of 2,892 more people to the LOAPUD by 2045 (per the medium growth scenario) is possible as the area contains under-developed areas that could potentially be made available for more intensive residential development. Areas located near the City of Oroville have a moderate probability of developing over the next twenty years since the City continues to grow and expand. When LOAPUD staff consider future growth rates, they utilize a one percent population growth rate to consider projected future demand for wastewater services in 2025, 2030, 2035, and 2040 (LOAPUD, 2021b).

### *4.4.4 Existing Land Use*

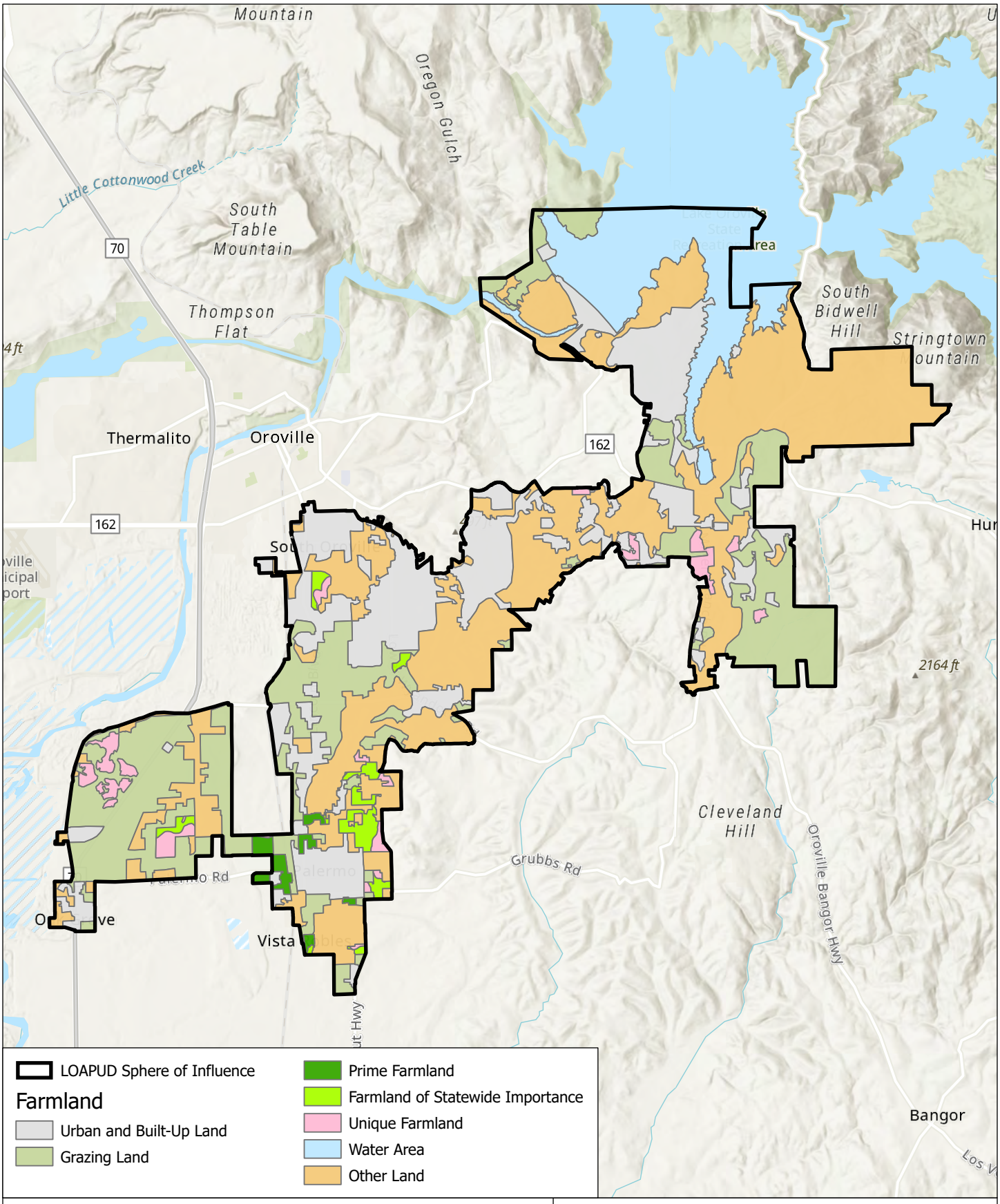
Land use is a factor that affects population growth and, therefore, demand for public services. However, the LOAPUD is not a land-use authority. Most of the LOAPUD's boundary area is located within unincorporated Butte County, and single-family residences are the predominant land use type. The Kelly Ridge and South Oroville neighborhoods contain medium-high-density residential uses. Several popular businesses are located along Oro Dam Boulevard, such as Jerry's Market and the Oroville Hospital. Several churches are located along Foothill Boulevard. In addition, there are several other independent local government agencies that operate within or near the LOAPUD boundaries, including five schools (Ishi Hills Middle School, Oroville Union High School, Oroville Elementary School, Palermo Elementary School, and Bangor Elementary School); the Butte County Mosquito and Vector Control District; Feather River Recreation and Park District; and the City of Oroville (SFWPA, UWMP, 2021g). Additionally, two water service providers (South Feather Water and Power Agency and Cal Water-Oroville) also have facilities located within the LOAPUD boundary area. Two casinos, both under federal trust status, are located within LOAPUD's service area and utilize LOAPUD services as listed below:

- Feather Falls Casino and Lodge, located near the intersection of Lower Wyandotte Road and Ophir Road, and
- Gold Country Casino and Hotel is located off Olive Highway and operated by the Tyme Maidu Tribe of Berry-Creek Rancheria, which holds a 90-acre reserve.

LOAPUD's boundary area is bordered on the west by the City of Oroville, to the north by Lake Oroville, and to the east by the farms and forest of unincorporated Butte County. Land uses in the unincorporated area surrounding the City of Oroville immediately to the east are largely urbanized. However, the topography gains elevation further east, and rural and forest uses predominate. The predominant land uses in the City of Oroville and its immediate surroundings include single-family residences, mobile home parks, and schools. Please refer to Chapter 3 for additional detail on land use within the City of Oroville.

<u>Open Space & Agriculture</u>

Butte LAFCo aims to protect open space and agriculture. For this MSR analysis, the spatial distribution of agricultural land was derived from the California Department of Conservation data. The types of farmlands within the PUD's boundary and SOI include grazing land, prime farmland, farmland of statewide importance, and unique farmland, as depicted in Figure 4-5 below. LAFCo has an interest in documenting the conversion of agricultural and open space lands to other land use types, such as residential use. However, the District's wastewater services do not play a role in these types of land-use conversions.




# Figure 4-5
# LOAPUD Farmland

*Map Date: 09/29/2021*
*Data Source: Butte LAFCO;*
*Butte County Association of Governments (2021)*

Butte County General Plan 2030

LOAPUD's boundaries and Sphere of Influence area are mostly unincorporated and subject to the land-use policies and regulations of the County of Butte. Most land-use decisions in unincorporated areas are initiated by private property owners and are secured via entitlements and land-use permits from Butte County and other agencies. In addition, the County plans for its future growth through its General Plan, which is a long-term comprehensive framework to guide physical, social, and economic development within the community's planning area. The General Plan contains a land-use map and associated policies that identify the types and intensities of permissible uses in relation to different land use designations. The Butte County General Plan 2030 was updated and adopted on October 26, 2010 (County Resolution No. 10-152) and Amended on November 6, 2012 (County Resolution No. 12-124). The Agricultural-Residential designation allows agricultural uses and single-family dwellings at rural densities. This area's farms and ranches receive water from various sources, including SFWPA raw irrigation water, rainfall, or groundwater, depending on the specific location.

The County's General Plan Housing Element was subsequently updated on August 26, 2014, through County Resolution No. 14-112. Butte County has opted to update its housing elements every eight years. The 2022 update to the Housing Element will aim to align with their Regional Transportation Plans (updated every four years) and the housing plans in the Regional Sustainable Communities Strategy (See BCAG). The County General Plan and associated Housing Element influence both the type and the rate of growth within the unincorporated areas, such as most of the District's boundary and SOI.

Figure 4-6 below provides a map that merges the County's General Plan Land Use Map with the City's General Plan Land Use Map through the use of crosswalks to graphically show the spatial relationships in land use designations. In the adjacent area, outside the LOAPUD's boundaries, land is primarily characterized by agriculture and open space with limited rural residential uses.

Oroville General Plan 2030

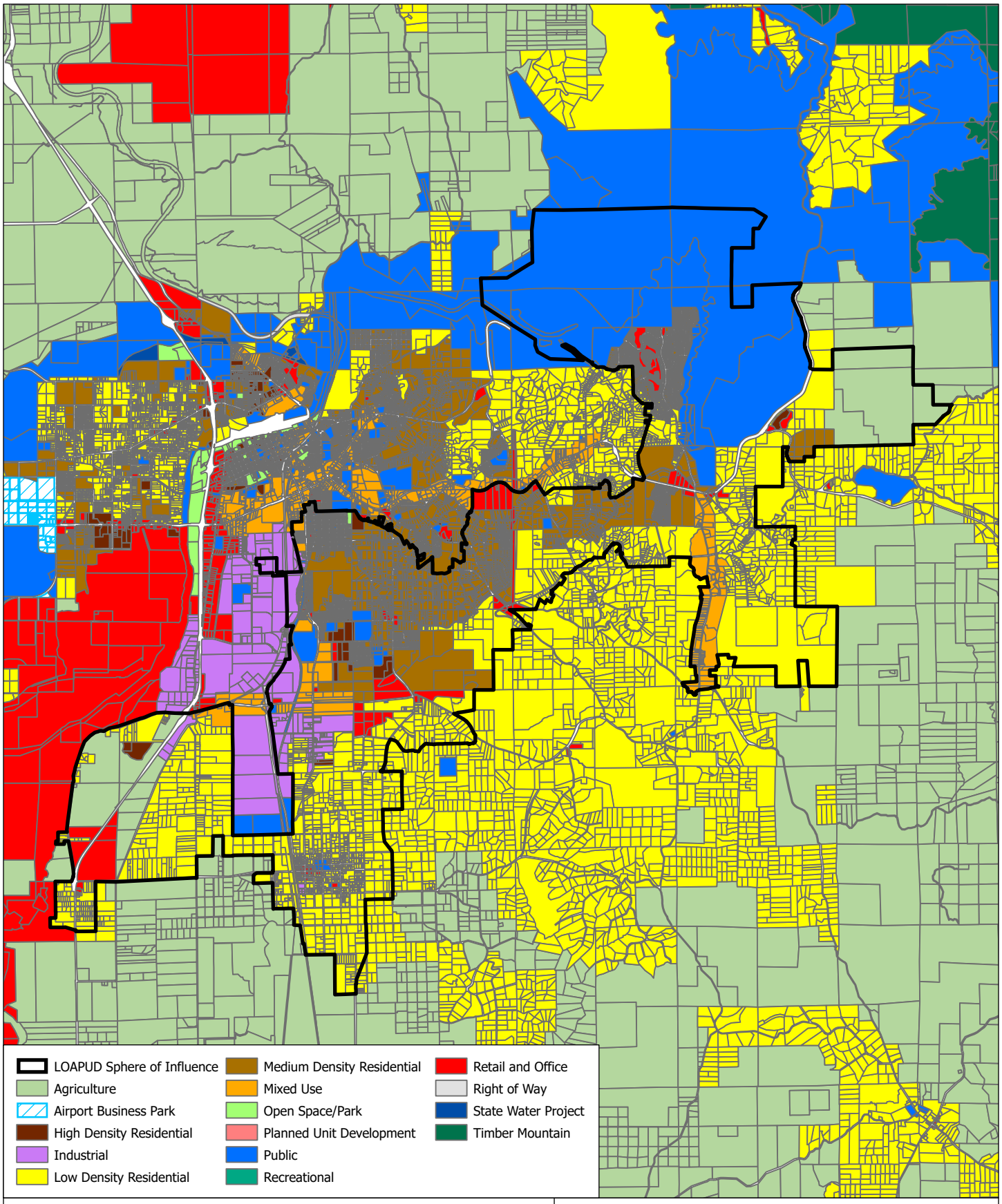
The Oroville 2030 General Plan was adopted in 2009 and updated in March 2015. The General Plan serves as a comprehensive guide for making decisions about land use, community character, circulation, open space, the environment, and public health and safety. The City General Plan contains guiding principles related to livability, enhanced mobility, a vibrant local economy, natural resources, environment, recreation, community infrastructure, health and safety, and an involved citizenry (COOR, 2015). The City's General Plan provides the legal foundation for the zoning ordinance and other ordinances. The General Plan recognizes the water and wastewater services provided to City residents by independent service providers, including Thermalito Water and Sewer District (TWSD), Lake Oroville Area Public Utility District (LOAPUD), South Feather Water & Power Agency (SFWPA), and California Water Service (Cal Water). The City's General Plan contains numerous policies regarding the provision of water and wastewater municipal services. To access the City's General Plan and to read a summary of the General Plan, please visit the City's website at: <*https://www.cityoforoville.org/services/planning-development-services-department/planning-division/general-plan-development-code-zoning-information*>. Additionally, The City of Oroville is currently in the process of updating its Housing

Element for the upcoming 2022-2030 Cycle. To receive updates or to participate in the Housing Element update process, visit the City's Housing Element update website: <*www.orovillehousingelement.com*>.

### *4.4.5 Potential Future Development*

Future population growth within the local community served by LOAPUD depends on zoning and General Plan policies and land use designations by the City of Oroville and the County of Butte. The hilly topography to the east somewhat restricts residential growth in that direction, partially due to the increased cost of installing infrastructure in hilly areas. Because of this topographic constraint, most of the residential growth expected to be serviced by the District will likely occur in the areas immediately surrounding the City of Oroville and to the south. An extensive amount of land is designated as low-density residential, as shown in Figure 4-7 below. Butte County is embarking on an update of its current General Plan, which may refine development requirements. Additionally, new state laws encouraging the construction of accessory dwelling units may promote infill development in some neighborhoods. For this MSR Analysis, it is assumed that the average annual future growth rate (AAGR) within the Agency boundaries will range from 0.76 percent to 0.88 percent, as listed in Table 4-8 above.

When a private property owner proposes a new development, the LOAPUD will generally coordinate with the respective City and County Planning Departments by providing information on the capacity of its wastewater infrastructure and collection rates to meet the area's current and future growth needs. Generally, the Lead Agency (such as the Planning Department for the City or County) will process applications for subdivisions and commercial developments and invite LOAPUD to comment on any service-related issues or associated environmental issues. New developments may request wastewater service from LOAPUD. For the purposes of discussion and comparison, the new proposed developments that were identified by SFWPA are listed here: Whisper Ridge; Lake Oroville Resort; Lake Wyandotte Campus; Rio D' Oro, and Las Plumas. LOAPUD staff has indicated that a few of these proposed developments will likely require wastewater collection service from the District (D. Goyer, personal communication, 2022).

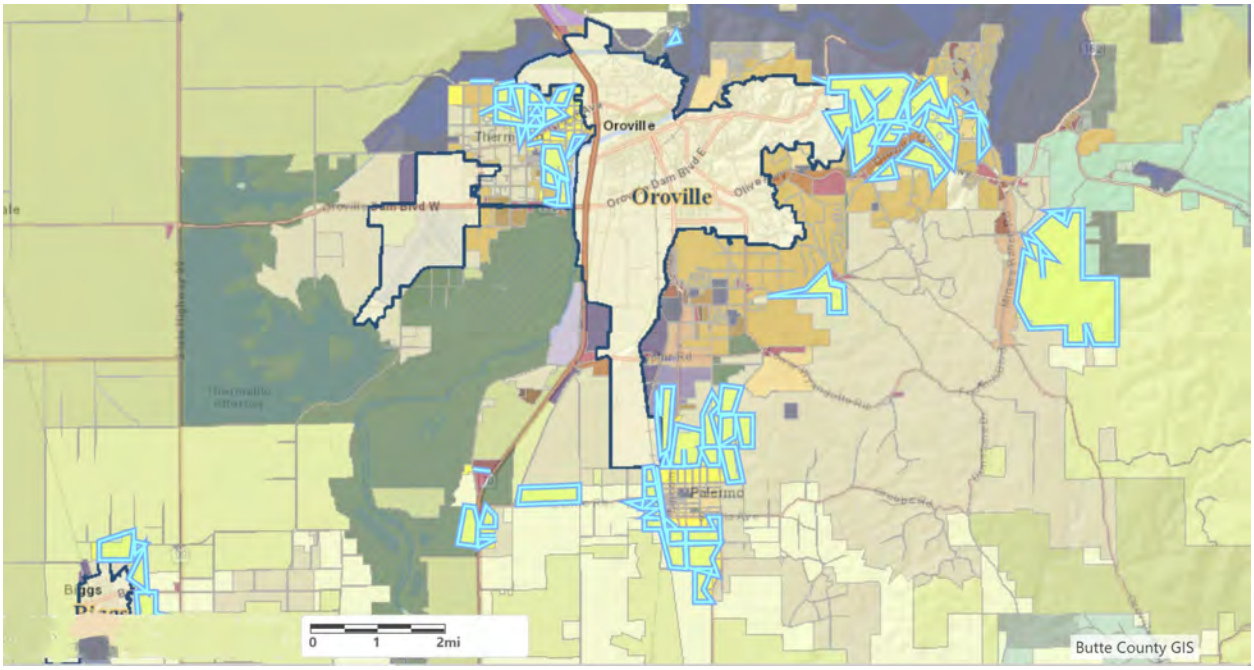



# Figure 4-6
# LOAPUD General Plan

*Map Date: 09/29/2021*
*Data Source: Butte LAFCO;*
*Butte County Association of Governments (2021)*

Butte County's Planning Department provides information services in the form of an interactive planning projects map, accessible from their website at: <*http://gis.buttecounty.net/public/index.html?viewer=dssearch*>. A visual search of this interactive map shows that several development projects have been proposed within LOAPUD's SOI, as shown in Figure 4-7 below.

Figure 4-7: Butte County Interactive Planning Projects Map




When a private property owner seeks wastewater collection and conveyance from LOAPUD to service new development, several criteria must be met, including the following:

- Project site must be within LOAPUD boundaries,
- Mutual approval of a Capacity Study by Developer, LOAPUD, and SC-OR,
- Preparation of plans and specifications in conformance with LOAPUD Improvement Standards and Policies,
- Acquiring and granting all necessary easements to LOAPUD,
- Payment of applicable fees,
- Mutual approval of a Development Agreement by a developer and LOAPUD Board of Directors, and
- Construction of sewer collection facilities.

Additionally, LOAPUD may require various other permits and fees prior to authorizing service.

### *4.4.6 Local Hazard Mitigation Plan*

The Butte County General Plan's Safety Element [which includes the Local Hazard Mitigation Plan (LHMP)] was adopted by the County Board of Supervisors on November 5, 2019 (Butte County OEM, 2019). Butte County, along with five incorporated cities and ten special districts, prepared the 2019 LHMP to make the County and its residents less vulnerable to future hazard events. The LOAPUD is the subject of a dedicated appendix (Appendix L) in the LHMP, and it lists the following potential local hazards:

- Climate Change;
- Dam Failure;
- Drought and Water Shortage;
- Earthquake and Liquefaction;
- Flood: 100-500-year;
- Floods: Localized Stormwater;
- Stream Bank Erosion; and
- Wildfire.

It is important to note that the LOAPUD has both formal and informal emergency response plans and practices. During past emergencies, the District has assisted neighboring service providers and other government agencies through mutual aid and other informal practices, as described in the following pages.

Flooding and Stormwater

Portions of the LOAPUD boundary area have been subject to historic flooding. The area is traversed by several stream systems and is at risk to a 1% annual chance of floods. Past flood occurrences have been noted by the District as follows:

- March 2016 Rain Event;
- December 2016-February 2017 Rain Event; and
- February 2017 Oroville Dam Crisis – While there were no physical damages, there was a loss of 3 business days for administrative functions and even more for some operations facilities.

Flooding has occurred within both the 1% and 0.2% annual chance floodplains and in other localized areas. Impacts to the LOAPUD from flooding can result in property damage, environmental and economic impacts to the District. Flooding can also cause severe inflow and infiltration issues within the sewer system. When the sewer system becomes inundated with surface water, capacity issues often arise. Pump stations can be maxed out and cause sewer overflows.

Additionally, stormwater can impact local roadways and bridges that provide a means of ingress and egress throughout the District. Localized flooding can also affect transportation routes that District personnel must take to reach District facilities. Flood debris can cause damage to

subsurface lines and maintenance holes. Localized erosion can undermine or deteriorate facilities. Pump stations may be required to perform at or above peak capacity for extended periods causing premature wear. LOAPUD's assets that could potentially be at risk during future flood events include subsurface lines and appurtenances, pump stations, administrative and plant operations structures. In the future, newer construction materials create opportunities for added robustness and should be evaluated for implementation in flood-prone areas as funding permits (Butte County OEM, LHMP, 2019).

Freezing, Winter Storms, and Thunder Storms

The District can experience temperatures below 32 F degrees during the winter months. In extreme situations, the temperature can drop into the teens. Snow, though rare, can occur within the District boundaries. Thunderstorms also occur. Winter conditions can cause downed trees and power lines, power outages, accidents, and road closures. District facilities can be affected by the loss of electricity. Any loss of power is of special concern due to the potential for extended interruption of LOAPUD critical facilities functions which could result in uncontrolled discharges of untreated sewage if all backup systems were to fail. The District maintains nine pump stations that vary in capacity and significance to overall District operations. Loss of power at these critical facilities triggers the requirement for 24-hour surveillance due to the type of backup systems (diesel generators) for pump station operation. In addition to the operations aspect, pump station monitoring systems are also affected unless power backup systems are in place. The District also maintains 58 residential (single and double) pump systems (electrical pumps) for a Septic Tank Effluent Pump (STEP) system. LOAPUD assets that could be at risk during these potential conditions include pump stations, including a communication network for pump station monitoring (SCADA). In the future, if new facilities are constructed, local building codes should be followed as applicable. Power backup systems currently in place for operations and communication sites should be evaluated and updated for hardening as funding permits. Special consideration shall be given to those future developments that are in areas served by lift stations due to the subsequent increase in flow to the facility, which could elevate the possibility and severity of uncontrolled discharges (Butte County OEM, LHMP, 2019).

Severe Weather: Extreme Heat

Extreme heat occurs in Butte County and LOAPUD annually during the summer months. Extreme heat is defined as temperatures that hover 10 degrees or more above the average high temperature for the region and last for several weeks. Vulnerable populations, such as the elderly and low-income populations, who might not be able to stay cool during extreme heat events, are particularly at risk. Extreme heat can also affect the operations of utilities and critical infrastructure, such as LOAPUD. Extreme heat can contribute to wildfire conditions and risk (Butte County OEM, LHMP, 2019).

Extreme heat is a concern to LOAPUD because it can lead to brownout conditions and power shutdowns during periods of high wildfire risk, such as red flag days. When power shutdowns occur during extreme heat conditions, critical utilities and services may be strained, limited, or interrupted, triggering the use of backup generators. Any loss of power is of special concern due to the potential for extended interruption of LOAPUD critical facilities and functions, which could

result in uncontrolled discharges of untreated sewage if all backup systems were to fail. The District maintains nine pump stations that vary in their capacity and significance to overall District operations. Loss of power at these critical facilities triggers the requirement for 24-hour surveillance due to the type of backup systems (diesel generators) for pump station operation. Not all pump stations have backup systems. In addition to the operations aspect, pump station monitoring systems are also affected unless power backup systems are in place. The District also maintains 58 residential (single and double) pump systems (electrical pumps) for a Septic Tank Effluent Pump (STEP) system. LOAPUD does have assets at risk, particularly its pump stations, including a communication network for pump station monitoring (SCADA) (Butte County OEM, LHMP, 2019). In the future, it is recommended that as new facilities are constructed, local building codes should be followed as applicable. Power backup systems currently in place for operations and communication sites should be evaluated and updated for hardening as funding permits. Special consideration shall be given to those future developments that are in areas served by lift stations due to the subsequent increase in flow to the facility, which could elevate the possibility and severity of uncontrolled discharges (Butte County OEM, LHMP, 2019).

Wildfire

Wildland fire is an ongoing concern for the District, with a high likelihood of future occurrence and a vulnerability rating of "medium." Fire season can begin in early spring and extend through late fall each year during the hotter, dryer months. Fire conditions arise from a combination of high temperatures, low air and fuel moisture content, vegetation accumulation, and high winds. Complicating the wildfire issue, PG&E shutdowns can occur during red flag days, which affects the District. In some instances, access to critical facilities must be maintained to monitor them properly. Any loss of power is of special concern due to the potential for extended interruption of LOAPUD critical facilities functions which could result in uncontrolled discharges of untreated sewage if all backup systems were to fail. The District maintains nine pump stations that vary in capacity and significance to overall District operations. Loss of power at these critical facilities triggers the requirement for 24-hour surveillance due to the type of backup systems (diesel generators) for pump station operation. Not all pump stations have backup systems. In addition to the operations aspect, pump station monitoring systems are also affected unless power backup systems are in place. The District also maintains 58 residential (single and double) pump systems (electrical pumps) for a Septic Tank Effluent Pump (STEP) system (Butte County OEM, LHMP, 2019). District staff has noted that past wildland fires have influenced staff and operations as follows:

- Camp Fire- Effects from evacuations and smoke;
- Wall Fire-Effects from evacuations and smoke; and
- 2008 fires in Cherokee and Bangor -Effects from smoke.

The District has physical assets which could potentially be at risk should a future wildfire occur, such as pump stations, including a communication network for pump station monitoring (SCADA), which would be at risk. In the future, as new infrastructure is constructed, local building codes should be followed as applicable. In addition, power backup systems currently in place for operations and communication sites should be evaluated and updated for hardening as funding

permits. Finally, special consideration shall be given to those future developments that are in areas served by lift stations due to the subsequent increase in flow to the facility, which could elevate the possibility and severity of uncontrolled discharges (Butte Co. OEM, LHMP, 2019).

### *4.4.7 Determinations for Growth and Population*

Based on the information included in Sections 4.4.1 through 4.4.6 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 4-9 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

Table 4-9: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA

| Number | Indicator | Determination |
|---|---|---|
| LOAPUD-Pop-1 | Existing Boundary. | LOAPUD's 8,582-acre boundary area is located mainly in the unincorporated County of Butte. A small portion of LOAPUD's boundary overlaps with the City of Oroville. The boundary area has an irregular shape and includes 5,558 assessor parcels. |
| LOAPUD-Pop-2 | Existing Sphere of Influence | The District's SOI was most recently updated on July 10, 2013. In addition to the 8,582-boundary area, the District's SOI covers 20,295 acres for a total of 28,877 acres. Given the large geographic size of the Sphere of Influence area, it is adequate for projected future needs. |
| LOAPUD-Pop-3 | Extra-territorial Services. | The LOAPUD does not provide extra-territorial services outside of its District boundary. |
| LOAPUD-Pop-4 | Projected population in years 2020 to 2045. | Approximately 12,768 permanent residents live within the LOAPUD boundaries. From 2020 to 2045, it is anticipated that an additional 2,892 persons are expected to reside within LOAPUD boundaries. This represents an overall 22.65 percent increase in the projected future population (or 0.82 percent per year). This will bring the total population within the District's service area to approximately 15,660 persons by the year 2045. |
| LOAPUD-Pop-5 | District boundaries contain a sufficient land area to accommodate projected growth. | Currently, the District's boundary area supports an average of 1.5 persons per acre, which is considered low population density. The County General Plan suggests that growth may occur within the LOAPUD boundary. LOAPUD's boundaries contain a sufficient land area to accommodate projected growth. |

| Table 4-9: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| LOAPUD-Pop-6 | Effect that the District's service provision will have on open space and agricultural lands. | LOAPUD's boundary and SOI include grazing land, prime farmland, farmland of statewide importance, and unique farmland. Most farms and agricultural land in the area rely on septic tanks and do not receive wastewater collection services. LOAPUD does provide wastewater collection service to state lands associated with Lake Oroville and surrounding open space, thereby protecting water quality. However, the provision of wastewater collection services generally has minimal effect on agricultural land and open space. |

## 4.5 Disadvantaged Unincorporated Communities

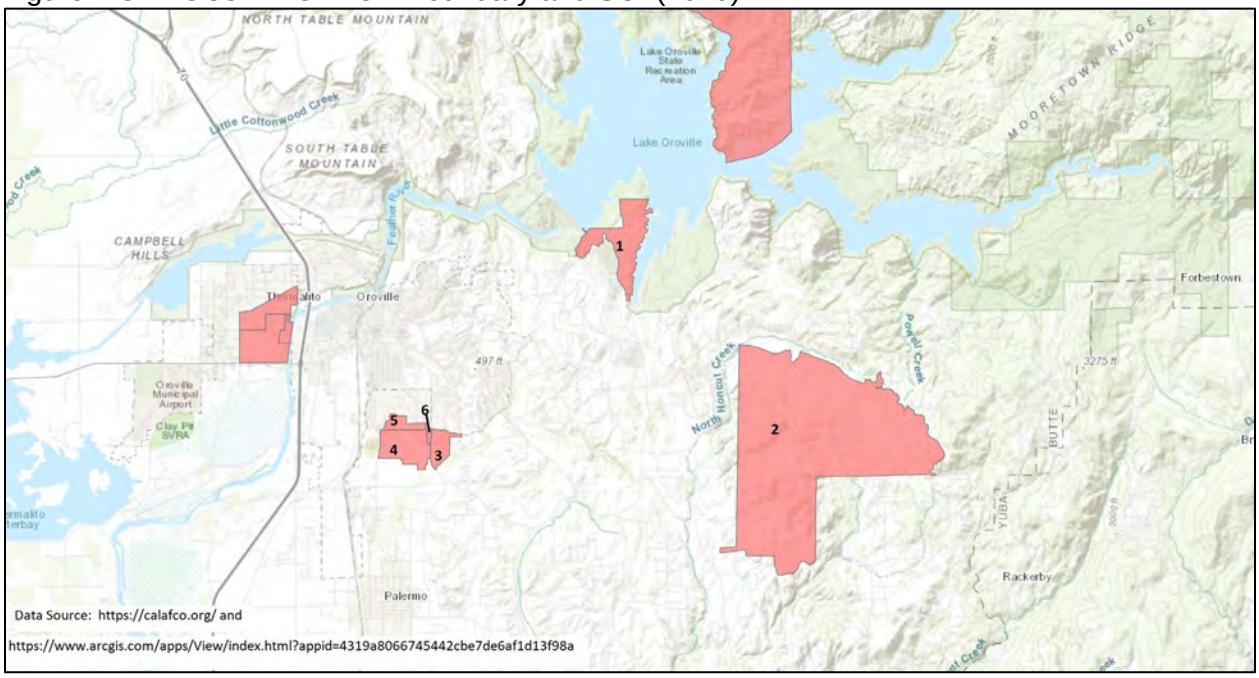
LAFCO's MSRs typically describe Disadvantaged Unincorporated Communities (DUCs). DUCs are a census "block" where the annual median household income (MHI) is less than 80 percent of the statewide MHI. The statewide annual median household income (MHI) in California for 2019 was $75,235 (U.S. Census, 2021). Eighty percent of the statewide MHI (2019) equals $60,188.00, the threshold used to determine which geographic areas qualify for classification as disadvantaged communities. The year 2019 is utilized as the baseline year because it corresponds to the CALAFCO map. Please note that since Oroville is an incorporated City, there are no DUCs within its boundaries. Part of LOAPUD's service area overlap with the City's boundary.

Disadvantage Unincorporated Communities (DUCs) are the topic of a mandated LAFCO determination. DUCs are defined as areas with the following features:

- Inhabited with ten or more homes adjacent or in close proximity to one another; and
- Either within a city's SOI, islands within a city boundary, or geographically isolated and have existed for more than 50 years; and
- The median household income is 80 percent or less than the statewide median household income.

As shown in Figure 4-8, there are six census "blocks" with median household income below the state threshold within the LOAPUD boundary and SOI. These areas are classified as DUC's.

Figure 4-8: DUCs in LOAPUD Boundary and SOI (2019)




The six census blocks are marked with numbers 1-6 in Figure 4-8 above and these numbers correspond to those listed in Table 4-10, below. Table 4-10 provides data for the year 2019 because that relates to the data CALFCO utilized to create the above map.

Table 4-10: DUCs in Census Blocks (2019)

| # on Map | Census Block # | 2019 MHI Threshold | Block MHI (2019) |
|---|---|---|---|
| 1 | Block Group 2, Census Tract 26.02 | $60,188 | $47,426 |
| 2 | Block Group 3, Census Tract 24 | $60,188 | $45,850 |
| 3 | Block Group 4, Census Tract 31 | $60,188 | $47,961 |
| 4 | Block Group 2, Census Tract 30.02 | $60,188 | $46,964 |
| 5 | Block Group 3, Census Tract 30.02 | $60,188 | $47,500 |
| 6 | Block Group 1, Census Tract 30.01 | $60,188 | $29,792 |

*Data Source: 2019 data from CALAFCO Statewide DUC Map using American Community Survey 5-Year Data (2015-19) Updated Mar 2022.*

Please note that newer data based on the 2020 U.S. Census is slowly being released. The statewide annual median household income (MHI) in California for 2022 is $88,930 (ESRI, 2022). Eighty percent of the statewide MHI (2022) equals $71,144.00. The 2020 U.S. Census also created spatial changes such that the geographic layout of census tracts and census blocks may have significantly expanded or contracted. Based on preliminary information from ESRI, it appears that a much larger area of the Oroville region will soon be classified as DUCs or DACs.

GIS layers for newly shaped census tracts and census blocks are not yet readily available in a useful format from ESRI.

Within the LOAPUD boundary, water service is provided to the DUCs by the SFWPA and CalWater. Outside the water providers' boundary, individual privately-owned wells provide groundwater as needed.

Wastewater collection services are available from the Lake Oroville Area Public Utility District (LOAPUD) to areas within its service area. The Sewerage Commission – Oroville Area (SC-OR) provides wastewater treatment to LOAPUD customers. Outlying areas rely on septic tanks for wastewater service. Fire protection services are provided by the City of Oroville only to those parcels located within the City. For most of the parcels within the LOAPUD boundary and SOI fire protection service is provided by two agencies. The portions of the SOI to the north, west, and the east (to some extent) are provided fire protection by the Butte County Fire Department (BCFD)/CALFIRE. Butte County Fire/CALFIRE Department provides services to approximately1,550 square miles of Butte County and approximately 102,000 unincorporated residents from 42 fire stations. CALFIRE also contracts with the City of Oroville to provide fire protection services to the community.

DUCs in the LOAPUD SOI

Unincorporated communities/neighborhoods within the existing LOAPUD SOI include the following: Rio d'Oro Specific Plan area; Power House Hill Road/Lone Tree Road area; Palermo; Miners Ranch Road area; and Stringtown Mountain Specific Plan area (LAFCo, 2013). Most parcels within the SOI rely on individual septic systems or other small on-site wastewater disposal systems. LAFCo's 2013 SOI Update Report found that "Large portions of LOAPUD's updated SOI are identified as disadvantaged unincorporated communities, including the unincorporated community of Palermo. The disadvantaged unincorporated communities within LOAPUD's SOI will require District sanitary sewer services in the future to replace poorly performing or failing septic systems or to facilitate new development. Therefore, there is a present and probable need for public sanitary sewer services within the areas designated as disadvantaged unincorporated communities in LOAPUD's updated SOI." (LAFCo, 2013).

For example, the unincorporated community of Palermo is located within LOAPUD's SOI and is south of the City of Oroville. Palermo has a population of 5,000 residents residing on 490 assessor parcels. Palmero qualifies as a severely disadvantaged community. In Palmero, all parcels are served by on-site septic systems for wastewater treatment and disposal. Most of the parcels use individual water wells for their potable water supply. Continued septic system failures, flooding, and high groundwater levels have resulted in cross-contamination of the existing wells and possible contamination of the groundwater aquifer. To remedy this public health situation, Butte County and the State of California have proposed the Palermo Clean Water Consolidation Project and are pursuing 100% grant funding for this project. An Initial Study/Proposed Mitigated Negative Declaration written consistent with the California Environmental Quality Act was released for public comment in December 2021. Since Palmero is within the sphere of influence for LOAPUD, the District may be asked to play a role in the process of developing a solution.

All LOAPUD boundary and SOI areas receive essential municipal services of water, wastewater, and structural fire protection (or acceptable private alternatives). Therefore, no DUCs within the existing LOAPUD boundary or SOI lack essential public services, and no public health or safety issues have been identified.

Disadvantaged Tracts for Grant Applications

Many state and federal agencies award grants, loans, and other funding to local agencies based on socio-economic data associated with census tracts. A census tract is a geographic area defined by the United States Census Bureau. The geographic size of census tracts varies widely depending on the population density; a census tract typically has around 4,000 residents but can range from 1,200 to 8,000. There are nine census tracts within the LOAPUD sphere of influence, as shown in Figure 4-9. Eight of these Census Tracts have MHIs below the $60,188 threshold and therefore are classified as disadvantaged unincorporated communities as listed in Table 4-11 below. Census Tract 26.01 has a MHI that exceeds the threshold ($66,750).

**Table 4-11: Median Household Income by Census Tract**

| Census Tract | Population (2019) | Square Miles | Median Household Income |
|---|---|---|---|
| 24.02 | 3,555 | 239.29 | $40,071 |
| 25 | 5,353 | 54.94 | $37,054 |
| 26.01 | 2,508 | 7.78 | $66,750 |
| 26.02 | 3,661 | 9.93 | $48,090 |
| 30.01 | 3,375 | 0.89 | $29,235 |
| 30.02 | 3,587 | 6.62 | $41,377 |
| 31 | 4,671 | 4.75 | $52,258 |
| 32 | 4,261 | 15.31 | $40,318 |
| 33 | 5,246 | 119.58 | $47,411 |

Source: US Census, 2019 American Community Survey 5-Year Estimates and *https://tigerweb.geo.census.gov/tigerweb/*

### *4.5.1 Determinations for Disadvantaged Unincorporated Communities*

Based on the information included in Sections 4.5 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a Municipal Service Review. The determinations listed below in Table 4-12 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

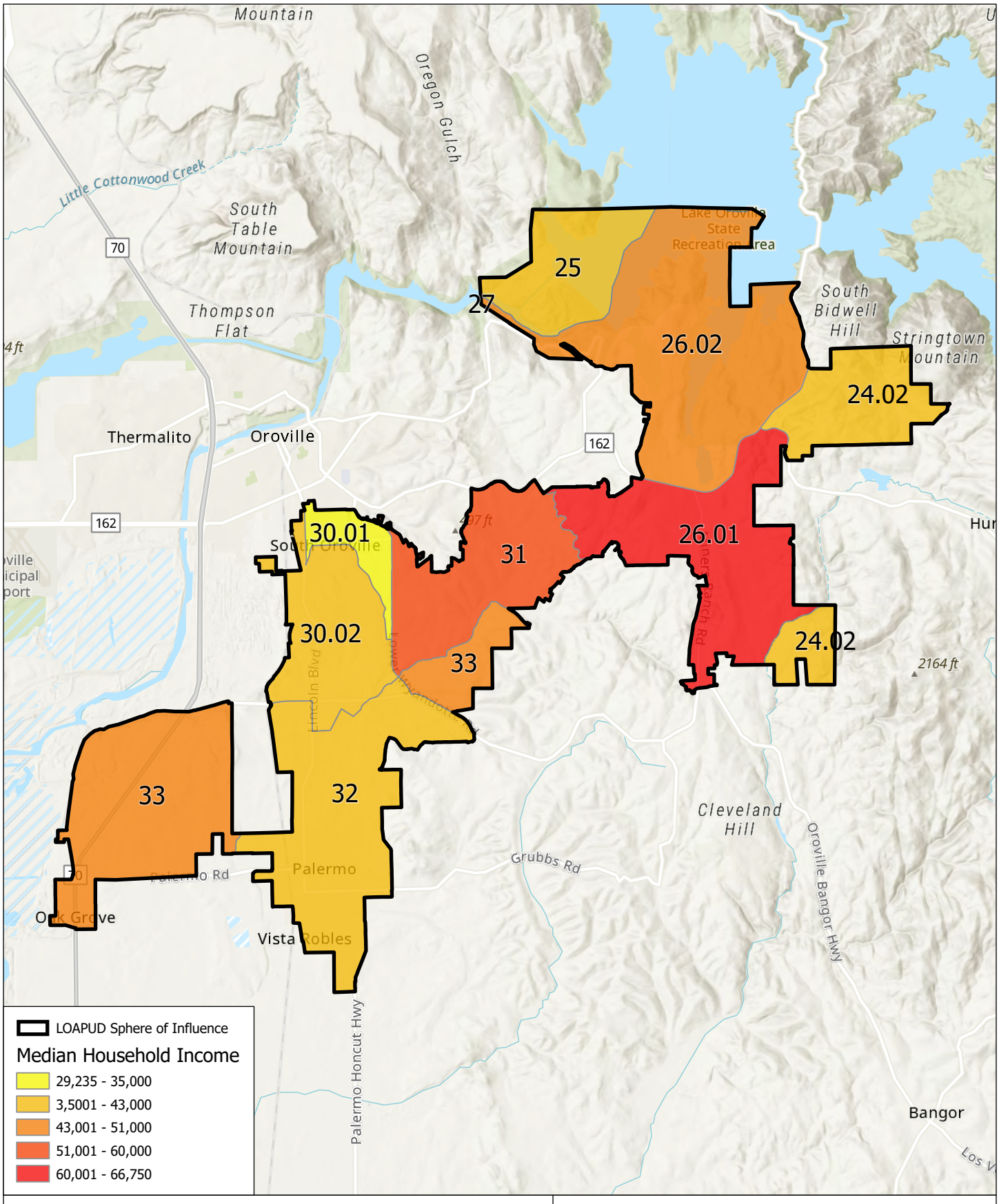



**Figure 4-9**
**LOAPUD Census Tracts**

*Map Date: 09/26/2021*
*Data Source: Butte LAFCO; US Census Bureau*
*American Community Survey (ACS)*

Table 4-12: MSR DETERMINATIONS: LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE

| Number | Indicator | Determination |
|---|---|---|
| LOAPUD-DUC-1 | The median household income is identified. The DUC threshold MHI (80 percent of the statewide MHI) is clearly stated. The MHI in the Agency's boundary is described. | DUCs have a MHI of less than the $60,188.00 threshold for 2019. There are six census "blocks" with median household income below the state threshold within the LOAPUD boundary and SOI. These areas are classified as DUC's. Additionally, eight of the nine census tracts encompassing the LOAPUD boundary and SOI are classified as DUCs. |
| LOAPUD-DUC-2 | Potential DUCs are considered. The provision of adequate water, wastewater, and structural water or wastewater services to DUCs is considered. | Within LOAPUD's boundary, identified DUCs receive essential water, wastewater, and structural fire protection services. However, within LOAPUD's SOI, the community of Palmero has experienced water quality contamination resulting in a potential health or safety issue that requires attention. LAFCo's 2013 SOI Update Report found that "Large portions of LOAPUD's updated SOI are identified as disadvantaged unincorporated communities, including the unincorporated community of Palermo. The disadvantaged unincorporated communities within LOAPUD's SOI will require District sanitary sewer services in the future to replace poorly performing or failing septic systems or to facilitate new development. Therefore, there is a present and probable need for public sanitary sewer services within the areas designated as disadvantaged unincorporated communities in LOAPUD's updated SOI". |

# 4.6: Wastewater Services

## 4.6.1 Collection and Conveyance - Overview

This Section evaluates the efficiencies of services provided by the Lake Oroville Area Public Utility District (LOAPUD) and the associated infrastructure needs, especially as they relate to current and future users. The District owns and operates a sanitary sewer collection and conveyance system that primarily serves the unincorporated areas in east and south Oroville. LOAPUD's wastewater collection system includes approximately 77 miles of pipelines, 1,550 individual maintenance holes, and nine lift stations. The sewer system conveys wastewater to a treatment plant owned and operated by the Sewerage Commission - Oroville Region (SC-OR). SC-OR was created in 1973 under a joint powers agreement (JPA) between the City of Oroville (COOR), Thermalito Water and Sewer District (TWSD), and the Lake Oroville Area Public Utility District. The individual agencies maintain and operate their own wastewater collection systems that discharge into the SC-OR plant. This Chapter focuses only on the wastewater collection and conveyance provided by the LOAPUD. Wastewater infrastructure needs and deficiencies are evaluated in terms of supply, capacity, condition of facilities, and service quality.

## 4.6.2 Collection System Services

The primary service provided by the District is wastewater collection and conveyance to the SC-OR treatment plant. The District has 5,733 sewer connections, as detailed in Table 4-13 below. LOAPUD functions as a satellite system to the SC-OR wastewater treatment plant, which provides treatment and disposal of wastewater. One LOAPUD connection may serve many individual customers. The LOAPUD estimates its customers include two industrial connections and 112 commercial connections, such as casinos, restaurants, bars, retail, office, food processing, schools, and churches (LOAPUD, 2021a). In addition, LOAPUD provides sewer service to most parcels within the District's service area. However, a few isolated parcels continue to use private individual septic tanks (Butte County OEM, LOAPUD, November 2019).

Table 4-13: Number of Customers for Key Municipal Services

| **Service** | **Number of Customers in 2013** | **Number of Customers in 2021** |
|---|---|---|
| Wastewater Collection & Transmittal | 4,436 connections | 5,733 connections |
| Data Source | (LAFCo, 2013) | (LOAPUD, SSMP 2021b). |

Between the years 2013 to 2021, LOAPUD saw an increase of 1,297 wastewater connections, as listed in Table 4-13 above. This represents an average increase of 162 connections per year.

The LOAPUD Board of Directors has adopted several policies and ordinances governing the operation of this utility. The LOAPUD Manual of Board Policies includes adopted Policy No. 3065, Sewer Use Regulations (adopted January 11, 1989, and amended June 14, 2005) regarding the use of public sewers within the Lake Oroville Area Public Utility District. This Policy specifically: (1) prohibits illicit discharges to the system; (2) requires that the system is properly constructed; (3) ensures access to system elements for inspection and maintenance; (4) limits the discharge of fats, oils, and grease; and (5) provides for enforcement (LOAPUD, SSMP, 2013).

Water conservation programs such as low-flow toilet rebates, leak detection pills, etc., can reduce water use and the associated amount of wastewater generated. To further improve safety and service, the California Plumbing Code requirements for Backflow Prevention Devices are implemented by Board Policy #6010, Development Improvements Standards. Backflow prevention is part of LOAPUD's Rules and Regulations No. 5.03.2.5 Backwater Valves. This requires installing a backwater valve that may prevent wastewater from backing up through the sewer service into the structure being served. Installation and maintenance of backwater valves are the sole responsibility of the Owner. The District is not responsible for damage beyond the District's control, including backflow of sewage into any residential, multiple-unit, commercial, industrial, or public-use buildings. (See also §6.)

Treatment and Disposal: SC-OR is responsible for wastewater treatment and disposal, as described in Chapter 5. LOAPUD is a member of the SC-OR JPA.

Water Recycling: Since the LOAPUD does not operate the wastewater treatment plant, it does not have direct access to treated wastewater that could be utilized as a part of a water recycling program. However, LOAPUD is a member of the SC-OR JPA and could potentially participate in water recycling in the future. In addition, within LOAPUD's boundaries, there are numerous land-uses that could benefit from non-potable water, such as street tree landscaping.

Sewer EPA Categorical Users: Environmental Protection Agency (EPA) categorical users are significant industrial users regulated under a local pretreatment ordinance. Since the LOAPUD does not operate the wastewater treatment plant, it does not have direct involvement with this regulation. SC-OR is the lead agency for industrial pretreatment. Additional details about EPA Categorical Users are provided in Chapter 5.

Wastewater Collection & Conveyance Service to SOI

LOAPUD does not currently provide wastewater collection services to areas within its SOI. Parcels within the SOI rely on individual septic systems. These septic systems are regulated by the Butte County Environmental Health Division, and communications are a major part of the coordination between LOAPUD and Butte County Environmental Health Division. Additional data about septic systems were not readily available. Although additional annexations of land to the LOAPUD boundary have the potential to increase demand for public services, most future annexations would be included within the County's or the City's General Plan. Additionally, any new annexations would be studied on a case-by-case basis with a full review of anticipated demand, mitigation measures, and needed infrastructure upgrades. All new development in the LOAPUD must provide for its appropriate share of infrastructure capacity.

### *4.6.3 Plans*

The LOAPUD has two plans relevant to the current management of its wastewater conveyance and transmission service, a 2021 Sewer System Management Plan and a 2021 Sewer System Master Plan, as described in the following paragraphs. Please note that LOAPUD is currently working with the members of the JPA to implement the Fats, Oils, & Grease (FOG) program to ensure that program is run consistently correctly throughout the area (personal communication, D. Goyer, 2022).

Sewer System Management Plan (2021)

LOAPUD originally adopted its Sewer System Management Plan on July 14, 2009, and subsequently updated it on July 14, 2013. The most recent update to the Management Plan was in September of 2021. The Sewer System Management Plan was updated to maintain compliance with State Water Resources Control Board Orders No. 2006-0003-DWQ and No. 2013-0058-EXEC. The Sewer System Management Plan guides the proper management, operation, and maintenance of all parts of the District's sanitary sewer system. The Management Plan aims to reduce and prevent sanitary sewer overflows (SSOs) and mitigate SSOs if they occur. The Sewer System Management Plan (2020) is not posted as an individual item on the LOAPUD website, and this is an issue that needs improvement. The Management Plan is quite detailed and contains the following elements:

- Spill Response Flow Chart
- Chain Of Communication
- Summary Of District Policies
- Operations And Maintenance Plan
- Personnel Training Description
- Sewer Operations and Maintenance Plan (Section IV)
- Information Management, Including Mapping And Record Keeping
- Rehabilitation and Replacement Plan
- Sewer System Map
- Equipment List
- Overflow Emergency Response Plan, including
    - Spill Prevention Procedures
    - Public Advisory Procedure
- Fats, Oils, and Grease Control Plan
- *Data Source: LOAPUD, 2013*

2021 Sewer System Master Plan

The 2021 Sewer System Master Plan (SSMP) functions as a planning tool to assist in providing adequate wastewater collection capacity for the community within LOAPUD's boundaries and SOI. The contents of the 2021 SSMP include the following:

- Existing and projected wastewater flows, including wastewater generation factors and projections of future additional flows (Chapter 2).

- Inventory of existing pipelines and lift stations, discussion of infiltration/inflow, and pipeline replacement history (Chapter 3).
- Master plan includes the results of a computer analysis of the system pipeline capacities and sizing, pipe replacement needs, other new conveyance facility needs (Chapter 4).
- Capital Improvement Program (CIP) for the replacement of existing facilities as needed and future construction of new facilities.
- Sewer Overflow Prevention and Response Plan (Section VI).
- (Data Source: LOAPUD, SSMP, 2021b)

A copy of LOAPUD SSMP can be obtained at the District Office, 1960 Elgin Street, Oroville, CA.

### *4.6.4 Water Quality Database Reports*

Overview

This section provides the results of database searches on water quality for the LOAPUD. Compliance of wastewater agencies with water quality regulations promulgated by the State Water Resources Control Board (State Water Board) and the Central Valley Regional Water Quality Control Board (Regional Water Board) is important to LAFCo. This information is especially important since, during a drought, a community can't rely upon "dilution" as a solution to pollution. In addition, when local water supplies are scarce, keeping that supply at a high level of water quality is desirable. This means that pollution should be minimized, and wastewater spill events are highly discouraged and can result in permit violations.

California Integrated Water Quality System Project

The California Integrated Water Quality System (CIWQS) is a relational database used by the State and Regional Water Boards to track information about permit violations and enforcement activities. LOAPUD has permits from the Central Valley Water Quality Control Board and is classified as a "Permittee." Permittees are allowed to self-report their permit violations to the CIWQS. A five-year term from January 1, 2016, to December 31, 2021, was queried in the CIWQS database. The database query results show that LOAPUD had no recorded regular water quality violations/enforcement actions during this timeframe (SWRCB, 2022). The CIWQS Facilities-at-a-Glance report lists seven LOPUD facilities, as listed in Table 4-14 below, and there are no red flags associated with any of these facilities (SWRCB, 2022).

Sanitary Sewer Overflow Database

The State Water Board maintains a Sanitary Sewer Overflows (SSO) database from public/permitted systems and private lateral sewage discharges. This database is a specific module in the CIWQS. The State Water Board formalized the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003 (SSS WDRs), on May 2, 2006. All public agencies that own or operate a sanitary sewer system comprised of more than one mile of sewer pipes that convey wastewater to a publicly owned treatment facility must be covered under the SSS Waste Discharge Requirements. The SSS Waste Discharge Requirements require enrollees, among other things, to maintain compliance with the Monitoring and Reporting Program. A seven-year term from January 1, 2015, to December 31, 2020, was

queried in the CIWQS-SSO database. The results of the database queries regarding LOAPUD are listed below in Table 4-14. The results show that during the seven-year study period, LOAPUD had a total of two reported sanitary sewer overflow events. The years 2015 and 2020 each had one reported spill.

The largest spill occurred on June 14, 2015, with a total volume of 188 gallons and was classified as a “Category 3”. Category 3 refers to any sewage discharge that is less than 1,000 gallons and that has not reached surface water or drainage channels. The spill on June 14, 2015, was caused by a debris build-up that caused a backup. Upon investigation, it was determined that the debris was composed of grease and fish cleaning waste that contributed to the partial blockage. The wastewater managed to flow off the paved roadway to an open, unpaved area of the roadway and leached into the ground. The second sewer overflow event was 108 gallons spilled on March 28, 2020, and was also classified as “Category 3”. The spill was due to the buildup of debris wipes and non-dispersible material. The spill's total volume was 108 gallons, but the majority of the spill was located inside structures. Both overflow events did not reach surface water, nor did they reach drainage channels. LOAPUD has a Sewer Overflow Prevention and Response Plan (Section VI) as part of their Sewer System Master Plan (LOAPUD, SSMP, 2021b).

### *4.6.5 Permits*

The District is considered an ‘Enrollee’ per the State Water Resources Control Board Order No. 2006-0003-Dwq Statewide General Waste Discharge Requirements for sanitary sewer systems (LOAPUD, 2021a).

### *4.6.6 Existing Storm Water Drainage / Flood Protection*

Stormwater sometimes influences the collection and conveyance of wastewater because stormwater can infiltrate into pipes or other facilities. For example, stormwater can overtop maintenance holes. Within the LOAPUD, storm drain facilities are owned and maintained by Butte County (LOAPUD, 2021a). LOAPUD does not provide any stormwater services, nor does it have any stormwater facilities. The District aims to protect its wastewater infrastructure during stormwater events.

| Table 4-14: Facilities-At-A-Glance Report CIWQS | | | | |
|---|---|---|---|---|
| **Place ID** | **Place Name** | **Agency** | **Place Address** | **Description** |
| S800432 | Villa Verona Sewer Pipeline | LOAPUD | Lower Wyandotte Road to Claremont Drive, Oroville, CA, 95966 | Construction project with Order No. 2009-0009-DWQ and WDID No. 5R04C361821 |
| S800043 | Lincoln Crossing Pipeline Replacement Mount Ida Rd Pipeline Replacement Vila Verona Mainline Phase | LOAPUD | Oroville, CA, 95966 | Construction project with Order No. 2009-0009-DWQ |
| S630309 | State Line Sewer Replacement 2006 | LOAPUD | Throughout southern and eastern Oroville. Oroville, CA, 95966 | Construction Project with Order No. 99-08DW and WDID No. 5R04C340434 completed on 04/05/2006 |
| 631283 | Lake Oroville Area PUD Collection System | LOAPUD | 1960 Elgin Street, Oroville, CA, 95966 | Database entry for the entire collection system. |
| 234759 | Kelly Ridge Bypass Sewer System | LOAPUD | Sections 1&12, T19N, R4E Oroville, CA, | 401 Certification per regulation ID No. 170833 with WDID No. 5A04CR00053 on 05/23/2003 |
| S237236 | LOAPUD Sewer Sys Improvement | LOAPUD | Oak Knoll Way Oroville, CA, 95966 | Construction Project with Order No. 2009-0009-DWQ and WDID No. 5R04C321226 |
| 756129 | Villa Verona Mainline Phase 1 | LOAPUD | V6 Road-Oroville-Bangor Highway along Wyandotte Road. Oroville, CA. | 401 Certification under regulatory measure 375550 and WDID No. 5A04CR00176. Expired 07/09/2014 |
| *Data Source: State Water Resources Control Board. California Integrated Water Quality System. On-line Database. Retrieved on 25March2022 from: <https://ciwqs.waterboards.ca.gov/ >.* | | | | |

Table 4-15: Lake Oroville Area Public Utility District

Sanitary Sewer Overflow Database

| SSO Event ID | Region | Responsible Agency | Collection System | SSO Category | Start Date | SSO Address | SSO Volume | Volume of SSO Recovered | Volume of SSO that Reached Surface Water | SSO Failure Point | Spill Cause | Final Spill Destination | WDID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 816289 | 5R | LOAPUD | LOAPUD CS | Category 3 | 2015-06-14 09:22:00.0 | Bidwell Canyon Road | 188 | 0 | 0 | Gravity Mainline | Debris-General | Unpaved Surface | 5SSO10827 |
| 858337 | 5R | LOAPUD | LOAPUD CS | Category 3 | 2020-03-28 09:00:00.0 | 5309 Mount Ratchel Court | 108 | 100 | 0 | maintenance hole | Debris wipes/ Non-dispersibles | Building Or Structure | 5SSO10799 |

Data Source: *State Water Resources Control Board. California Integrated Water Quality System. On-line Database. Retrieved on 25March2022 from: <https://ciwqs.waterboards.ca.gov/ >.*

# 4.7: Infrastructure and Public Facilities

Infrastructure owned and maintained by the LOAPUD is critical to its provision of wastewater collection and conveyance services. In this section, LOAPUD's infrastructure is evaluated in terms of capacity, condition of facilities, maintenance, and service quality with correlations to operational, capital improvement, and future needs. A summary of the District's existing infrastructure is provided in Table 4-16 below.

Table 4-16: Critical Facilities, Infrastructure, and Other Agency Assets

| Name of Assets | Facility Type | Replacement Value | Hazard Info |
|---|---|---|---|
| Piping, Maintenance hole, Lampholes, Cleanouts, Subsurface Lines | Subsurface Lines | 13,865,710.00 | Flooding, Earthquake, Wildfire, Severe Weather, Dam Failure |
| Office Buildings, Maintenance Buildings, Etc. | General Admin and Plant Facility | 3,755,971.00 | Flooding, Earthquake, Wildfire, Dam Failure, Severe Weather, Power Outages |
| Pump Stations | Collection Facility | 4,434,824.00 | Flooding, Earthquake, Wildfire, Dam Failure, Severe Weather, Power Outages |
| **Total** | | **$22,056,505.00** | |

Source: Butte Co. OEM, LHMP, Appendix L, Nov 2019

### *4.7.1-Administrative Facilities*

LOAPUD's administrative office, system monitoring, control office, and maintenance shop are located at 1960 Elgin Street in the unincorporated area of Oroville. The District has equipment storage and gas pumping facility at 1945 Elgin Street.

### *4.7.2-Land*

LOAPUD owns a total of 2.87 acres of land, which is associated with key infrastructure, as listed in Table 4-17 below.

| Table 4- 17: Parcels of Land Owned by LOAPUD | | | |
|---|---|---|---|
| **Site Address** | **Use** | **Type** | **Size (acres)** |
| Lincoln Blvd / Elgin Street | Vacant | Parcel | 0.44 |
| 1960/1970 Elgin Street | Office | Parcel | 0.27 |
| 1946 Elgin Street | Yard | Parcel | 0.16 |
| 1936/1938 Elgin Street | Yard | Parcel | 0.11 |
| 1945 Elgin Street | Yard | Parcel | 0.72 |
| 1945 Elgin Street | Yard | Parcel | 0.12 |
| 1945 Elgin Street | Yard | Parcel | 0.12 |
| Lincoln Blvd / Virginia Avenue | Vacant | Parcel | 0.01 |
| 4788 Royal Oaks Drive/ Royal Oaks Lift Station | Royal Oaks Lift Station | Parcel | 0.13 |
| Hanging Tree Lift Station | Hanging Tree Lift Station | Parcel | 0.28 |
| 5900 Lower Wyandotte Road / Mooretown Lift Station | Mooretown Lift Station | Parcel | 0.09 |
| Vista Del Cerro Lift Station | Vista Del Cerro Lift Station | Parcel | 0.04 |
| 4879 Lower Wyandotte road - Unused Property | Vacant | Parcel | 0.28 |
| Kelly Ridge Road - Unused Property | Vacant | Parcel | 0.1 |
| **Total** | | | **2.87** |
| *District owned property by APN: 035-144-021, 022 & 023, - 035-140-004 & 005, - 069-060-040, - 069-090-029, - 069-590-040, - 079-110-038, - 078-130-014 [*10 in total] | | | |
| *Data Source: Personal communication, LOAPUD, Kelly Hamblin, 2021* | | | |

### *4.7.3- Collection and Conveyance Infrastructure*

LOAPUD's wastewater collection system includes 77 miles of pipelines, 1,550 individual maintenance holes, and nine lift stations, as listed in Table 4-18 below (LOAPUD, 2021a).

| **Table 4-18: Collection System Infrastructure Components** | |
|---|---|
| Pipeline for Collection System | 65.9 miles |
| Pipeline for Interceptor | 11 miles |
| Force Mains | 4.5 miles |
| Pump Stations | 9 |
| Maintenance holes for Collection System | 1,550 |
| Maintenance holes for Interceptor | 203 |
| Individual STEP systems | 304 |
| Data Source: LOAPUD SSMP 2021b | |

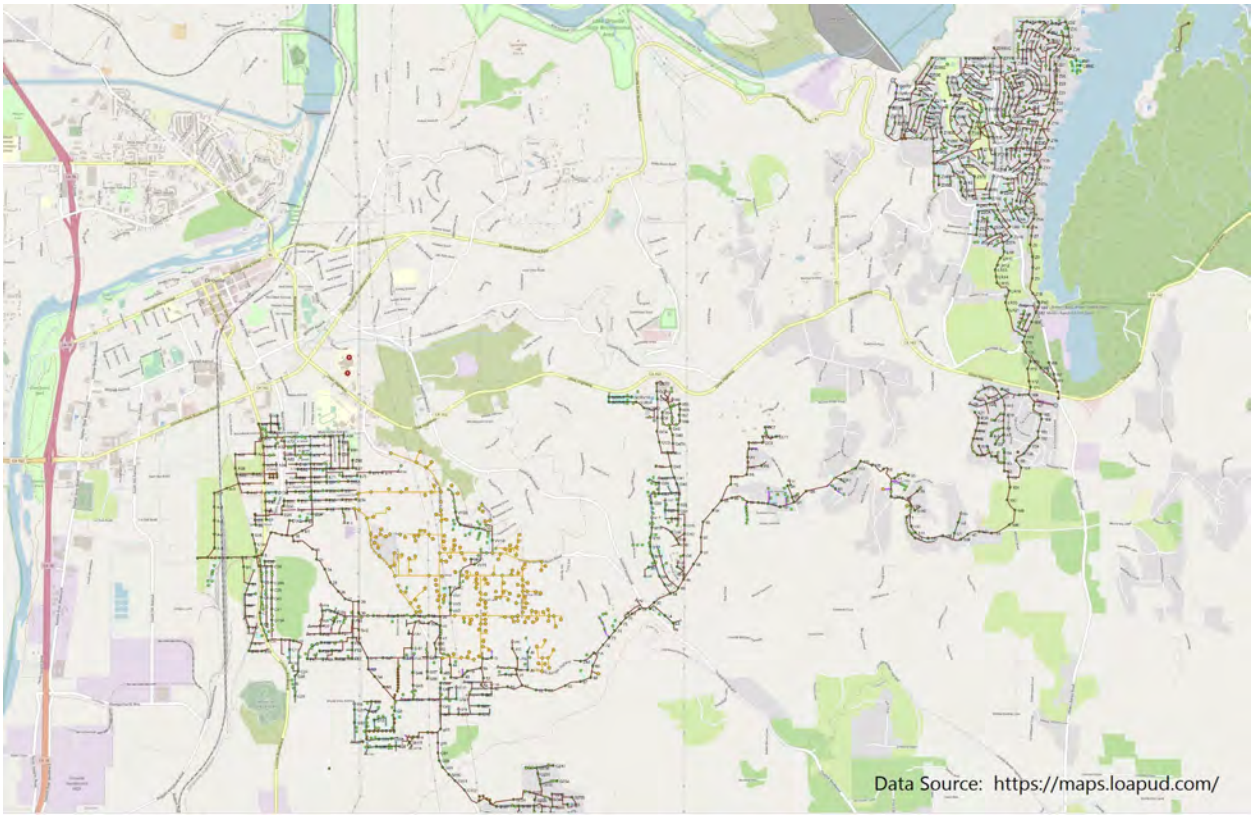
The gravity sewer pipeline for the collection system and the interceptor (77 miles total) is comprised of pipes sized from three inches to 30-inches in diameter. The pipes are constructed of a range of materials, including steel, concrete clay, asbestos-cement, ductile iron, and polyvinyl chloride. Each type of pipe has an estimated lifespan, as listed in Table 4-19 below.

Older pipe joint materials, such as concrete mortar or lead, may contribute to inflow infiltration. Newer pipe joint materials, such as synthetic rubber joints, reduce infiltration. Maintenance holes in the area can range in depth from shallow at less than two feet to very deep at greater than 18 feet. However, the depth of most normal maintenance holes is between three to ten feet (LOAPUD, SSMP, 2021b).

| Table 4-19: Lifespan of Three Types of Pipes within LOAPUD | |
|---|---|
| **Pipe Material** | **Service Life (years)** |
| Asbestos Cement | 60 |
| Vitrified Clay | 75 |
| PVC/Ductile Iron | 100 |
| Data Source: LOAPUD, 2019a | |

There are 304 septic tank effluent pump (STEP) systems in the District, as listed in Table 4-18 above. For example, the Villa Verona STEP system uses individual pumps and septic tanks located on the customer's private property to pump wastewater to a District pipeline. The STEP systems have a high level of maintenance requirements because each of the pumps requires regular servicing and the septic tanks require regular pumping. Please note that LAFCo's 2013 MSR listed a higher number of STEP systems. However, LOAPUD has successfully eliminated 30 STEP systems by connecting these customers directly to the District's infrastructure. For example, in the future, LOAPUD hopes to replace the Villa Verona STEP system by installing an additional 15,500 feet of pipeline to connect these customers directly to the District's gravity sewer (LOAPUD, SSMP, 2021b). A map showing LOAPUD's collection system infrastructure is shown in Figure 4-10.

Figure 4-10: Collection System Infrastructure Location




Pump Stations

LOAPUD's wastewater collection system relies on a series of pump stations to lift wastewater from low-lying areas or over hills into the gravity mains that ultimately lead to the SC-OR treatment plant. The nine lift stations currently maintained and operated by LOAPUD are as follows:

- Royal Oaks Lift Station
- Hanging Tree Lift Station
- Heritage Lift Station
- Mooretown Lift Station
- Las Plumas Lift Station
- Vista Del Cerro Lift Station
- L-1 Lift Station
- L-2 Lift Station
- L-3 Lift Station

Data Source: LOAPUD, SSMP, 2021b

In the Kelly Ridge area, sewage is pumped through two pump stations prior to reaching the gravity sewers. Additional details about each of the nine pump stations above are available in the District's 2021 SSMP.

### *4.7.4- Equipment*

Vehicles are a major portion of the equipment utilized by the District's Field Staff, as listed in Table 4-20 below. Currently, all the vehicles used are gasoline/diesel (i.e., fossil fuel) powered vehicles. The California Air Resources Board (CARB) approved a new rule on Aug 25, 2022 which requires new car sales in California to be zero-emission vehicles (ZEVs) by 2035. While it is not yet clear whether new electric vehicle laws will apply to the type of trucks utilized by LOAPUD, it is likely that sometime in the future, LOAPUD may be asked to consider purchasing or retrofitting vehicles reliant upon an alternative energy source such as electricity,biogas, hydrogen, or other source. The price per gallon of gasoline has risen in 2022; therefore, alternative fuel/energy for vehicles can sometimes be cheaper.

| Table 4-20: Equipment Inventory - LAOPUD | |
|---|---|
| 1 | 2008 Ford Explorer |
| 2 | 2010 Ford F-150 |
| 3 | 1999 Ford F-450 Flatbed Dump |
| 4 | 1996 Ford F-350 7.5l |
| 5 | 1996 Ford F-150 Fuel Truck |
| 6 | 2004 Sterling Jetrodder |
| 7 | 2012 Peterbuilt Pump Truck |
| 8 | 1998 Bobcat X331 |
| 9 | 1994 Ford Econoline Camera Van |
| 10 | 1988 Case 580 Super K Backhoe |
| 11 | 2007 Peterbuilt Dump |
| 12 | 1993 Ford F-800 Pump Truck |
| 13 | 1992 Atlas Portable Compressor |
| 14 | 2002 Portable Godwin Pump |
| 15 | 1983 Jetrodder (Back Up) |
| 16 | 2000 John Deere 410 Backhoe |
| 17 | Easment Machine (Drives Itself But Connects To Jetrodder For Water Supply) |
| 18 | 2003 Gorman Rupp Portable Pump |
| 19 | Rodding Machine (Trailer Mounted Snake) |
| 20 | 1992 Case Tencher |
| 21 | 1970 John Deere 644a Loader |
| 22 | 2006 Kabelco Excavator |
| 23 | 2019 Ford F-350 Dually |
| 24 | 2019 Ford Transit Van |
| 25 | Royal Oaks Generator |
| 26 | Hanging Tree Generator |
| 27 | Mooretown Generator |
| 28 | WINCO Portable Generator |
| 20 | ONAN Generator |
| Data Source: LAOPUD 2021b SSMP, Appendix | |

### 4.7.5 Infiltration and Inflow

There are several measures of integrity for a wastewater collection system, including peaking factors, efforts to address infiltration and inflow (I/I), and inspection practices. The LOAPUD undertakes testing and other measures to ensure the integrity of the collection system. For example, a new CCTV and push camera were purchased in 2019. Additionally, smoke testing of the lines is performed every three to five years. Unused sewer laterals are cut and capped. LOAPUD implements a testing and inspection program on a regular basis for lateral lines and maintenance holes (LOAPUD, 2021a).

During wet weather conditions, a large amount of infiltration and inflow (I&I) can enter LOAPUD's sewer system. For example, LOAPUD's Sewer System Management Plan (2021) found that the peak daily flow can reach 7.7 mgd. This number is comparable with data shown in Table 4-25 which estimates peak flows of 9.270 mgd. However, existing data and future projections from the SC-OR plant shown in Table 5-17 indicate that for the year 2022 they planned for peak flows from LOAPUD of approximately 12.7 mgd. SC-OR estimates that LOAPUD's peak flows may increase to 13.5 by the year 2027, due to atmospheric river events and other issues associated with climate change. However peak flows tend to be of short duration. Nevertheless, peak flows do have the potential to cause temporary spillage. Additionally, the difference between the dry weather flows and the wet weather flows is often caused by I&I. LAFCo's 2013 MSR/SOI Update found that this flow, in conjunction with wet weather flows from the collection systems of the City of Oroville and the Thermalito Water and Sewer District, can have an impact on the SC-OR WWTP. This is because wet weather flows into the SC-OR WWTP can be as much as seven to eight times higher compared to typical average dry-weather flows (ADWF). LAFCo's 2013 MSR/SOI also found that LOAPUD had invested in a comprehensive program to reduce I&I. High rates of I&I cause increased costs to LOAPUD because it must pay for treatment of this flow at the SC-OR WWTP and because spills can occur at maintenance holes. In addition, the District's sewer lift stations, pipes, and other infrastructure must be sized large enough to accommodate these flows and the increased size results in increased costs. Currently, the District maintains an ongoing program to reduce I&I using the following methods:

- Television Inspections,
- smoke testing,
- use of portable flow meters to identify specific locations,
- periodic replacement of older infrastructure, and
- lateral pipeline testing.
- Data source: LOAPUD, SSMP, 2021b

Since LAFCo's 2013 MSR/SOI was published, the district has repaired or replaced several pipeline sections to work towards remediating the I&I problem. For example, sewer pipelines were replaced at the Mission Line, Idora Street, Bidwell Reroute Line, P-Line, and the Laundromat site (LOAPUD, SSMP, 2021b). In addition, portable flow meters have been utilized recently by the District to locate and isolate areas with high I&I. This has made the I&I reduction program more effective by concentrating efforts on areas that have been identified as having high I&I rates.

The District's work to reduce I&I has been successful; however, problem areas still remain. One remaining source of I&I is the privately-owned sewer laterals which connect the individual homes and businesses to the District's sewer main. Traditionally, these sewer laterals are the responsibility of the private property owner rather than the District. However, the private property owners have not maintained these laterals. Therefore, they have become one of the primary sources of I&I into LOAPUD's facilities. To address this issue, the District adopted a lateral pipeline testing and replacement program in 2009. This program requires that a property owner test their sewer lateral and repair or replace that lateral as needed. For example, remodeling a home or changing the use of a commercial structure would trigger the lateral testing requirement. In addition, LOAPUD is exploring opportunities to provide assistance to property owners with the repair/replacement expenses. Providing financial assistance to private property owners is key because there are several disadvantaged communities within the District, as described earlier in this chapter. In summary, private sewer laterals are now one of the primary sources of infiltration and inflow into the District's system (LOAPUD, SSMP, 2021b). To further address this issue, the District's 2021 Sewer System Master Plan recommended that the District undertake a comprehensive I&I study to better define and prioritize a pipeline replacement program. Ideally, this would include a model calibrated to accurately recreate I&I impacts on the system. The effects of eliminating I&I sources can also be accurately modeled (LOAPUD, SSMP, 2021b).

### *4.7.6 Maintenance*

The facilities and infrastructure on which LOAPUD depends have varying ages. The District is committed to implementing regular, proactive system maintenance to remove roots, debris, fats, oils, and grease (FOG) in areas prone to blockages that may cause sewer backups or sanitary sewer system overflows (SSOs). LOAPUD has a defined Sewer Operations and Maintenance Plan within its Sewer System Management Plan (2021). The District's preventative maintenance program includes inspection of the collection system, cleaning of the collection system, and repair and rehabilitation. Guidelines to maintain pumps, valves, maintenance holes, lift stations, electrical stations, auxiliary power, motors, buildings, and grounds are provided in the Sewer System Management Plan. To implement this maintenance program, the District follows collection system best management practices, addresses preventative maintenance, and proceeds with the scheduled replacement of aging infrastructure. Pipelines with structural defects, major root intrusion, misaligned or damaged joints, sags, or other problems are routinely repaired or replaced by District field staff. Work orders, job reports, and memorandums are part of good record-keeping, and LAOPUD staff carefully tracks this paperwork (LOAPUD, SSMP, 2021b). Infrastructure maintenance is an important part of the service that the LOAPUD provides. In general, as an enterprise district, LOAPUD is responsible for maintaining its system so that it can best serve its constituents. As part of the required work for O&M, LOAPUD maintains safety programs and holds staff meetings to ensure communication of requirements and to keep information current. Maintenance of system includes 1) Mapping. 2) Maintenance of lines and facilities, 3) Clearing brush to ensure continued access to facilities and fire safety (Butte County OEM, LHMP 2019*).* The LOAPUD has a net position of $9.8 million (i.e., those assets that exceed liabilities) (LOAPUD CAFR, 2020), and so maintenance of these assets is critical.

### 4.7.7 Capital Improvement Plan

Generally, when collection systems are found to have structural problems, specific elements are prioritized for repair, rehabilitation, or replacement. Larger-sized rehabilitation or replacement projects are typically placed on a Capital Improvement Plan (CIP) list. The LOAPUD has a Capital Improvement Plan as Chapter 5 of its 2021 Sewer System Master Plan. Approximately 50 pipeline segments have been identified for replacement based on a maximum/full depth of 75 percent, as summarized in Table 4-21 below.

| Table 4-21: Pipeline Replacement Summary - CIP | | | |
|---|---|---|---|
| Construction Cost (2020 dollars) | | | |
| | **2020** | **Future** | **Total** |
| LOAPUD Sewer System | $459,355 | $4,947,775 | $5,407,130 |
| Engineering, Contingencies @ 25% | $114,839 | $1,236,944 | $1,351,782 |
| Total | $574,194 | $4,184,719 | $6,758,912 |
| Data Source: LAOPUD Sewer System Management Plan (2021b) | | | |

To accommodate new development, future improvement projects may be needed to expand the collection system to accommodate increased demands. These future expansion projects are part of the capital improvement plan, and facilities include transmission mains, force mains, and lift stations. A list of potential CIP projects and their estimated cost is shown in Table 4-22 below. Together, the costs for the pipeline replacement projects and the proposed collection system expansion projects exceed $20 million. Capital improvements may be installed with in-house staff or contracted out.

Table 4-22: Proposed Sewer Collection System Facilities (CIP)

**PROPOSED SEWER COLLECTION SYSTEM FACILITIES**

| Location | Facility | Length (ft) | Estimated Construction Cost ($) |
|---|---|---|---|
| Oro Quincy Hwy, Mt. Ida Rd, Forbestown Rd | "Hawk Ravine" gravity transmission pipeline | 14,900 | 2,831,000 |
| | Mt Ida Lift Station | | 1,500,000 |
| | Force main | 1,600 | 160,000 |
| Olive Hwy, Ward Bl, Canyon Dr | "A Line" Gravity transmission pipeline | 13,100 | 2,489,000 |
| Las Plumas Study Area | Las Plumas Gravity pipeline | 6,750 | 1,282,500 |
| Wyman's Ravine & Railroad Ave: Las Plumas Study Area | Wyman's Ravine Lift Station | | 1,500,000 |
| | Force main | 19,400 | 1,940,000 |
| | | **Total Construction Costs** | **$11,702,500** |
| | | **Engineering, contingencies @ 25%** | **$ 2,925,625** |
| | | **Total** | **$14,628,125** |

*Data Source for Table 4-22: LOAPUD, 2021b Sewer System Management Plan*

Other Proposed New Infrastructure

LOAPUD is in the process of designing a regional sewer lift station through the Las Plumas Area Gravity Sewer Interceptor Planning Project. The lift station will serve the "South Oroville/Las Plumas Area" as identified in the Butte County General Plan 2030. The lift station is intended to accommodate 1,440 equivalent dwelling units, the majority of which will be residential customers. This Interceptor Planning Project is composed of two phases:

- Phase 1: A new pipeline is proposed to serve the area north of the new lift station between Ophir Road and Via Canela Road. Phase 1 will be funded by a Local Early Action Planning (LEAP) Grant.
- Phase 2: Extends the proposed gravity sewer interceptor further north to Las Plumas Avenue, potentially accommodating new residential development between Lincoln Boulevard to the west and Via Pacana Road and Las Plumas High School to the east. Phase 2 will be funded by a Regional Early Action Planning (REAP) Grant.

Wastewater Treatment Plant

The Sewerage Commission-Oroville Region (SC-OR) provides wastewater treatment and disposal for the Oroville Region (including LOAPUD) through its operation of the wastewater treatment plant located on South 5th Avenue, south of downtown Oroville. The three partners currently send an average dry-weather flow of 2.63 million gallons per day to the WWTP (LOAPUD, SSMP, 2021b). However, the WWTP is rated for an average dry-weather flow of 6.5 million gallons per day. A sample of LOAPUD's monthly flow contribution to the SC-OR WWTP is shown in Table 4-23, below. Due to the recent Camp Fire affecting the nearby Town of Paradise, the local population density has fluctuated, and future residential, commercial, and institutional development have been approved. The SC-OR WWTP has a current capacity capable of serving an additional 2,300 new homes. The unused capacity of the plant is available to the JPA members under a first-come, first-served policy (LOAPUD, SSMP 2021b). If an adequate capital improvement budget can be allocated, future wastewater treatment plant expansion may be technically possible. Please see Chapter 5 for additional details on SC-OR.

Table 4-23: Sample of LOAPUD's Monthly Flows Report from SC-OR

| Month | Total Monthly Flow (MG) | Average Daily Flow (MG) | Total Peak Flow (MG) | Date of Peak Flow |
|---|---|---|---|---|
| Jan 2023 | 54.653 | 1.763 | 5.00 | 1/9/2023 |
| Dec 2022 | 31.662 | 1.021 | 5.2 | 12/31/2022 |
| March 2022 | 23.419 | 0.755 | 1.90 | 3/1/2022 |

Data Source: SC-OR Monthly Commission Meeting Packet, Monthly Flows Report

Wastewater Capacity - Existing

The 2021 SSMP found that LOAPUD currently serves 5,733 wastewater connections which include residential, commercial, and public uses. The District converts the non-residential

connections to equivalent dwelling units (EDUs). This conversion serves to adjust larger-sized customers to the equivalent number of residential customers, which generate the same quantity of wastewater. LOAPUD currently provides service to 6,160 EDUs (LOAPUD SSMP 2021b). The District calculates an EDU as follows:

- 210 gallons per day of wastewater flows = 1 EDU for single-family residences
- Sixteen Plumbing Fixture Units = 1 EDU for non-residential users (LOAPUD, 2019a)

The LOAPUD's wastewater system has two components to its capacity:

- Collection and conveyance infrastructure capacity limitations as managed by LOAPUD; and
- Capacity limitations on the volume at the wastewater treatment plant operated by the Sewerage Commission Oroville region (SC-OR-FCFS)

In 2021 LOAPUD updated its Sewer System Master Plan (SSMP) and included a capacity analysis summarized in Table 4-24 below. Average dry-weather flow (ADWF) and average wet-weather sewer flow (AWWF) in a million gallons per day (mgd) were calculated based on existing conditions. Peak wet weather flows were 6.357 mgd in 2020 which was a drought year (LOAPUD SSMP 2021b).

Table 4-24: Existing (2020) Wastewater Flows

| **Flow Type** | **ADWF** | **AWWF** | **PWWF** |
|---|---|---|---|
| Volume (mgd) | 0.748 | 0.978 | 6.357 |
| Data Source: LOAPUD, 2021b (SSMP) | | | |

In 2008, LOAPUD had an average dry weather flow of 0.81 mgd and an average wet weather flow of 4.8 mgd (LAFCo MSR, 2013). Since then, the ADWF has decreased slightly. However, AWWF significantly decreased from 4.8 mgd down to 0.978 mgd in 2020 as listed in Table 4-23 above. The AWWF likely decreased due to the drought. The decrease in ADWF, even given the increased number of customers served, is likely due to water conservation measures and increased water use efficiency. Factors that currently influence the Lake Oroville Area Public Utility District's ability to collect wastewater and provide public service to customers include having an available labor pool and having a sufficient budget (LOAPUD, 2021a). The Lake Oroville Area Public Utility District's wastewater collection system has sufficient capacity to serve existing customers (LOAPUD, SSMP, 2021b).

Wastewater Capacity – Projected Future

Generally, new development occurring within the District's existing boundaries could result in an increase in demand for sewer services and the need for additional infrastructure. Therefore, LOAPUD's 2021 Sewer System Master Plan considered future conditions, including planning for new future development and growth in population consistent with the City of Oroville and the County of Butte's General Plans. Average dry-weather flow (ADWF) and average wet-weather sewer flow (AWWF) in a million gallons per day were predicted based on the County and City general plan build-out. Peak wet weather flow is projected to be 9.27 mgd.

| Table 4-25: Future Projected Wastewater Flows | | | |
|---|---|---|---|
| **Flow Type** | **ADWF** | **AWWF** | **PWWF** |
| Volume (mgd) | 0.838 | 1.585 | 9.270 |
| Data Source: LOAPUD, 2021b (Master Plan) | | | |

LOAPUD has reserved some capacity for planned or proposed development, as noted in the "will-serve" letters it has provided to developers. The capacity to serve proposed new urban and suburban development is carefully planned by LOAPUD. Decisions about whether or not to issue "will serve letters" for wastewater service to new/proposed development is part of the process. Will-serve letters remain valid for one year from the date of issue. However, the expiration date may sometimes be extended upon request, depending on the specific circumstances of each case (LOAPUD, 2021a).

Improvement to the District's collection system will be necessary to meet the area's future needs. For example, some pipelines may have a diameter that is too small to accommodate future flow demands. If improvements are not made, the result could be surcharging maintenance holes, overflow of raw sewage at maintenance hole covers, and overloaded pipelines. To avoid these potential future problems, the District's 2021 Sewer System Master Plan included a detailed computer model of the system's hydraulics to consider a range of factors, including ground elevations, depth of flow, velocity, and pump station capacities. The model considered two scenarios:

1. Existing conditions within the current boundary at current EDU flows, and
2. Projected buildout flows within the Sphere of Influence

Based on this modeling analysis, the list of capital improvement projects previously described was developed to accommodate projected future development.

The District's 2021 Sewer System Master Plan does make a conclusionary statement about infrastructure capacity to serve future development as follows:

> The District has adopted the LOAPUD Sewer System Master Plan which includes an evaluation of the system's ability to meet current flow capacity requirements and forecasted future flow capacity requirements. Based on hydraulic modeling of the District's collection system and future flow projections based on the Butte County General Plan, the master plan identifies expansions and upgrades to existing facilities as well as proposed new facilities needed to assure capacity will be available for current customers and new development (LOAPUD, 2021b).

Additionally, LOAPUD staff have indicated that the District has sufficient capacity to service projected future needs through 2045 (LOAPUD, 2021a). The collection system could potentially be expanded to address any future projected increase in demand for wastewater services (LOAPUD, 2021a). However, the cost of such expansion is typically passed along to project developers. LOAPUD staff indicates that capacity limitations are set by SC-OR via the first come, first served basis (LOAPUD, 2021a).

### 4.7.8 Wastewater Facilities in SOI

Parcels within the SOI are currently unincorporated and are located within the jurisdiction of Butte County. These parcels do not currently receive municipal sewer service. New development occurring within the SOI is typically evaluated by Butte County and the City under the auspices of several state and local laws to consider potential impacts on the provision of sewer services.

The LOAPUD's 2021 Sewer System Master Plan analyzed the capacity of the District's infrastructure to potentially provide service to future development that may occur within the SOI (upon future annexation into the boundary area). Generally, new development in the SOI is responsible for constructing all sanitary sewer lines and/or septic systems serving each development.

### 4.7.9. Infrastructure Needs and Deficiencies

The primary function of LOAPUD is to collect and convey untreated sewage to the treatment plant. Infrastructure needs or deficiencies (i.e., pipelines, hydrants, tanks, reservoirs, etc.) are described by LOAPUD in its Sanitary Sewer Management Plan.

The majority of critical District facilities have power backup systems in place to ensure the continued function of critical facilities, including pump stations, with backup generators. Nevertheless, unexpected events sometimes occur and have the potential to overwhelm District facilities. Stress testing of the District facilities could illuminate and prioritize some problem areas. (Butte County OEM, LHMP, 2019). The LHMP identifies a need to perform formalized stress testing for District critical facilities identifying and prioritizing projects for phased implementation as part of an approved improvement program. This program could include: 1) stress test District facilities, 2) evaluate outcomes, 3) make recommendations, and 4) implement solutions as funding permits. This type of program would help the District avoid potential future uncontrolled discharge of untreated sewage and would benefit the district by updating facilities (Butte County OEM, LHMP, 2019)

During power outages, backup generators are the primary method by which the District maintains continuous power to its critical facilities. Currently, the District has only one portable generator that can be used in case of power outage. This generator is housed at the District office. In the instance of a widespread and prolonged power outage, there is a risk that additional power generation would be needed at facilities that do not have backup generators. Additional generators would mitigate some of the risks of a prolonged outage. Therefore, the LHMP identifies a need to purchase additional portable backup generators. Purchasing backup generators would help the District avoid potential future uncontrolled discharge of untreated sewage and would benefit the District by updating facilities (Butte County OEM, LHMP, 2019). However, the purchase of these generators is not included in the District's capital improvement plan as outlined in the 2021 SSMP. So, there is a risk that this expense may not be programmed into an actual budget.

Given the potential of future hazards such as flooding, wildfire, and power outages, it is becoming more important for the District to have overflow capacity at lift stations. A low-tech option to provide needed system redundancy would be to install overflow tanks which increase the resiliency of the lift station. While some of LOAPUD's lift stations have overflow storage, five of the nine stations do not. The LHMP identified the need to install overflow storage at existing lift stations that do not currently have this type of system in place. LOAPUD staff could evaluate which critical lift stations would benefit the most from this type of system and install backup storage at these locations if not already in place. Purchasing additional overflow storage at the list stations would help the District avoid potential future uncontrolled discharge of untreated sewage and would benefit the district by updating facilities (Butte County OEM, LHMP, 2019).

Emergency Fueling has been identified in the LHMP as a District-wide need because the primary backup systems found at the majority of District facilities consist of diesel-powered generators with varying fuel tank capacities. A prolonged period of power outage creates the need for consistent refueling. To refuel the generators, a small capacity fuel cell is conveyed to the lift stations by field staff. Filling the fuel cell at the District's central fueling station can also be affected by power outages, thereby compounding difficulties in emergencies. To address this problem, the LHMP proposes that staff review the District's current refueling capabilities and create redundancy to enable consistent fuel delivery during a crisis. This could include: 1) assessing the District's fuel supply chain, 2) analyzing capacity to deliver and dispense fuel based on worst-case scenarios, and 3) purchasing equipment and/or upgrading existing systems to mitigate any issues discovered in the review. Emergency fueling would help the District avoid potential future uncontrolled discharge of untreated sewage and would benefit the district by updating facilities (Butte County OEM, LHMP, 2019).

The Mooretown Lift Station is located at the fringe of a 100-year Zone A floodplain. Therefore, a flood event could potentially impact the lift station. The LHMP proposes a project to review the location of the Mooretown Lift Station in relation to the current established flood risk and determine the best course of action for mitigation if needed.

Backup power generation is the primary method the District uses to maintain the continued function of its critical facilities. Currently, the District has only one portable generator that can be used in case of power outage. This portable generator is housed at the District office. In the event of a widespread and prolonged power outage, there is a risk that additional power generation would be needed at several facilities concurrently. Additional portable backup generators would mitigate some of the risks of a prolonged outage. Therefore, the LHMP proposes the purchase of additional portable backup generators. A related alternative would be to install permanent backup generation at the District's main office and other critical facilities without permanent backup power generation (Butte County, OEM, LHMP, 2019).

The American Society of Civil Engineers, Region 9 has several recommended remedies for California's aging wastewater infrastructure as outlined in Appendix K and as summarized below:

1. The State of California should continue to provide loans and grant funding for the repair and rehabilitation of wastewater collection and treatment systems and reuse projects.
2. The State of California should continue to implement indirect and direct potable reuse regulations.
3. Implement an education program at the state and local level about what a wastewater treatment plant is, what kind of wastes it can treat, and what impact wastes have on the sewer pipes, such as grease and flushable wipes, etc. Continue educational programs about identifying a sewer overflow and whom to call if such an event occurs.
4. Make risk-based decisions on capital improvements, maintenance, and operations (i.e., implement asset management programs).
5. Continue advancements in water reuse/recycling.

Recommendations # 1 and 2 above apply to the State and are beyond LAFCo's purview. However, Recommendations # 3, 4, and 5 are pertinent to LOAPUD and will therefore be put forward as recommendations from this MSR.

Complaints:

The LOAPUD does receive approximately 35-50 complaints each year, primarily focusing on rates and rate increases (LOAPUD, 2021a). LOAPUD does have a system to address complaints about the wastewater collection and conveyance system. If a maintenance hole becomes clogged or an odor is detected, residents are advised to contact the District during regular business hours via phone, e-mail, or the District website. After normal business hours, urgent complaints or emergencies can be directed to the LOAPUD's main number at (530) 533-2000, which is answered by a 24-hour answering service. Emergency calls are dispatched immediately, 24 hours a day, 365 days a year.

### *4.7.10 Determinations for Infrastructure and Public Facilities*

Based on the information included in Section 4.7.1 through Section 4.7.9 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 4-26 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

| Table 4-26: MSR DETERMINATION: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES, INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| LOAPUD-PUB-1 | Has the Agency been diligent in developing plans to accommodate the infrastructure and service needs of current and future constituents? Regularly reviews and updates its service plans to help ensure that infrastructure needs and deficiencies are addressed in a timely manner. | LOAPUD regularly reviews and updates its service plans to help ensure that infrastructure needs and deficiencies are addressed in a timely manner. For example, LOAPUD originally adopted its Sewer System Management Plan on July 14, 2009, and subsequently updated it on July 14, 2013. The most recent comprehensive update to the Management Plan occurred in September of 2021. However, The Sewer System Management Plan (2021) is not posted as an individual item on the LOAPUD website, and this is an issue that needs improvement. LOAPUD has demonstrated its diligence in developing plans to accommodate current and future constituents' infrastructure and service needs by creating a capital improvement plan as part of its 2021 Sewer System Master Plan. |
| LOAPUD-PUB-2 | The District meets infrastructure needs for existing and future demands on the wastewater system. | LOAPUD's infrastructure relates to wastewater collection and conveyance only. The wastewater collection system includes approximately 77 miles of pipelines, 1,550 individual maintenance holes, and nine lift stations. The sewer system conveys wastewater to a treatment plant owned and operated by the Sewerage Commission - Oroville Region. The District's sewer pipes are configured such that expansion into new geographic areas is possible if needed. However, new pumps or lift stations may be needed.<br><br>The District's 2021 Sewer System Master Plan identifies new facilities that would be needed to accommodate future growth. More importantly, the 2021 SSMP outlines a range of actions the PUD will undertake to address geographic areas known to |

| | | |
|---|---|---|
| | | (continued)<br>receive high wet weather flows due to inflow and infiltration (I&I). One of the primary sources of I&I into LOAPUD's facilities identified by the 2021 SSMP is the privately-owned sewer laterals that connect the individual homes and businesses to the District's sewer main. When private property owners do not maintain these laterals, it can become an I&I problem. In addition, inflow and infiltration are infrastructure-related issues that need improvement. |
| LOAPUD-PUB-5 | Is there duplicate infrastructure by other agencies nearby? | Several nearby agencies offer wastewater services similar to that of the LOAPUD (such as TWSD and the City of Oroville). However, within the District's sewer service area, the LOAPUD is the only provider, and there is no overlap of actual infrastructure. However, a small portion of LOAPUD's boundary overlaps with the City of Oroville. Additionally, the LOAPUD SOI overlaps significantly with the City of Oroville's SOI. |
| LOAPUD-PUB-6 | The Agency has preventative maintenance measures and has planned for the replacement of aging infrastructure. | Infiltration and inflow are significant within the District's existing system due to the age and deteriorated condition of older pipes, joints, and related infrastructure. LOAPUD's 2021 Sewer System Master Plan contains a detailed capital improvement plan, including cost estimates, that will continue the District's work to address the infiltration and inflow issue. The District regularly undertakes rehabilitation projects, such as repairing, relining, and replacing existing aged or poorly functioning pipes. The District is planning to spend approximately $20 million on the pipeline replacement projects and the proposed collection system expansion projects listed in its 2021 Sewer System Master Plan. However, a timeframe for these expenditures has not yet been determined. |

| | | |
|---|---|---|
| LOAPUD-PUB-7 | Evaluation of agency's capacity to assist with and/or assume services provided by other agencies. | LOAPUD has demonstrated some capacity to assist with or assume services provided by other agencies. For example, the LOAPUD has close collaborative relationships with nearby independent wastewater providers such as TWSD, SC-OR, and the City of Oroville. LOAPUD's leadership capacity could be improved by assigning specific timeframes to the projects in its capital improvement plan and by posting its Sewer System Master Plan (2021) and Sewer System Management Plan (2021) on the website in a timely manner. |

# 4.8: Finances

## *4.8.1 Introduction to Financial Metrics*

LAFCO is required by the CKH Act to make a determination regarding the financial ability of the Lake Oroville Area Public Utility District to provide public services. This Chapter provides an overview of financial health and context for LAFCO's financial determinations. This section's primary source of information is the audited Comprehensive Annual Financial Reports (Financial Statement) from the District for the fiscal years 2018, 2019, and 2020. Based on recent recommendations from the Little Hoover Commission, this determination on the financial ability to provide services is based upon several key financial performance indicators that LAFCOs throughout the State consider in MSRs.

In California, special districts are classified as enterprise or non-enterprise districts based on their source of revenue:

- Enterprise districts: Finance of district operations is via fees for public service. Under this model, the customers that consume goods or services such as wastewater collection and/or disposal pay a fee. Rates are set by a governing board, and there is a nexus between the costs of providing services and the rates customers pay. Sometimes enterprise districts may also receive property taxes which comprise a portion of their budget.
- Non-enterprise districts: Districts that receive property taxes are typically classified as non-enterprise districts. Services that indirectly benefit the entire community, such as flood or fire protection, community centers, and cemetery districts, are often funded through property taxes.

LOAPUD is an enterprise district that charges fees for wastewater collection, conveyance, and treatment services. LOAPUD does receive property taxes in relation to wastewater service. The District does not have "blended component units[2]" (LOAPUD, Financial Statement, 2021c).

### *4.8.2: Financial Policies & Transparency*

The District prepares and approves a budget with an annual timeframe with the fiscal year beginning on July 1st of each year. In addition, it is LOAPUD's practice to present a monthly financial report (Fund Balances) and a monthly claim report to the Board of Directors during the regular monthly meeting. The current budget and the past three years of Financial Statements are available to the public via the District's website at: <https://www.loapud.com/loapud-audits#body_file-a5357893-7f34-4efe-85f8-b5be5f7d229a>. This URL pathway is indirect, and starting from the homepage, visitors must navigate to the "Who We Are" page and then to the "District Transparency" page, and then click the link to "Audits."

Every year the District publishes a Financial Statement, Management Discussion and Analysis, and Independent Auditor's Report. The CA Government Code requires an annual independent audit of the District's financial records by a certified public accountant who serve as independent auditors. There are four types of audit opinions: unqualified, qualified, adverse, and disclaimer. An unqualified opinion is a clean opinion meaning the entity passed its audit. A qualified opinion means the entity passed the audit with notable exceptions. A disclaimer or adverse opinion essentially means the entity flunked its audit. The independent audit on FY 2020 was performed by SingletonAuman PC, Certified Public Accountants in Susanville, Ca. The auditors expressed their opinion that the "…. the financial statements referred to above present fairly, in all material respects, the financial position of the Lake Oroville Area Public Utility District as of June 30, 2021, and the change in financial position and, where applicable, cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America" (LOAPUD, 2021c).

The District uses the accrual basis of accounting under which revenues are recognized when earned, and expenses are recorded when liabilities are incurred (LOAPUD, 2021c). A District's financial policies function as business rules that ensure an agency's transactions are recorded consistently and correctly. It is important for a District's financial policies to be made available to the public. LOAPUD has specific accounting policies listed in its financial statements. A few key accounting policies include:

[2] A blended component unit is defined as a unit which has the "substantively the same governing body" as the primary government agency and the funds of a blended component unit have the same financial reporting requirements as a fund of the primary government. Please refer to *https://www.gasb.org/cs/ContentServer?cid=1176158034864&d=&pagename=GASB%2FPronouncement_C%2FGASBSummaryPage* for additional information.

- Use of Estimates Policy: The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.
- Cash. Cash Equivalents. and Investments Policy: For the statement of cash flows, the District's proprietary fund considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. Accordingly, investments on June 30, 2021, are stated at fair value. Additionally, Board Policy Number 3025 guides the Investment of District Funds Number, and this policy was originally adopted on June 14, 2005, and amended on August 12, 2008. Policy 3025 is available online at: <*https://www.loapud.com/board-policy-no-3025-investment-of-district-funds*>.
- Restricted Assets Policy: The District has presented restricted cash for amounts received from the District's capacity charge and rural development surcharge. In addition, the USDA Bond Reserve is presented as restricted cash. These amounts have been classified as restricted assets on the statement of net position because their use is limited by applicable bond or other covenant.
- Bad Debts Policy: It is the District's policy to collect past due accounts by adding such amounts to the County of Butte's property tax rolls. As such, it is management's opinion that past due accounts are, in all material respects, fully collectible, and no allowance for doubtful accounts has been recorded on the accompanying financial statements.
- Capital Assets Policy: Property and equipment with a life greater than one year are capitalized and stated at cost, except for portions acquired by contribution, which are reported at the agreed-upon cost, which equates to fair market value. The District's policy is to capitalize individual items costing more than $5,000. Maintenance and repair costs are expensed as incurred unless they extend the asset's useful life. Depreciation is computed using the straight-line method over asset estimated useful lives.

Readers are invited to view the entire LOAPUD accounting policies list in the annual financial statements.

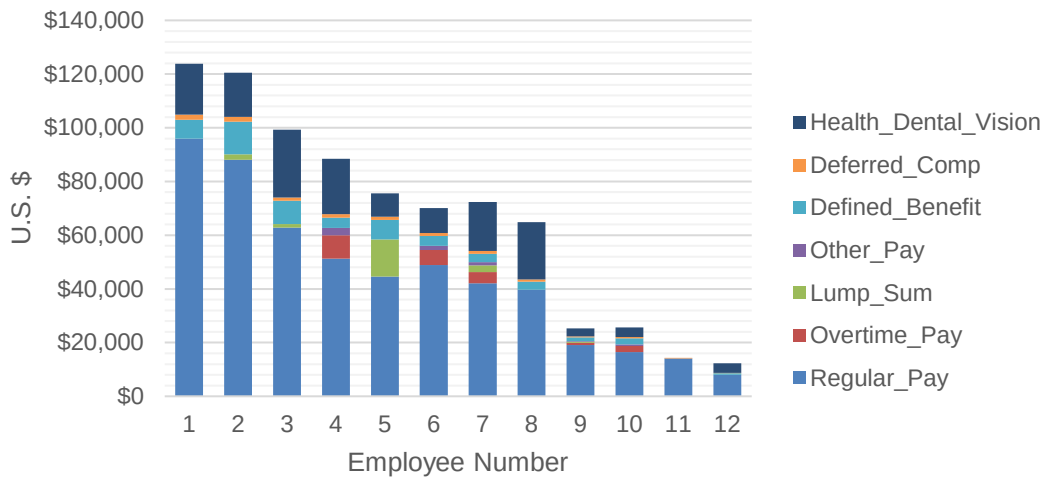
### *4.8.3 Data Transparency*

Financial data transparency promotes accountability and provides information to citizens about what their local government is doing. Transparency allows residents to stay informed and learn about local government revenue, spending and debt. The District General Manager makes regular quarterly reports to the Board of Directors regarding finances (Fund Balance) and claims. This information is available to the public via the meeting agenda packet.

Transparency with salary data is also an important attribute for special districts in California. The Lake Oroville Area Public Utility District provides competitive compensation and a benefits

package to full-time, regular employees, as shown in Figure 4-11 below. The employee wage scale is available in LOAPUD's annual budget, which is posted on its website. Additionally, the Lake Oroville Area Public Utility District forwards a report to the California State Controller for Government Compensation in California per Government Code Section 53891. In 2020 the California Auditor reported that LOAPUD had a total of 12 regular employees, which includes eight full-time employees and four part-time employees. Additionally, six Board members were on the payroll to receive board meeting stipends. Total Wages in 2020 summed up to $602,256. Total Retirement & Health Contribution paid in 2020 for employees was $213,701. Among the eight full-time employees, total compensation (including regular pay and benefits) averaged $89,395 for the year 2020 (California Auditor <*https://publicpay.ca.gov/Reports/SpecialDistricts/SpecialDistrict.aspx?entityid=2179&year=2020*>. 2022)

Figure 4-8: Employee Compensation - LOAPUD (2020)




Determinations for LOAPUD's financial policies and fiscal transparency features are listed in Table 4-31.

### *4.8.4: Revenues, Expenditures, and Net Position*

Revenues

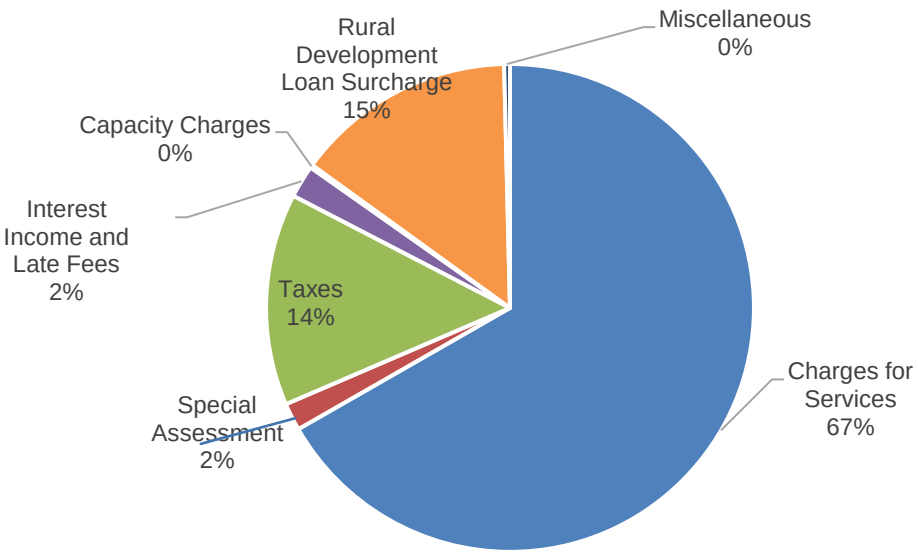
LOAPUD has two basic types of revenue:

- Operating revenues consist primarily of charges for services.
- Non-operating revenues and expenses are related to financing and investing-type activities.

The District has multiple sources of revenue, including rates and service charges, taxes, interest income, connection fees, and other miscellaneous fees such as inspection and plan check fees (LOAPUD, 2019a).

Overall revenues for FY 20/21 were $2,468,806 which were more than expenses of $2,021,978 by $446,828. The net position was $10,371,553 on June 30, 2021. This was an increase of $446,828 from the prior year (LOAPUD, 2021c). A majority of the revenue comes from Service Charges (67 percent), as shown in Figure 4-12 below.

Figure 4-12: Sources of Total Revenue FY20/21




*Data Source for Figure 4-12: LOAPUD Financial Statement, 2021c*

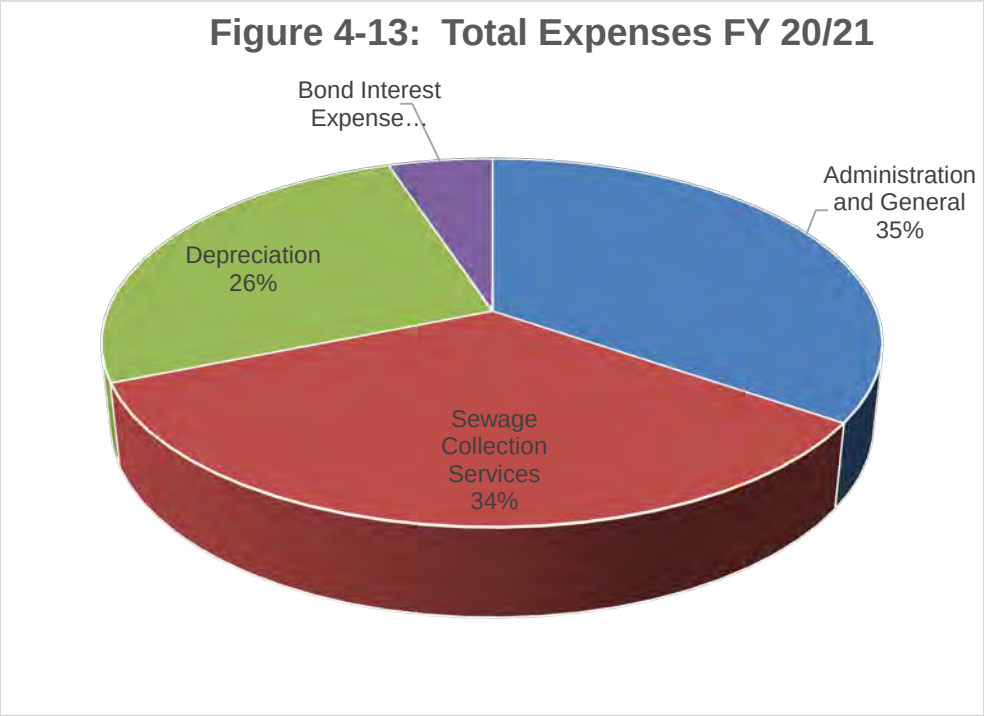
In FY 20/21, LOAPUD received $347,112 in property taxes. The District relies on the competency of the County of Butte for the billing, collection, and distribution of its share of property tax revenues (LOAPUD, 2021c).

Looking forward, LOAPUD's FY22/23 Budgeted estimates revenue for the current year to be $2,579,974, representing a six percent increase over the previous year. Financial analysts frequently use revenues as a variable for comparison among other districts and utilize various ratios to facilitate the comparison. Tax Revenues/Connection Ratio calculates tax revenues ($347,112) per the number of sewer connections (5,733) which equates to a ratio of 60.5, meaning that on average, each sewer connection pays $60.5 in property tax annually to LOAPUD. The Total Revenue Per Capita Ratio calculates to Total Revenue ($2,468,806) per resident population (12,768) which equates to 193, which means that on average, each individual within the boundaries pays $193 per year for wastewater service. Total revenue per acre measures how efficiently a service provider can serve a defined geographic area. LOAPUD's Total Revenue ($2,468,806) per acre (8,582) equates to 288, meaning that LOAPUD generates $288 for every acre within its boundary.

Expenses

In FY 2020/21, total expenses (including both operating and non-operating) were $2,021,978 for the wastewater utility. The largest expense was wastewater administration and general operations at $699,080 (35 percent), and the second largest expense was sewage collection services at $693,173 (34 percent), as shown in Figure 4-13 below. Depreciation comprised 26 percent, and an analysis of the depreciation schedule is performed at the time of pre-audit (LOAPUD, 2021a).

**Figure 4-13: Total Expenses FY 20/21**

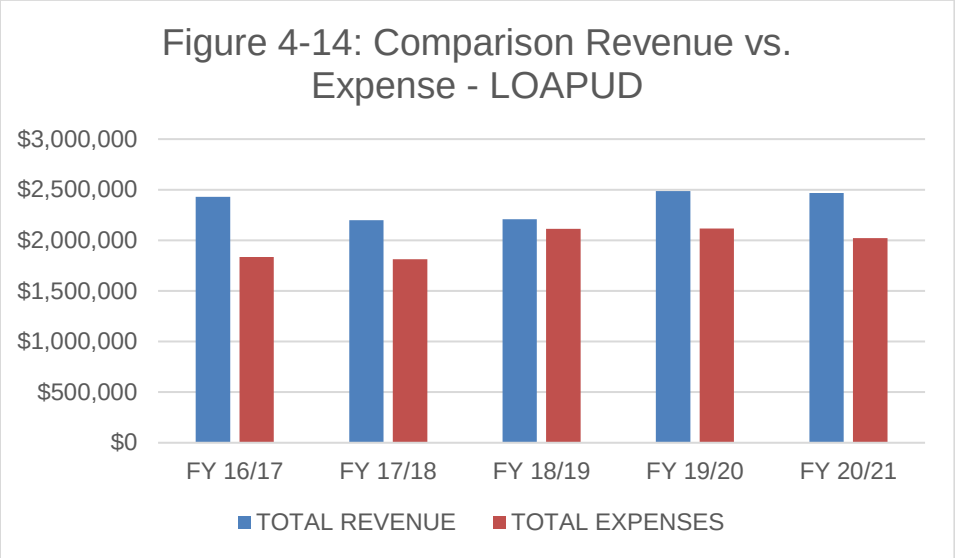



*Source: LOAPUD, 2021c*

Expenses that occur while providing wastewater service to customers for operating and maintaining the system, including materials, personnel, administration, and other services, are typically classified as operation and maintenance costs. These expenses could potentially increase in the future due to inflation rate, increased energy costs, cost-of-living increases, and associated increased maintenance costs. Wastewater infrastructure is expensive, and it has a defined service life. For example, pipes, valves, maintenance holes, and wet wells can last 40 to 50 years, while electric controls and pumps may last only 5 to 20 years (LOAPUD, 2019a). Therefore, proper maintenance of the facilities is necessary to elicit the maximum useful life.

Expenses associated with capital improvement projects contributed to the expenditure totals during these years. The LOAPUD has a Capital Improvement Plan as Chapter 5 of its 2021 Sewer System Master Plan. Table 4-21 in this MSR list costs associated with Pipeline Replacement which is part of the CIP. Contributions from the reserve funds may be used to offset some of these costs. Therefore, it is important for LOAPUD to consider the need to retain sufficient reserve funds to help it fund capital improvement projects and to help it weather the economically lean years. Please also see the discussion of rates presented on page 4-78 and 4-79 in this Chapter.

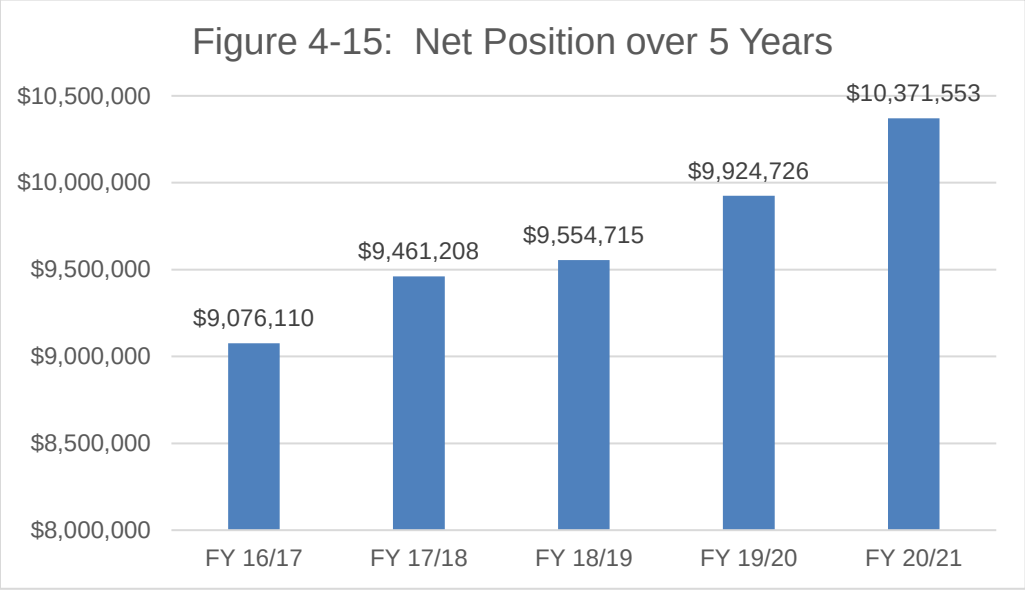
A comparison of LOAPUD's annual total revenue to total expenses, as provided in Figure 4-14 (next page) shows that annual revenues exceeded annual expenses in each of the five fiscal years studied (i.e., FY16/17 to FY20/21).




*Data Source for Figure 4-14: LOAPUD Financial Statements for FY16/17 to FY20/21*

## Net Position

The Statement of Net Position includes all of the District's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, which provide information about the nature, and amounts, of investments in assets and obligations to District creditors. As of June 31, 2021, the District's net position was $10,371,553 as shown in Figure 4-15. This was an increase of $446,828 from the prior year (LOAPUD Financial Statement, 2021c).




*Data Source: LOAPUD Financial Statements for FY2018, 2021*

The Net Position for the wastewater provider steadily increased from FY 16/17 to FY 20/21, as shown in Figure 4-15 above. The determinations related to LOAPUD's financial revenues, expenditures, and net position are listed in Table 4-31.

### *4.8.5: Capital Improvement Plan*

A Capital Improvement Plan is a fiscal and planning tool that helps organizations make thoughtful budgeting decisions for large projects and purchases based on goals and objectives. Capital improvements are needed to fund the larger repairs, maintenance, and upgrades to the aging collection system and pumping facilities; improve energy efficiencies; address safety and code inadequacies; and meet regulatory requirements (LOAPUD, 2019a). The District has a Capital Improvement Plan (CIP), approved as part of the Final Rate Study by Sauer Engineering in 2019 and is available on the District's website at: *https://www.loapud.com/lake-oroville-area-public-utility-district-rate-study-report-2019*. Additionally, the District's capital improvement projects and purchases for the coming fiscal year are typically described in the annual budget. District management assesses and budgets for capital improvements based on need and available funds. The District has identified necessary capital improvement projects for the next 20 years, including projected equipment repairs, purchases, and replacements. The Final Rate Study by Sauer Engineering in 2019 found that:

- The total cost of Capital Improvements in 2019 dollars is $2,571,294
- The projected cost of Capital Improvements at the year of implementation is $4,067,943
- The cost per year to meet Capital Improvement Program is $497,820 per year
- The monthly cost per EDU to implement the Capital Improvement Program is $6.74/EDU/month (LOAPUD, 2019a).

The 2019 Final Rate Study by Sauers Engineering provides details on the upcoming capital improvement projects by listing projects, and major purchases the District plans for over the next ten years. Readers are encouraged to view these details on the District's website. A summary of the projects is provided below.

- Retrofit facilities with submersible pumps
- Retrofit facilities with piping between overflow storage and wet well.
- Upgrade SCADA to show generator running
- Replace Microtel Auto Dialer
- Install bypass pumping ports
- Maintenance hole repairs - various:
- Pipeline repairs
- Vehicle replacement
- Install a particulate filter on 2000J.D. 410E
- and many other projects and pieces of needed equipment
- Source: LOAPUD, 2019a

Please note that several projects are listed in the CIP; however, funding quantity or method was not described. For example, the install overflow storage, upgrade obsolete electrical, and upgrade backup generator projects do not have a funding quantity identified or a funding source listed (LOAPUD, 2019a).

LOAPUD's total revenues for FY 20/21 were $2,468,806. The cost per year to meet Capital Improvement Program is $497,820 per year. The average cost to meet the CIP needs equates to 20 percent of the annual revenues every year.

LOAPUD's 2022-2023 Budget Report describes the budget account for capitalized expenditures, including design and construction costs for select capital projects and equipment. Budget account #81000 for Capital Outlay expended $12,051 in FY 19/20, -14,652 in FY20/21, and $371,010 in FY21/22. The budget for these three fiscal years did not meet the allocation goal for CIP projects described in the 2019 Final Rate Study by Sauers Engineering. Please note that the negative number for FY20/21 indicates that funds originally allocated to the Capital Outlay fund were reallocated. For this current fiscal year (FY 22/23), a total of $1,249,500 is budgeted (LOAPUD, Budget, 2022). The proposed expenditure of $1.2 million in this current fiscal year represents a significant increase in budget allocation toward capital improvement projects.

### *4.8.6: Reserves*

In California, many independent special districts have accumulated reserves. Although there are no rules guiding the size and use of reserve funds, general best management practices suggest that an agency should have a reserve fund that allows for operations of between six months to a year. Reserve funds provide the following benefits:

- allow for the continued operation of the agency even in downturns and unfavorable conditions,
- can contribute towards capital improvement projects which would reduce the potential need to accumulate a high debt load, and
- helps to ensure continued solvency of the District.

LOAPUD has cash and investments totaling $4 million, as shown in Table 4-27 below. LOAPUD's staff and Board evaluate the budget annually for the retention of reserves. An analysis of the depreciation schedule is performed at the time of pre-audit (LOAPUD, 2021a). However, the District does not presently have a dedicated source of funds for an Emergency Reserve account. Historically, in an emergency (natural disaster, unanticipated breakdown of equipment, etc.), the District would need to borrow funds from other accounts with no method of repaying that account. LOAPUD's 2019 Final Rate Study recommended that the District consider establishing an emergency fund paid through service charges which would allow the District to pay for emergencies without having to take money from other necessary funds or borrow money. Additionally, LOAPUD's 2019 Final Rate Study recommended that the District establish a minimum $50,000 per year emergency reserve account (LOAPUD, 2019a). The MSR Authors concur with this recommendation.

| Table 4-27: LOAPUD's Cash and Investments on June 30, 2021 | |
|---|---|
| Cash on Hand | $500 |
| Deposits with Financial Institutions | $1,312,413 |
| Deposit with LAIF* | $2,699,643 |
| **Total Cash and Cash equivalents** | **$4,012,556** |
| *Data Source: LOAPUD, Financial Statement, 2021c*<br>**Note: LAIF is the Local Agency Investment Fund run by the CA Treasurer's Office* | |

LOAPUD's Board Policy Number 3025 guides investment protocol as described in Section 4.8.2 of this MSR.

### *4.8.7: Outstanding Debts and Liabilities*

For local government agencies, liabilities typically include current liabilities such as accounts payable, salaries payable, bond interest payable, and long-term liabilities such as serial bonds payable, installments payable, and contracts payable.

LOAPUD does have long-term public debt related to wastewater service in the form of a USDA Bond-Series 'A' with a payoff date in 2043 (LOAPUD, 2021a). The USDA Rural Development Agency (RDA) issued sewer revenue bonds funding to LOAPUD in 2004 and 2005 for a total of $5,000,000. The debt service agreements included a requirement for a dedicated source of funds to cover annual principal and interest payments, which were calculated at $4.90 per month per EDU. One of the bonds was paid in full and retired during the fiscal year 2016/2017. The remaining bond's annual principal and interest payments will mature in 2043. Currently, the District holds one sewer revenue bond of $3,150,000, which accrues interest at a rate of 4.25 percent (LOAPUD, 2019a). The debt service requirements for annual payments for principal and interest for the past five years are listed in Table 4-28 below.

| Table 4-28: RDA Revenue Bond Service Payment Schedule Past Five Years | |
|---|---|
| **Year Ended, June 30** | **Total Annual Service Payment (P&I)** |
| 2018 | $164,370 |
| 2019 | $165,160 |
| 2020 | $164,823 |
| 2021 | $165,400 |
| 2022 | $164,850 |
| Data Source: LOAPUD, 2019a | |

### *4.8.8: Pension Payments*

On behalf of its full-time employees, LOAPUD contributes the pension payments to the California Public Employees Retirement System (CalPERS), a multiple-employer public employee defined benefit pension plan. CalPERS provides retirement, disability, and death benefits to plan members and beneficiaries. CalPERS acts as a common investment and administrative agent for participating public entities within the State, including LOAPUD. Copies of CalPERS' annual financial report may be obtained from its executive office at 400 Q Street, Sacramento, California 95811. The pension contribution requirements of plan members and LOAPUD are established and may be amended by the LOAPUD Board of Directors.

As of June 30, 2021, the District reported net pension liability of $1,537,423 for its share of the net pension liability of the Plan, as listed in Table 4-29 below. The District's net pension liability for the Plan is measured as the proportionate share of the net pension liability. The net pension liability of the Plan is measured as of June 30, 2021, and the total pension liability for each Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2020, rolled forward to June 30, 2021, using standard update procedures. The District's proportion of the net pension liability was based on a projection of the District's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined.

| Table 4-29: Pension Liability - Business-Type Activities | | |
|---|---|---|
| Fiscal Year | 2021 | 2020 |
| Net Pension Liability | $l,537,423 | $l,484,215 |

The net pension liability increased by 3.58 percent in FY 20/21 as compared to the previous year. For the year ended June 30, 2021, the District recognized an actual pension expense of $185,178. The $185,178, which is reported as contributions, will be recognized as a reduction of the net pension liability in the year ending June 30, 2022. On June 30, 2021, the District reported deferred outflows of resources and deferred inflows of resources related to pensions as listed in Table 4-30 below.

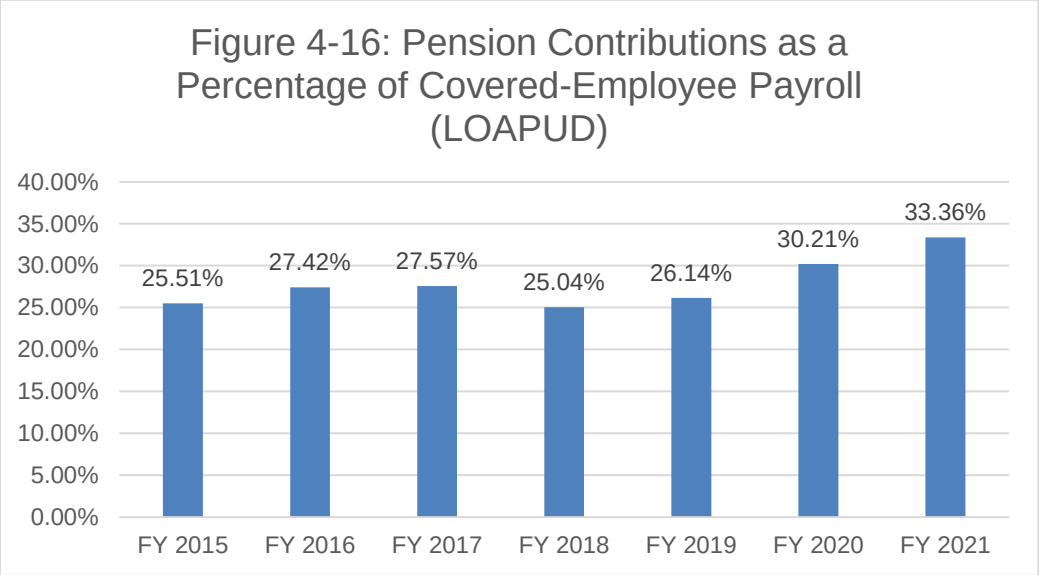
Table 4-30: Pension Deferred Outflows and Inflows FY 20/21

| | **Deferred Outflows of Resources** | **Deferred Inflow of Resources** |
|---|---|---|
| Difference between Expected and Actual Experience | | $ 10,996 |
| Change in Assumptions | $79,228 | |
| Difference Between Expected and Actual Experience | 45,672 | |
| Difference Between Expected and Actual Investment Earnings | | |
| Difference Between Employer's Contributions and Proportionate | | |

| | | |
|---|---|---|
| Share of Contributions | 91,094 | |
| Change in Employer's Proportion | 3,404 | 26,536 |
| Contributions Subsequent to the Measurement Date | 185,178 | |
| **Total** | **$404,576** | **$37,532** |

*Data Source: LOAPUD Financial Statement FY 20/21*

This fiscal indicator shown in Figure 4-16 depicts the relationship between pension contributions as a percentage of covered-employee payroll. Due to updates to pension reporting requirements enacted in 2014, the Pension Payments indicator shows data for 2015 and beyond. In addition, GASB 68 revised and established new financial reporting for pensions effective in 2015. This percentage is calculated using the following formula: contributions in relation to the actuarially determined contribution divided by covered payroll.




FY 2021 had the highest percentage (33.36 percent), reflecting that a greater percentage of funds was dedicated to pension contributions compared to covered-employee payroll. During the fiscal years 2015 through 2019, the percentage was stabilized at around 26.3 percent on average. As of June 30, 2020, LOAPUD had a net pension liability of $1.48 million, and this liability increased to $1.5 million as of June 30, 2021. This increase in net pension liability is likely reflected in the ratio shown in Figure 4-16 above. Ideally, LAFCO will continue to monitor this metric to consider long-term fiscal trends as a larger time series of data becomes available.

CalPers recognizes that the scale and multi-faceted nature of climate change presents a systemic risk to retirement portfolios across the board. The risks include:

- disruption to portfolio companies' supply chains and operations,
- heightened volatility to financial markets,
- reduced economic growth,

- fixed assets (e.g., real estate), and
- impacts to the financial success of existing business models and portfolio companies

CalPers has implemented its Sustainable Investments Program in an attempt to mitigate these systemic risks (CalPers, n.d.)

### *4.8.9: Rates*

Since LOAPUD is an enterprise district, rates cover the costs of service provision, with very few exceptions. Expanding the wastewater system in response to growth in the community is typically paid by developer fees. The LOAPUD's fee schedule provides information regarding wastewater rates, prominently posted on its website at: <*https://www.loapud.com/documents-maps-forms-and-fees*>. The District Board adopted its wastewater rate schedule via Resolution 05-2019 adopted on June 11, 2019. These rates were adopted based on a wastewater rate study by Sauers Engineering, Inc. (a Civil & Environmental Engineer firm) which considered several options to fairly allocate the cost of service to the District's customers through increased rates. The Sauers Engineering firm study considered LOAPUD's long-term financial needs and its ability to fund future system replacements while maintaining adequate reserves to support ongoing operations and maintenance of the system. The Board held a public workshop in June 2019 to receive comments from the public. LOAPUD notices of the proposed retail wastewater rates and public hearing were mailed to all ratepayers and property owners.

Residential customers include single-family homes, individual condominium units, and townhouse units. Commercial customers include multiple dwelling units, trailer parks, public use, dedicated irrigation, and commercial establishments. Rates for customer accounts consist of several components. The District's monthly service charge is based on a system that converts customers to equivalent dwelling units (EDU). Residential customers are considered one EDU, and non-residential customers can range from one to many depending on how their wastewater generation compares to a single-family residence. A commercial establishment may have a multiple EDU count, and thus the service charge would be multiplied accordingly. The following fee schedule shows the monthly rate charges per month for each EDU:

Table 4-31: LOAPUD Monthly Fee Schedule

| FISCAL YEAR | MONTHLY CHARGE PER EDU | | | | |
|---|---|---|---|---|---|
| | TREATMENT | PRIMARY SYSTEM | | | STEP SYSTEM |
| | SC-OR | SERVICE CHARGE* | PUMPING CHARGE | KRE PUMPING CHARGE | VILLA VERONA* |
| 2018/2019 (CURRENT) | $11.85 | $21.45 | $4.35 | $1.87 | $26.30 |
| 2019/2020 | $13.85 | $24.21 | $5.85 | $3.37 | $29.06 |
| 2020/2021 | $15.85 | $25.21 | $5.85 | $3.37 | $30.06 |
| 2021/2022 | $17.85 | $26.21 | $5.85 | $3.37 | $31.06 |
| 2022/2023 | $19.85 | $27.21 | $5.85 | $3.37 | $32.06 |
| 2023/2024 | $23.85 | $28.21 | $5.85 | $3.37 | $33.06 |

*Includes $4.90/EDU/Month USDA RD Debt Service Charge

The overall monthly charge that appears on a customer bill is comprised of several smaller sub-fees, as listed in Table 4-31 above and explained in the following paragraphs. Summing these sub-fees calculates an average monthly fee for a typical single-family home at $52.91 in 2022/23.

Sewer Service Charge: In the existing rate structure, the base fee (sewer service charge) is identical for every user class (residential, commercial & industrial) based on the number of EDU. Single-family residential (SFR), multi-family residential (MFR), and Commercial/Industrial users have the same monthly base fee of $27.21 per EDU. A single-family residence is counted as one EDU and would pay a monthly base charge of $27.21. A commercial customer would likely pay multiple times $27.21 based on the number of EDUs (for the basic monthly service) (LOAPUD, 2019a).

RDA Debt Service: LOAPUD customers are charged a fee that LOAPUD utilizes to pay off its debt of sewer revenue bonds. The RDA Debt Service fee is $4.90 per month per EDU (LOAPUD, 2019a). This is included in the Sewer Service Charge.

Pumping Charge: Only those customers with wastewater flow going through one or more of the District's lift stations are charged the monthly Pumping Charge in addition to the base charge. The Pumping Charge is utilized by LOAPUD to pay for operation costs of the lift stations (LOAPUD, 2019a).

Kelly Ridge Estates Pumping Charge: In the Kelly Ridge Estates neighborhood, wastewater moves through five lift stations. Although Kelly Ridge Estates customers currently pay an assessment for pumping expenses through the Butte County tax rolls, the assessment is less than LOAPUD's Pumping Charge (LOAPUD, 2019a). Therefore, Kelly Ridge Estate customers pay a monthly charge to cover operation, maintenance, and upgrade costs of $3.37 per EDU (in addition to the assessment).

STEP System Sewer Service Charge: STEP is a septic tank effluent pump system in the Villa Verona Assessment District area. Individual pumps and septic tanks are located on the customer's private property, which pump wastewater from the customer to a District pipeline. Since the local topography does not lend itself to either a conventional gravity collection system or a regional sewer lift station, the STEP system is the best option for wastewater. Due to the need to serve each of the pumps and to periodically pump the septic tanks, maintenance costs can be high. Therefore, a separate rate charge for customers on a STEP system has been set at $32.06 per month (LOAPUD, 2019a).

SC-OR Service Charge: SC-OR charges LOAPUD customers for wastewater treatment and disposal costs through LOAPUD's billing system. The SC-OR service charge is established by SC-OR and included as a separate line item on LOAPUD's invoices. The SC-OR service charge was $13.85 per EDU per month for 2019, as listed in Table 4- 31 above (LOAPUD, 2019a). SC-OR recently approved a rate increase that is now included on the LOAPUD sewer bill. The new

SC-OR service charge includes an annual $2.00/EDU/month step increase through FY 2022/23 and a $4.00/EDU/month step increase in FY 2023/24 (LOAPUD, 2019a).

Comparable Rates: LOAPUD's Final Rate Study (2019) compared wastewater service rates of LOAPUD to various districts and cities in Northern California. The rate comparison in the study gives the District a barometer of its rates in relation to surrounding communities and similar service providers. Generally, LOAPUD's rates are similar to those of other wastewater service providers in the region.

Rate Increase in 2019: Based on the results of the 2019 Rate Study, LOAPUD determined that it was necessary to raise rates to allow the District to continue performing maintenance and replacement of existing, aging facilities and to install new facilities as needed. Increasing costs for fuel, construction, material, administrative, and overhead expenses were cited. LOAPUD mailed the Notice of Rate Increase to its customers on April 25, 2019. A public hearing was held at 2 PM on June 11th, 2019.

Other Fees: In addition to monthly fees, connection charges, annexation fees, and other fees may apply. the connection charge is based upon an asset replacement which determines the amount of each user's share of the cost of replacing the District's capital facilities. Wastewater connection charges allow development projects to reimburse the District for actual administrative, material, and labor costs of connecting to the wastewater system. Overall, LOAPUD's budgeting approach has resulted in stable rates. Table 4-32 below summarizes the determinations for LOAPUD's financial ability to provide services.

Table 4- 32: MSR DETERMINATIONS LOAPUD FINANCIAL ABILITY TO PROVIDE SERVICES (Including financial policies and Transparency Indicators

| | **Indicator** | **Determinations** |
|---|---|---|
| LOAPUD-FIN-1 | Summary financial information presented in a standard format and simple language. | LOAPUD's Financial Statement and Budget are prepared annually and clearly and transparently present financial information. The District's fiscal year begins July 1st. |
| LOAPUD-FIN-2 | District has a published policy for reserve funds, including the size and purpose of reserves and how they are invested. | LOAPUD's reserve policy is described in its annual financial statement, posted on the District website. |
| LOAPUD-FIN-3 | Other financing policies are clearly articulated. | LOAPUD's Financial Statement contains a list of its accounting policies. |
| LOAPUD-FIN-4 | Compensation reports and financial transaction reports that are required to be submitted to the State | Employee wage scale is available in LOAPUD's annual budget, posted on the District website. In addition, required reports are sent to the |

| | | |
|---|---|---|
| | Controller's Office are posted on the district website. | California State Controller for Government Compensation. |
| LOAPUD-FIN-5 | Revenues exceed expenditures in 50% of studied fiscal years | About 67 percent of all revenues for the LOAPUD comes from wastewater Service Charges. Total revenue was more than the total expenditures in each of the five study years. Please note that in future fiscal years, capital contributions will be made to fund capital improvement projects, and it is recognized that capital improvement projects are expensive and necessary. Many wastewater districts in California are in a similar situation. |
| LOAPUD-FIN-6 | Increases or decreases in net position | The Net Position steadily increased year to year in each of the five study years. As of June 31, 2021, the District's net position was $10,371,553. This was an increase of $446,828 from the prior year |
| LOAPUD-FIN-7 | Tax Revenues/Connection Ratio | Tax Revenues/Connection Ratio calculates tax revenues ($347,112) per the number of sewer connections (5,733) which equates to a ratio of 60.5, meaning that on average, each sewer connection pays $60.5 in property tax annually to LOAPUD. |
| LOAPUD-FIN-8 | Rates were adopted by the Board of Directors | The District Board adopted its wastewater rate schedule via Resolution 05-2019, adopted on June 11, 2019. These rates were adopted based on a wastewater rate study by Sauers Engineering, Inc. (a Civil & Environmental Engineer firm) which considered several options to fairly allocate the cost of service to the District's customers through increased rates. |
| LOAPUD-FIN-9 | The process for adopting rates is consistent with Proposition 218 | LOAPUD mailed its customers the Notice of Rate Increase on April 25, 2019. A public hearing was held at 2 PM on June 11th, 2019, consistent with Proposition 218. |
| LOAPUD-FIN-10 | Rates are readily available to constituents | Information regarding wastewater rates is provided in the LOAPUD's fee schedule, which is prominently posted on its website at: <*https://www.loapud.com/documents-maps-forms-and-fees*>. |

### *4.8.10: Risk Management*

Managing risks is a method that special districts commonly utilize to reduce unforeseen costs associated with risks. Insurance policies assist special districts in managing risks. Insurance coverage typically includes property, liability, crime, and workers' compensation insurance. The property, liability, and crime policies are specific to governmental agencies and are not in a pooled program. The Workers' Compensation policy is with Special District Management Authority, a self-insurance pooled group specific to special districts in CA. General Liability insurance is obtained through a broker called Allied-Wastewater. LOAPUD annually reviews its coverage options (LOAPUD, RFI, 2021a).

## 4.9: Cost Avoidance & Facilities Sharing

This section highlights cost avoidance practices given necessary service requirements and expectations. Ideally, proposed methods to reduce costs would not adversely affect service levels. Municipal wastewater systems generally have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, LOAPUD pursues an array of cost avoidance techniques that contribute incrementally towards keeping costs reasonable. Specifically, LOAPUD carefully utilizes its budgeting processes to serve as a means to avoid unnecessary costs.

Facilities Sharing: LOAPUD actively shares facilities and equipment with neighboring service providers. For example, the WWTP is a shared facility among the members of SC-OR. In addition, specific pieces of equipment related to the sewage system are occasionally shared by LOAPUD, the SC-OR, and TWSD. For example, the purchase of aluminum shoring is coordinated with neighboring agencies to reduce costs. By purchasing compatible components with the same type of shoring in case of emergency, the employees will be familiar with how the pieces work (D. Groyer, personal communication, 2022).

LOAPUD does not currently participate in any formal joint agreements or mutual aid (LOAPUD, 2021a). LOAPUD is in an JPA, SC-OR consists of the City Of Oroville, Thermalito Water and Sewer District and LOAPUD.

Information Sharing: The District shares information with the Thermalito Water and Sewer District. For example, there have been discussions about developing a common building standard for sewer facilities. Additionally, LOAPUD cooperates with the following agencies:

- Butte Local Agency Formation Commission to assist in the development of Municipal Service Review (MSR) Studies;
- respective planning departments of the City of Oroville and the County of Butte in the preparation of CEQA documents and processing applications for subdivisions and commercial developments;

Inter-Agency Cooperation

LOAPUD cooperates with other local agencies and service providers. For example, LOAPUD cooperates with Butte County and the South Feather Water and Power Agency on the Palermo Clean Water Consolidation Project. In November 2022, LOAPUD's Board of Directors authorized the submittal of a grant application to consider the feasibility of supporting a consolidation of the Palermo wastewater system. In addition, the Palermo community's individual on-site septic systems for wastewater treatment and disposal have experienced failures resulting in local contamination with coliform and nitrate. The septic tank failures, combined with flooding and high groundwater levels, create a risk for health and safety issues, especially for those who rely upon groundwater wells for residential drinking water. Butte County's website provides additional details on the Palermo issue at:
<*http://www.buttecounty.net/waterresourceconservation/Palermo_Clean_Water*>.

Memberships & Resource Sharing

Membership in professional organizations is a way that special districts can leverage their expertise and the expertise of their colleagues in similar districts to efficiently provide mutual assistance, share information, and to support professional development. LOAPUD staff did not indicate any membership in professional organizations. However, LOAPUD is a member of the JPA for SC-OR, and they practice informal mutual aid by assisting and receiving assistance from other public service providers in the Oroville area.

Cost Savings

District staff and the Board of Directors continuously look for ways to reduce overhead and operational costs. For example, the District generally runs a very lean operation. Staff is currently researching a future possible cost-savings method to utilize third-party billing (LOAPUD, 2021a). An example of staff focusing on saving money and increasing efficiency is the District's utilization of the cooperative purchasing system known as "Sourcewell" (*https://www.sourcewell-mn.gov/*) (LOAPUD, 2021a). This cooperative purchasing system conducts procurement for State and Local Governments and leverages the power of cooperation. Therefore, contracts can be obtained at a lower cost, saving the District money. Applying for grant and loan funds is another method LOAPUD utilizes to save costs. In September 2021, the LOAPUD Board of Directors authorized staff to sign a MOU to apply for the Local Early Action Planning Grants (LEAP) and Regional Early Action Planning (REAP) grants. Avoidance of litigation and other legal action is another method staff, and Board utilizes to save costs (LOAPUD, 2021a).

Goals and Challenges

California's water and wastewater districts face future challenges and issues due to changing conditions. For example, during the Covid crisis, the District incurred lost revenue due to the inability to stop sewer service. Several accounts stopped paying for sewer service, and the District had no method to recoup the lost revenue due to non-payment.

District staff was invited to note specific goals and challenges for the future. Identified issues include:

- Rising costs associated with replacement and/or upgrading of pipelines.
- Regional growth is inhibited by rising costs and environmental constraints.
- Shrinking labor pool
- Need to increase field staff by one Utility Worker
- (Data Source: LOAPUD, 2021a).

Reorganization: It is sometimes beneficial for an agency to pursue structural and/or jurisdictional reorganizations to save money and avoid future overhead costs. LOAPUD staff has indicated that there are no functional or structural reorganizations that the District is evaluating to benefit recipients of the District's services or improve the provision of wastewater collection services at this time. Appendix X in this MSR outlines several conceptual re-organization and SOI options for all the water and wastewater service providers described in this document.

### *Determinations for Shared Facilities*

Based on the information included in Section 4.10 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 4-33 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

Table 4-33: MSR DETERMINATION: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES

| Number | Indicator | Determination |
|---|---|---|
| LOAPUD-SHA-1 | The Agency collaborates with multiple other agencies for the delivery of services within its boundary. | LOAPUD collaborates with several other agencies to deliver services within its boundary by implementing the following practices: facility sharing through SC-OR, information sharing, and cost reduction. |
| LOAPUD-SHA-2 | Agreements for mutual aid or any other appropriate agreement (i.e., Tax Sharing Agreement) are periodically reviewed to ensure fiscal neutrality. | LOAPUD does not currently participate in any formal Joint Agreements or Mutual Aid. However, it is a member of SC-OR. LOAPUD provides assistance to SC-OR and receives assistance from SC-OR. |

| | | |
|---|---|---|
| LOAPUD-SHA-3 | Other practices and opportunities that may help to reduce or eliminate unnecessary costs are examined by the District periodically. Ideally, there is a balance between cost efficiency and risk reduction strategies. | Municipal wastewater systems generally have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, LOAPUD pursues several cost avoidance techniques that each contribute incrementally towards keeping costs at a reasonable level. Specifically, LOAPUD carefully utilizes its budgeting processes to serve as one means to avoid unnecessary costs. LOAPUD participates in one Joint Powers Authority (SC-OR). |

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# Chapter 5: Sewerage Commission-Oroville Region

This chapter presents a municipal service review for the Sewerage Commission-Oroville Region (SC-OR) with details on the Commission formation, boundary, government structure, population, land use, disadvantaged communities, and the provision of water or wastewater services and facilities. Based on the information in this report, written determinations that make statements involving each service factor the Commission must consider as part of a municipal service review are presented. The determinations are based upon data presented in this Chapter for the Sewerage Commission-Oroville Region and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

## Table of Contents

# 5.1 Agency Profile & Overview

### *5.1.1: Agency Profile*

| | |
|---|---|
| **Type of Agency:** | Joint Powers Agreement |
| **Principal Act:** | Ca. Govt. Code Sec. 6500 et al., the Joint Exercise of Powers Act. |
| **Functions/Services:** | • Wastewater treatment, disposal<br>• Limited wastewater collection<br>• Recycled water production and distribution for irrigation purposes<br>• Solar photovoltaic electricity generation |

| | |
|---|---|
| **Main Office:** | 2880 S. 5th Ave, Oroville, CA, 95965 |
| **Mailing Address:** | PO BOX 1350, Oroville, CA, 95965 |
| **Phone No.:** | (530) 534-0353 |
| **Web Site:** | https://www.sc-or.org/ |
| **General Manager**: | Glen E. Sturdevant Email: gsturdevant@sc-or.org |
| **Alternate Contact:** | Mikah Salsi, Plant Supervisor. Email: msalsi@sc-or.org |
| **Meeting Schedule:** | The fourth Tuesday of each month at 5:00 PM (except for November and December when the meetings are held earlier due to holidays) |
| **Meeting Location:** | Commission HQ: 2880 S. 5th Ave, Oroville, CA, 95965 |
| **Date of Formation:** | The JPA was formed on June 18, 1971. |
| **Area Served**: | Serving roughly 28,712 acres (50.5 square miles) |

| | |
|---|---|
| **Population** | 41,131 permanent residents |
| **Number of water/sewer connections** | There are two direct connections to SC-OR's main trunk line. All other connections are managed by the JPA member entities (SC-OR, 2021b). |
| **Gross Revenue** | Gross revenues are based on monthly sewer service fees and are $4,585,157 for the 2022 budget cycle |
| **Expenditures** | $2,783,765.00 in FY 20/21 |

### 5.1.2 Agency Overview

The Sewerage Commission-Oroville Region (SC-OR) was formed from a Joint Powers Agreement (JPA) made between the City of Oroville (COOR), the Lake Oroville Area Public Utility District (LOAPUD), and the Thermalito Water and Sewer District (TWSD), which are all located in the Oroville area. In accordance with this agreement, SC-OR provides wastewater collection (via an interceptor), wastewater treatment, and disposal services. Today, SC-OR also provides two auxiliary services: 1) recycled water production and distribution for irrigation and 2) solar photovoltaic electricity generation for internal use. Each of SC-OR's three-member agencies pays a quarterly sewer usage charge to cover the costs of providing related services. Appendix P of this document contains the most recently adopted SC-OR JPA agreement, which was updated on April 24, 2002, and amended in 2010. The current JPA agreement runs for 20 years (from 2010) and expires in 2030 unless it is extended by the written agreement of all the entities (personal communication, M. Salsi, 2022). The JPA agreement can be rescinded or terminated only by the unanimous agreement of the entities. All LAFCOs in California have the ability to review municipal services provided by JPAs. The authority to review JPAs is provided in CKH and Public Records Act:

- CKH: Gov. Code sections 56301, 56378, 56386
- Public Records Act: Gov. Code section 6250 et seq.

Butte LAFCO's MSR on Wastewater Service Providers–Oroville Region Adopted November 5, 2009, included a detailed description of SC-OR. This chapter presents an update to the 2009 MSR.

## 5.2 Agency Formation and Boundary

### 5.2.1 Formation

The Sewage Commission-Oroville Region (SC-OR) Joint Powers Agency (JPA) provides efficient and effective wastewater treatment services for the greater Oroville region. SC-OR was formed primarily for the purpose of wastewater treatment and disposal. SC-OR's Principal Act is the Joint Exercise of Powers Act, as codified in the California Code of Regulations, Government Code section 6500 et al. SC-OR was created on June 18, 1971, following the adoption of a Joint Powers Agreement by the City of Oroville, the Lake Oroville Area Public Utility District (formerly North Burbank PUD), and the Thermalito Water and Sewer District (formerly Thermalito Irrigation District). These three agencies are known as SC-OR member entities. SC-OR's first Board Meeting was held in 1973. Today, SC-OR's service region is composed of three separate member entities jurisdictional boundaries and respective service areas (Figure 5-1). SC-OR owns and operates a wastewater treatment facility, sewer interceptors, pump stations, and outfall.

### *5.2.2 Boundary*

SC-OR is not a special district and therefore does not have a LAFCo adopted official district boundary or sphere of influence. However, the area served by the SC-OR regional wastewater treatment facility is determined by the jurisdictional boundaries of the three-member entities, as listed in Table 5-1 below. The geographic boundaries of the three-member agencies encompass roughly 28,712 acres or 50.51 square miles, as seen in Figure 5-1 (next page). Table 5-1 below describes the geographic characteristics of the boundaries of the entities that comprise SC-OR.

Table 5-1: Boundary and SOI Acreage and Number of Assessor Parcels

| | Boundary | | Sphere of Influence | |
|---|---|---|---|---|
| | **Acres** | **# of APNs** | **Acres** | **# of APNs** |
| City of Oroville | 8,873 | 7,447 | 33,744 | 16,917 |
| Thermalito Water and Sewer District | 14,873 | 3,798 | 44,101 | 4,383 |
| Lake Oroville Area Public Utility District. | 8,582 | 5,558 | 20,295 | 8,013 |
| Total of Three Entities | 32,328 | 16,803 | 98,140 | 29,313 |
| Subtract Overlap Areas | -3,616 | | -22,940.2 | |
| **Total for SC-OR** | 28,712 | n/a | 75,199.8 | n/a |
| *Data Source: See Tables 3-1, 4-3, and 7-1* | | | | |

The combined SC-OR service area (i.e., “boundary”) covers 28,712 acres, as listed in Table 5-1 above. SC-OR’s service area contains less than 16,500 assessor’s parcels. The total planning area (i.e., “sphere of influence”) for the combined SC-OR covers 75,199.8 acres. The shape of the combined boundary is irregular and does not follow any conventional geometric shape. A detailed description of the boundary area for the three-member agencies is provided in the agency-specific chapters as follows: City Of Oroville, Chapter 3; Lake Oroville Public Utility District, Chapter 4; and Thermalito Water And Sewer, Chapter 7.

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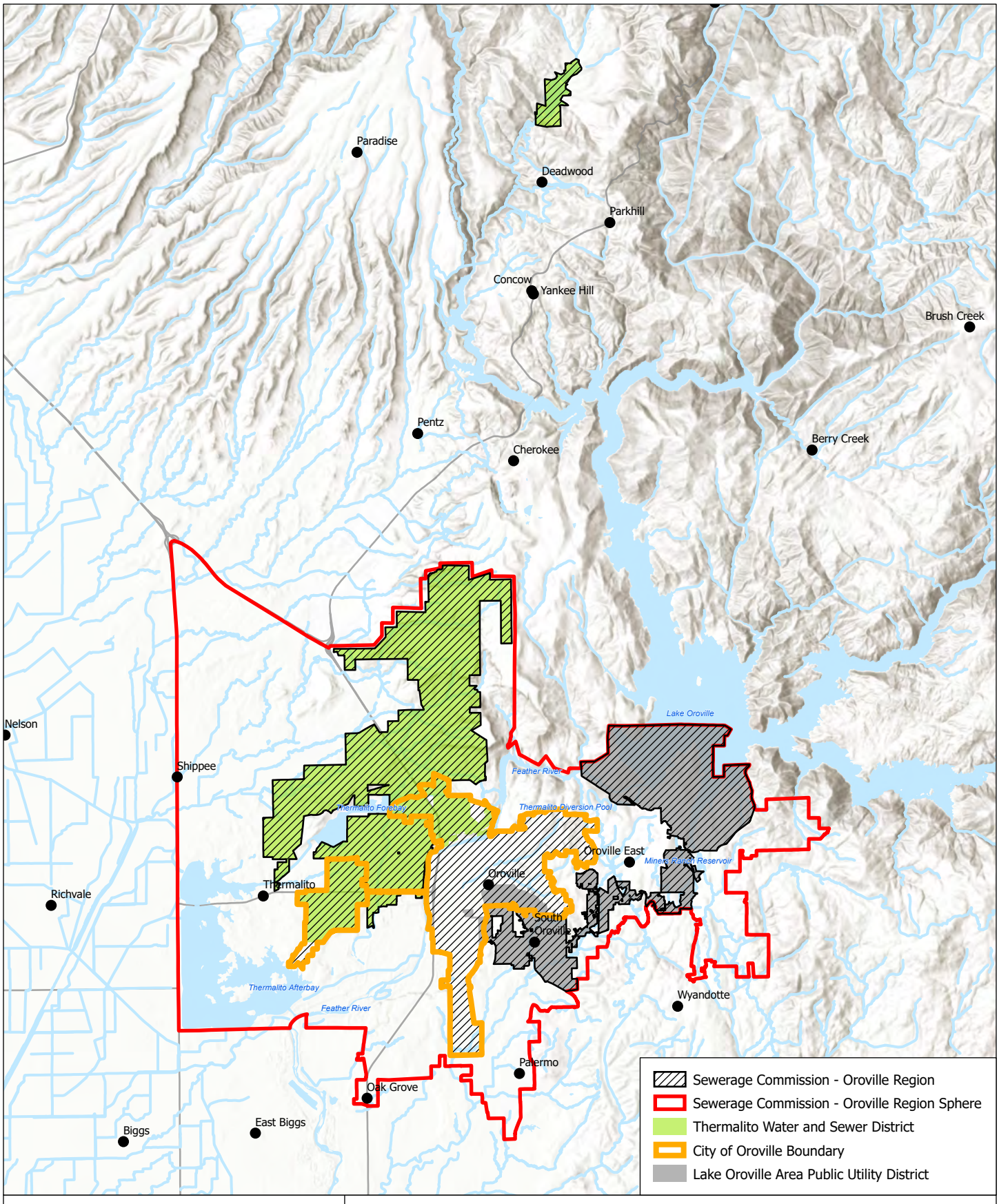



*Map Date: 09/29/2021*
*Data Source: Butte LAFCO*

# Figure 5-1
# Boundary and SOI Sewerage Commission – Oroville Region

### 5.2.3 Sphere of Influence

SC-OR is not a special district and therefore does not have a LAFCo adopted official sphere of influence. However, the area served by the SC-OR regional wastewater treatment facility is determined by the SOI of the three-member entities. SC-OR's three-member agencies have SOIs that encompass 75,199.8 acres and include less than 29,000 parcels, as shown in Table 5-1 above.

### 5.2.4 Extra-Territorial Services

The SC-OR does not "directly" provide extra-territorial services outside the boundary of its three-member entities (SC-OR, 2021b). However, SC-OR accepts and treats domestic septage trucked in by approved septage haulers licensed by Butte County Environmental Health Divison and SC-OR. The septage originates from pumped residential septic tanks and is brought to the SC-OR WWTP for treatment and disposal. SC-OR voluntarily provides this service to the community and is under no obligation to continue this service. SC-OR accepts approximately 1 million gallons per year of domestic septage from within their service area.

This program resulted from a historical situation (n.d.) when the local landfill stopped accepting sludge, and prices and problems arose. The next nearest landfill is located in Wheatland, which increased transportation costs for truck companies. Septic pumper trucks are private companies that pump out homeowner septic tanks and bring the pumped waste to the SC-OR WWTP. The private trucking companies have a contract with the homeowners. The effluent is required to originate in the Oroville area, and truck drivers are required to demonstrate the origin by providing a ticket with the homeowner's address. (personal communication, Glen Sturdevant, May 2021). Since this is a historic/legacy practice, SC-OR does not classify this as an "out-of-agency" service. Please note that SC-OR does cooperate with its three-member wastewater service providers as described in "Facilities Sharing," Section 5.9.

## 5.3: District Governance and Accountability

This section describes how performance, accountability, transparency, and public engagement relate to the public's trust in local government. LAFCO is required by the CKH Act to make specific determinations regarding a municipality's government structure and accountability.

### 5.3.1 Government Structure

The SC-OR is a local government agency structured under a Joint Powers Agreement (JPA).

Usage of JPA's: Under the California Joint Powers Law, Article 1, Chapter 5, Division 7, Title 1 (California Government Code 6500), two or more public agencies, including special districts, can enter into Joint Powers Agreements to exercise powers common to the contracting parties. California Government Code Section 6506 specifically applies to the formation of JPA agencies. Under JPA Agreements CGC Section 6508, a JPA agency can be empowered to provide a range of management services, including, but not limited to, 1) making and entering into contracts; 2) applying for and accepting grants, advances, and contributions; 3) acquiring property, by eminent

domain or otherwise, and holding/disposing of property: 4) employing or contracting for the services of agents, employees, consultants, and others; 5) making plans and conducting studies; 6) incurring debts, liabilities or obligations; 7) issuing bonds; 8) designing, constructing and operating facilities and works; and 9) suing or being sued subject to limitations in the JPA agreement.

Effective January 1, 2017, the law requires that JPAs formed by one or more public agencies for the purpose of providing municipal services file a copy of the agreement and any amendments to the Local Agency Formation Commission (LAFCO). The JPAs were mandated to submit a copy of their agreements and amendments by July 1, 2017. JPAs that fail to submit their agreements will be prohibited from issuing bonds or incurring indebtedness of any kind until they meet this requirement.

Governance of JPAs: JPA agencies and their specified activities are overseen by governing boards made up of officials appointed by the member agencies. The make-up of the JPA board by respective member agencies and their specific voting rights are spelled out in the JPA agreement. Good communications, open meetings, and active member agency board participation provide a sound mechanism for retaining local control over the JPA agency. JPA agencies can be dissolved by the member agencies when they have completed their assigned activities or are no longer providing intended benefits. LAFCO emphasizes that it is fundamentally important to a successful JPA that the individual JPA board/commission members consider what is best for all its members when taking board actions and avoid any appearances that the JPA is biased towards one or more member entities. This would include actions related to JPA staffing, rate setting, and preparing capacity evaluations or securing sewer connections.

### *5.3.2 Board of Commissioners*

The Sewerage Commission - Oroville Region (SC-OR) is governed by an appointed Board of Commissioners, appointed by the agencies to whose board they were elected. SC-OR's Board of Commissioners has six members who meet in regular session once monthly on the fourth Tuesday of each month at 5:00 pm at the SC-OR board room at 2880 South 5th Avenue, Oroville. Special meetings are held as needed. SC-OR's Board of Commissioners is comprised of two representatives from each of the member entities, with one of the appointees designated a voting member and the other a non-voting alternate, as listed in Table 5-2. Typically, SC-OR Board appointments are made every two years in July for TWSD and LOAPUD. For LOAPUD, the LOAPUD Board President makes the appointments and designates the voting member. For TWSD, the TWSD Board President makes the appointments and designates the voting member on a staggered, rotating 2-year schedule. The City members of the SC-OR Board are appointed by and serve at the pleasure of the Mayor. Board Members from the City could serve up to four years or more depending on re-election status. SC-OR's Board may appoint committee members on an as-needed basis. Currently, there are no committees of the SC-OR Board. The Commissioner's policy states that an annual elections meeting is to be held during the regular meeting in June. Typically, the " Chair " position is rotated annually among member entities. The policy can be found at the following URL:

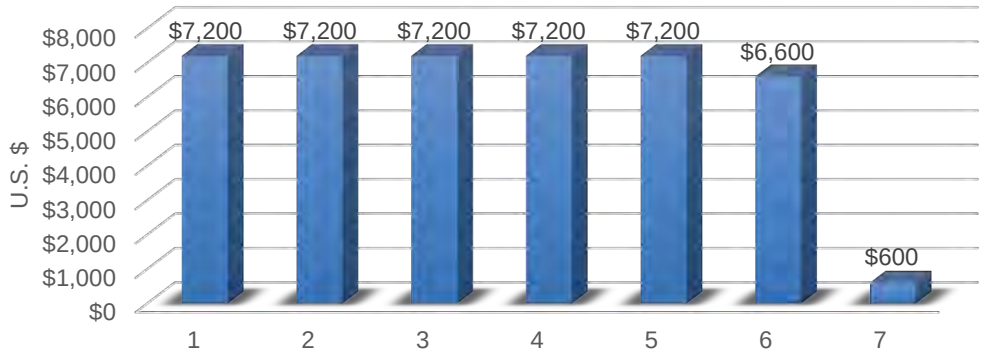
<*https://www.sc-or.org/files/3077759b3/Board+Meeting+Policy.pdf*>.

| Table 5-2: SC-OR's Board of Commissioners | | |
|---|---|---|
| **Name** | **Title** | **Representing Agency** |
| Rich Salvucci | Commissioner | LOAPUD |
| Bradley Taggart | Commissioner | TWSD |
| Scott Thomson | Commissioner | COOR |
| Angie Mastelotto | Commissioner, Chair | LOAPUD |
| David Pittman | Commissioner | COOR |
| Bruce Wristen | Commissioner, Vice Chair | TWSD |

SC-OR holds regular public meetings on the fourth Tuesday of each month at 5:00 PM, except for November and December, when the meetings are held earlier due to holidays. Commission members are eligible to receive an annual stipend of $7,200 for attendance at regular and special meetings as well as Commission committee meetings. Both voting and non-voting Commissioners receive the stipend. Total stipend payments for 2020 are shown in Figure 5-2 below.

All meetings of the Commission and other advisory boards are open to the public in accordance with the Brown Act. The agenda for each Commission meeting includes a public comment period for items not on the agenda. Additionally, the Commission meeting minutes reflect that the public is invited to speak on all items included on the agenda. Commission agendas are posted at the SC-OR office and posted on the SC-OR website here: https://www.sc-or.org/board-meetings Commission Agenda Packets are emailed out to Commission members and posted on the webpage at the above link. Minutes, once approved, are posted on the webpage (SC-OR, 2021b). The Commission and its representatives have a solid record of adherence to the requirements of the Brown Act, the Political Reform Act, and similar laws (SC-OR, 2021b). SC-OR's regulations are adopted by Resolution. Regulations adopted by resolution have the same force and effect as those adopted by Ordinance (Ca. Govt. Code sec. 50020).

**Figure 5-2: SC-OR Commissioner Stipend (Annual 2020)**




Source: CA Auditor Website Public Pay

In California, elected members of special district boards are required to comply with three laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training. A description of each of these three state laws is provided in Chapter 2, Introduction. An assessment regarding the compliance with these three ethics and accountability laws by elected board members of each of the subject Oroville Area water or wastewater related agencies was made as part of this MSR process.

- Political Reform Act: Each district is required to have conflict of interest code/policies. SC-OR's policy regarding the Political Reform Act can be found in the "Board Policies" subsection under the "Governance" tab by following the link for the "Conflict of Interest Policy" PDF found at the following URL: <*https://www.sc-or.org/files/0c6926293/Conflict+of+Interest+Policy.pdf*>. The Political Reform Act also requires special district board members to disclose all personal economic interests by filing a "Statement of Economic Interests" with the Fair Political Practices Commission (FPPC). Compliance with this law was assessed by querying the FPPC Complaint and Case Information Portal at: <*https://www.fppc.ca.gov/enforcement/complaint-and-case-information-portal.html*>. Query results for the SC-OR found no violations. SC-OR's policy states that designated employees are to "file statements of economic interests with the Clerk of the Board of Supervisors of the County of Butte."

- Ethics Training Certificates: Local government officials (including cities, counties, and special districts) are required to take ethics training every two years. Compliance with this law was assessed for each of the five public water or wastewater agencies studied in this MSR. Generally, the ethics training requirement applies to the three-member agencies and does not apply directly to SC-OR. Assembly Bill 1234 (Salinas, 2005) requires ethics training. Ideally, a certificate demonstrating completion of required training for each Commission member would be made available as a public document through the three-member entities (City of Oroville, LOAPUD, and TWSD). Additionally, the SC-OR website is at: <*https://www.sc-or.org/ethics-sexual-harassment-training-certificates*>. The dates that each SC-OR Commission member completed the required training are listed below in Table 5-3. Ideally, each Commissioner would complete the required training within the past two years. The SC-OR website could post certificates directly or provide a link to the member entities' website where the certificates are available.

**Table 5-3: SC-OR Commission Members' Training Compliance**

| Name | Date AB1234 Training | Date GC 53237 Training |
|---|---|---|
| Angie Mastelotto | May 7, 2022* | May 7, 2022* |
| David Pittman | Data Not Available | Data Not Available |
| Scott Thomspon | Jan 27, 2021 | Jan 27, 2021 |
| Bruce Wristen | Jan 2021 | Jan 2021 |
| Rich Salvucci | May 19, 2021 | May 20, 2021 |
| Bradley Taggart | Data Not Available | Data Not Available |
| *Indicates certificate expiration since training is required once every two years. | | |
| Data Source: SC-OR Website (n.d.) at: *https://www.sc-or.org/* | | |

Additionally, a completed ethics training certificate for Mr. Glen Sturdeant, dated September 3, 2021, is posted to the District's website at: <*https://www.sc-or.org*>. Overall, SC-OR and its member entities partners do mostly comply with the training requirements of Assembly Bill 1234. This item should continue to be monitored by LAFCO in subsequent MSRs.

Government Code 53237 et. seq.: Special district board members must receive the required sexual harassment prevention two-hour training every two years. Compliance with this law was assessed for each water or wastewater agency studied in this MSR. Completed sexual harassment training certificates for SC-OR Commission members can be found by accessing < *https://www.sc-or.org/ethics-sexual-harassment-training-certificates*>. Five of the six Commissioners have completed the required training. Ideally, the training would be completed every two years. Overall, SC-OR mostly complies with the training requirements of Government Code 53237. This is an item that LAFCO should continue to monitor in the next MSR.

### *5.3.3 Accountability and Transparency*

Brown Act

The Brown Act is described in Chapter 3, Introduction, of this MSR. All meetings of the Commission Board and committees are open to the public in accordance with the Brown Act. The agenda for each meeting includes a public comment period, and agendas are made available 72 hours before meetings. Any written document that relates to an agenda item is available for public inspection at the same time the writing is distributed to the appointed members of the Commission. Written documents are made available at the Commission Office. Agendas are also distributed via email upon request. Prior to 2021, no phone number or other means of correspondence were provided on the agenda. However, starting in 2022, SC-OR staff intends to put a contact number and email address on all future SC-OR Board agenda packets (personal communication, M. Salsi, 2022).

The State Legislature updated the Brown Act in 2016 as codified in Government Code §54954.2 (see also Assembly Bill 2257). These new Brown Act requirements prescribe the methods and location by which an agenda must be accessible on an agency's website for all meetings, as detailed in the Introduction, Chapter 2. The new requirements mandate that meeting agendas be retrievable, downloadable, searchable, and indexable. As part of this MSR, the website for each water or wastewater agency was evaluated to determine if meeting agendas are made available to the public in a manner compliant with AB2257. SC-OR makes its current Board agenda directly available from its website homepage.

Additionally, the agenda can be found on the website via the "Board Meetings" subsection under the "Governance" tab at the following URL: https://www.sc-or.org/board-meetings. This webpage contains dates, meeting minutes, and agendas dating from Jan. 8, 2019, to the most recent meeting. Packets and audio recordings were also made available for meetings beginning in late 2020 / early 2021. Agendas are posted to the website at least 72 hours prior to each meeting. Commission policy states that parties who have requested notice of special

meetings shall be notified by mail or telephone. Therefore, the Commission's website agenda distribution does comply with the requirements of the Brown Act 2016 updates described in AB 2257.

On March 4, 2020, Governor Newsom signed Executive Order No. N-29-20, declaring a state of emergency due to the threat of COVID-19 and suspending the general Brown Act requirements for teleconferencing. AB 361 allows public agencies to continue to meet remotely during a proclaimed state of emergency through January 1, 2024, while mandating that such meetings remain publicly accessible. During the Covid-19 global pandemic experienced in the year 2020 to 2022, the SC-OR adopted a policy on covid-19 safety. SC-OR continued to hold in-person Board meetings in which Board members and the public were socially distanced. Masks were provided to all attendees, and electronic participation was also provided (personal communication, M. Salsi, 2022).

Under the Brown Act, closed sessions of Board meetings are not encouraged; however, the Act does provide guidance about exceptions when closed sessions can be held under special circumstances. LAFCO may utilize the number of closed sessions a Board holds during a year as an indicator of transparency since fewer closed sessions indicate better levels of transparency. For 2020, the number of closed sessions in SC-OR Board meetings was evaluated. The year 2020 was selected as a base year because data were available for all five public agencies studied in this MSR. In the year 2020, SC-OR held a total of 17 Board meetings which included 12 regular meetings and five special meetings. Ten of those 17 meetings (59 percent) included a closed session. Seven of the closed sessions related to labor negotiations. One closed session related to contract negotiations, and another related to the discussion of options for legal services. The designation of an interim chief plant operator and consideration for hiring a consultant to the Commission were also session topics. For SC-OR, the year 2020 was not a typical year for Board meeting closed sessions due to contract negotiations with the previous manager, the new manager, and the new law firm, and these negotiations may have increased the number of closed sessions above the normal average for SC-OR (personal communication, M. Salsi, 2022). Therefore, it is recommended that this indicator be re-evaluated in the next MSR (in approximately five years) using a two-year timeframe as the study period.

Website

The Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8) requires that special districts have a functional website, and the requirements of this Act are described in the Introduction, Chapter 2. LAFCO uses compliance with the Special District Transparency Act as one indicator to determine the accountability and transparency of a District. SC-OR's website is regularly updated and easily navigable to allow for access to a directory containing current and past agenda packets and audio recordings for download. In the "Transparency" subsection under the "Governance" tab, users can access the current budget plan, financial statements covering the current year and up to 3 years prior, and a link to the State Controller's PublicPay website for Commission and staff member compensation found at the following URL:
*https://publicpay.ca.gov/Reports/SpecialDistricts/SpecialDistrict.aspx?entityid=2642&year=2019*
. Contact information and the physical address for the SC-OR HQ are also provided on the

website. Although none of the policies listed on the "Board Policies" subsection under the "Governance" tab relate to the website's active management and ease of use, opportunities for employment, a service area map, public bid documents, and Request For Proposals/Quotes are all accessible. SC-OR's website does not currently offer a page where community members can sign up for a free electronic subscription service which will send automatic email notifications when new agendas become available. When SC-OR next updates its website, it is recommended to consider adopting a Commission policy providing guidance on updating its website regularly and installing a web-enabled electronic subscription service. The Sewerage Commission-Oroville Region mostly complies with the requirements of the Special District Transparency Act.

General Accountability

The SC-OR demonstrated accountability and transparency in disclosing information and cooperation with Butte LAFCO. Commission staff cooperated with LAFCO's requests for information and participated in an interview with the MSR consultants. Wastewater Regulations are described in Appendix C. In general, the Commission works towards compliance with these regulations.

CONTACT INFORMATION

Sewerage Commission-Oroville Region

2880 S. 5th Ave, Oroville, CA, 95965

*https://www.sc-or.org/*

(530) 534-0353

Butte County is required by law to impanel a grand jury. The major functions of a grand jury are divided into criminal indictments and civil investigations. Civil investigations require the majority of the jury's time. The grand jury's civil or "watchdog" responsibilities include examining all aspects of local government, including cities and special districts, to ensure the county is being governed honestly and efficiently and county monies are handled appropriately. If an agency is subject to many grand jury inquiries, this can indicate poor performance or a high number of complaints about an agency. The Butte County Grand Jury has not investigated SC-OR as of December 2021 (Butte County Superior Court, 2021).

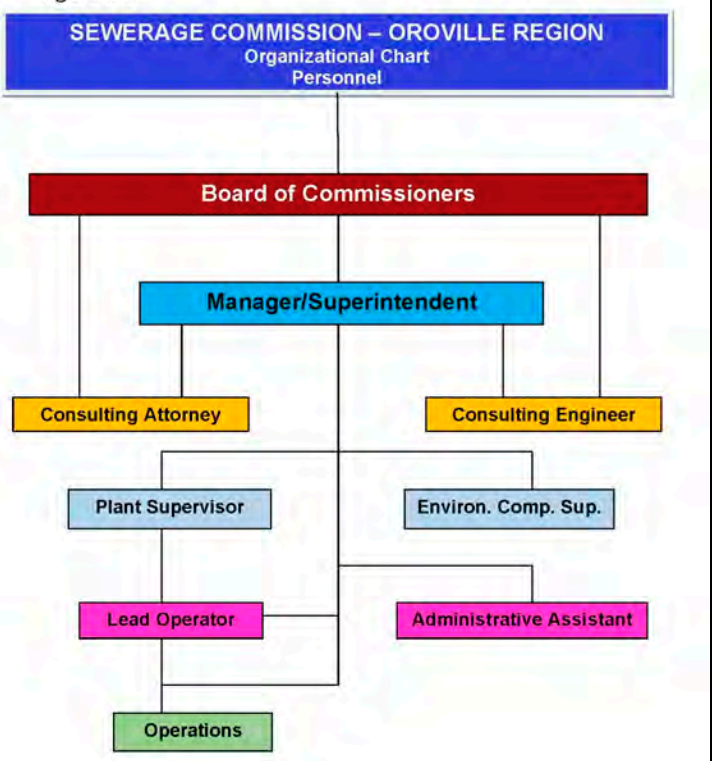
Litigation is expensive for public agencies due to the costs associated with preparing an administrative record, retaining attorneys, and preparing briefs. Avoidance of litigation is an indicator of management's effectiveness in utilizing alternative dispute resolution mechanisms. Current litigation The Commission is not currently involved in any litigation. This indicates that SC-OR's management and the Board of Commissioners are successfully utilizing alternative dispute resolution methods.

### *5.3.4 Management Efficiencies*

The General Manager is appointed by and reports to the Board of Commissioners (Board) and is responsible for directing Commission operations and overseeing and implementing policies on behalf of the Board. An important part of management effectiveness includes adopting a Commission-wide mission and vision statement. The SC-OR Mission statement is: "To provide efficient and cost-effective wastewater treatment while keeping the community safe and protecting the environment and downstream users." The General Manager develops the annual budget for

subsequent approval by the Board, manages all labor/management activities, and performs related work as required. The Manager is the Legally Responsible Official for reporting any Sanitary Sewer Overflows as required by the RWQCB (SC-OR, 2019a). The General Manager is ultimately responsible for effluent quality from the SC-OR plant's process and safeguarding the Feather River as a habitat for endangered fish species and recreational uses of the River (SC-OR, 2021b).

Figure 5-3




### *5.3.5 Staffing and Training*

SC-OR currently has nine full-time employees. SC-OR's organization chart is shown in Figure 5-3, and the Departments are as follows:

- Administration – 2 positions,
- Laboratory/ Environmental Compliance – 1 position,
- Operations - 6 positions
- Data Source: (SC-OR, 2021b).

The Finance Section 5-8 details wages and benefits paid to employees.

In addition to its paid staff, SC-OR contracts with private consulting firms to provide engineering and/or legal services. A registered engineer is often necessary to provide professional technical assistance to the Manager. A Consulting Engineer may plan, organize, administer or direct the maintenance, repair, installation, and upgrading of SC-OR's wastewater treatment and/or collection system infrastructure. SC-OR also contracts for legal services. As of January 2023, the legal counsel situation was vacant and a recruitment was being conducted. It is recommended that SC-OR avoid conflicts of interest among its member entities by ensuring that consultants (such as engineer or attorney) are not also engaged with the member entities as either employees or contractors.

Safety training is conducted for all SC-OR staff in accordance with Occupational Safety and Health Administration requirements. The safety officer (Plant Supervisor) provides training to SC-OR staff for general emergency response and for confined space, self-contained breathing apparatus. Safety training related to system equipment, operations and maintenance is also provided. Sanitary system overflow emergency events require a careful response, and SC-OR's operations personnel are trained to handle these events properly. A log of safety training activities is kept at the SC-OR office (SC-OR, 2019a).

### *5.3.6 Determinations for Governance and Accountability*

Based on the information in Sections 5.1 through 5.3 above, the following written determinations make statements involving each service factor that the LAFCO must consider as part of a municipal service review. The determinations listed below in Table 5-4 are based on the data presented and are recommended to the LAFCO Commissioners for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

Table 5-4: MSR DETERMINATIONS: ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENT STRUCTURE AND OPERATIONAL EFFICIENCIES

| Number | Indicator | Determination |
|---|---|---|
| SC-OR-Acc-1 | Number of closed sessions during the year 2020 (ideally fewer than 50%). | In the year 2020, SC-OR held a total of 17 Board meetings which included 12 regular meetings and five special meetings. Ten of those 17 meetings (59 percent) included a closed session. This exceeds the suggested 50 percent metric. However, it is recognized that 2020 may not have been a typical year for SC-OR Board meetings, given the special circumstances related to employee and contract negotiation, which increased the number of closed sessions. Therefore, it is recommended that LAFCO re-evaluate this metric in the next MSR for SC-OR. |
| SC-OR-Acc-2 | Does the agency's Website comply with the 2016 updates to the Brown Act described in Government Code §54954.2 and enacted by Assembly Bill 2257? | Compliance with the 2016 updates to the Brown Act described in Government Code §54954.2 was evaluated in this MSR. SC-OR makes its current Board agenda directly available from its website homepage. Additionally, the agenda can be found on the website via the "Board Meetings" subsection under the "Governance" tab at the following URL: https://www.sc-or.org/board-meetings. This webpage contains dates, meeting minutes, and agendas dating from the most recent meeting back to Jan. 8, 2019. Agendas are posted to the website at least 72 hours prior to each meeting. Therefore, the SC-OR's website agenda distribution does comply with the requirements of the Brown Act 2016 updates described in AB 2257. |

| | | |
|---|---|---|
| SC-OR-Acc-3 | Compliance with the Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8), which requires special districts to have a functional website that lists contact information and contains financial statements, compensation reports, and other relevant public information. | Compliance with the Special District Transparency Act (Gov. Code, §6270.6 and 53087.8) was evaluated in this MSR. SC-OR's website is regularly updated and easily navigable to allow for access to a directory containing current and past agenda packets, meeting minutes, and audio recordings for download. In the "Transparency" subsection under the "Governance" tab, users can access the current budget plan and financial statements covering the current year and up to 3 years prior. When SC-OR next updates its website, it is recommended to consider adopting a Commission policy providing guidance on keeping its website updated and installing a web-enabled electronic subscription service. The Sewerage Commission-Oroville Region mostly complies with the requirements of the Special District Transparency Act. |
| SC-OR-Acc-4 | Terms of office and next election date are disclosed for District Board members, and committee appointments are online. | Since the SC-OR's Board of Commissioners are appointed, the three-member entities are responsible for reporting the terms of office and the next election date for SC-OR Commissioners. SC-OR's Board of Commissioners does not currently have any committees. |
| SC-OR-Acc-5 | Do elected Board members submit required forms and receive required trainings as prescribed by the three state laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training? | SC-OR is a JPA, and it relies upon its three-member agencies that appoint Board of Commission members to comply with the three state laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training.<br>1) SC-OR's Board of Commissioners complies with the Political Reform Act by listing its conflict of interest policy on the SC-OR website. The FPPC database query results for the SC-OR found no violations. Additionally, SC-OR's policy states that designated employees are to "file statements of economic interests with the Clerk of the Board of Supervisors of the County of Butte. |

| | | |
|---|---|---|
| | | (continued)<br>~~2)~~ Ethics training is required by Assembly Bill 1234 for most local agencies. However, it appears that ethics training may not be required for JPAs as they are not defined as "local agencies". Nevertheless, training certificates are posted to SC-OR's website for several of its Board of Commissioners.<br>~~3)~~ Harassment prevention training is required by Government Code 53237 et. seq. This requirement seems to be mandatory for all employers. SC-OR's website contains up-to-date training certificates for several of (but not all) its Board of Commission members. This is an item that needs improvement. |
| SC-OR-Acc-6 | Current litigation and/or grand jury inquiry | The Butte County grand jury has not investigated SC-OR as of 2021. In addition, the Commission is not currently involved in any litigation. This indicates that SC-OR's management team successfully uses alternative dispute resolution methods. |
| SC-OR-Acc-6 | Conflicts of Interest among member entities are managed (i.e. Engineer and Legal Counsel). | As a JPA, SC-OR's Engineer and Legal Counsel should not ever also be employees or contractors of a member entity/agency, in order to prevent conflicts of interest. |

# 5.4: Growth & Population Forecasts

The growth and population projection for the affected area is a determination that LAFCO is required to describe, consistent with the MSR Guidelines from the Office of Planning & Research (OPR) as set forth in the CKH Act. This section provides information on the existing population and future growth projections for the Sewerage Commission-Oroville Region. Historical and anticipated population growth is a factor that affects service demand. Appendix A, at the end of this MSR Update, provides detailed demographic and socio-economic information for The County of Butte.

## *5.4.1 Existing Population*

There are approximately 41,131 residents within the SC-OR's service area as of 2020. SC-OR's population is comprised of people residing with each of the three-member agencies, as listed in Table 5-5 below.

| Table 5-5: Existing Permanent Population, SC-OR, 2020 | | | |
|---|---|---|---|
| **Name of Agency** | **Population in Service Area** | **# Registered Voters in Service Area** | **Population in planning area (SOI) only** |
| City of Oroville | 17,863 | 9,515 | 36,540 |
| Lake Oroville Area Public Utility District | 12,768 | 7,099 | 17,068 |
| Thermalito Water and Sewer District | 10,500 | 5,659 | 9,336 |
| Sewerage Commission-Oroville Region | **41,131** | **22,273** | **62,944** |
| Source: MSR Chapter 3, Table 3-6; Chapter 4, Table 4-7; Chapter 7, Table 7-5 | | | |

### *5.4.2 Existing Population in Planning Area (SOI)*

The existing population in SC-OR's planning area (SOI) and outside the service area/boundary is estimated to be 62,944 people, as shown in Table 5-5 above. The population within the SC-OR's planning area (SOI) is comprised of people residing within the SOI of each of the three-member agencies. Please note that the population in the planning area (SOI) is not served by SC-OR and likely relies upon septic tanks or does not utilize wastewater services. Since SC-OR is a JPA, it does not have its own sphere of influence.

### *5.4.3 Projected Population Growth*

SC-OR's population is comprised of people residing within the boundary of each of the three-member agencies, as listed in Table 5-6 below.

| Table 5-6: Total Estimated & Projected Population (2020 – 2045) | | | | | | |
|---|---|---|---|---|---|---|
| | **2020** | **2025** | **2030** | **2035** | **2040** | **2045** |
| City of Oroville | 18,888 | 21,113 | 21,679 | 22,170 | 22,555 | 22,830 |
| Lake Oroville Area Public Utility District | 12,768 | 13,300 | 13,854 | 14,432 | 15,033 | 15,660 |
| Thermalito Water and Sewer District | 10,500 | 10,622 | 10,747 | 10,872 | 11,000 | 11,128 |
| Sewerage Commission-Oroville Region | **42,156** | **45,035** | **46,280** | **47,474** | **48,588** | **49,618** |
| Data Source: MSR Chapter 3, Table 3-7; Chapter 4, Table 4-8; Chapter 7, Table 7-6 | | | | | | |

From 2020 to 2045, the population is expected to increase by 17.7 percent. This equates to a compound annual growth of 0.65 percent. The addition of 7,462 more people to the SC-OR by 2045 is possible as the Commission's existing boundaries contain under-developed areas that could potentially be available for more intensive residential development. For example, the City

of Oroville is likely to develop over the next twenty years as residential and commercial development continues to occur and expand.

SC-OR's 2019 Sewer System Management Plan anticipates 30,357 EDUs by the year 2027. This calculates[1] to a projected population of 94,107 by the year 2027. Given current development trends, it is unlikely that SC-OR's service area will actually see that level of development prior to the year 2027 or the year 2045.

### *5.4.4 Existing Land Use*

Land uses within the 28,712-acre (50.5 square miles) area encompassed by the SC-OR member entity boundaries fall under the jurisdiction of the City of Oroville for parcels within the City of Oroville's incorporated limits and the County of Butte for all other areas. LOAPUD and TWSD do not have any land use authority within their districts and have limited influence on land use decisions. Portions of LOAPUD and TWSD are within the incorporated limits of the City of Oroville. Land in the greater Oroville area was zoned for densities and allocations exceeding historical growth. However, infrastructure was planned and developed to serve actual growth, not potential build-out of allocated lands. Land use, agriculture/open space, General Plan designations, and the potential for new future development in the three-member entities are described in more detail in the following MSR chapters:

- Chapter 3, City of Oroville
- Chapter 4, Lake Oroville PUD
- Chapter 7, Thermalito Water and Sewer District

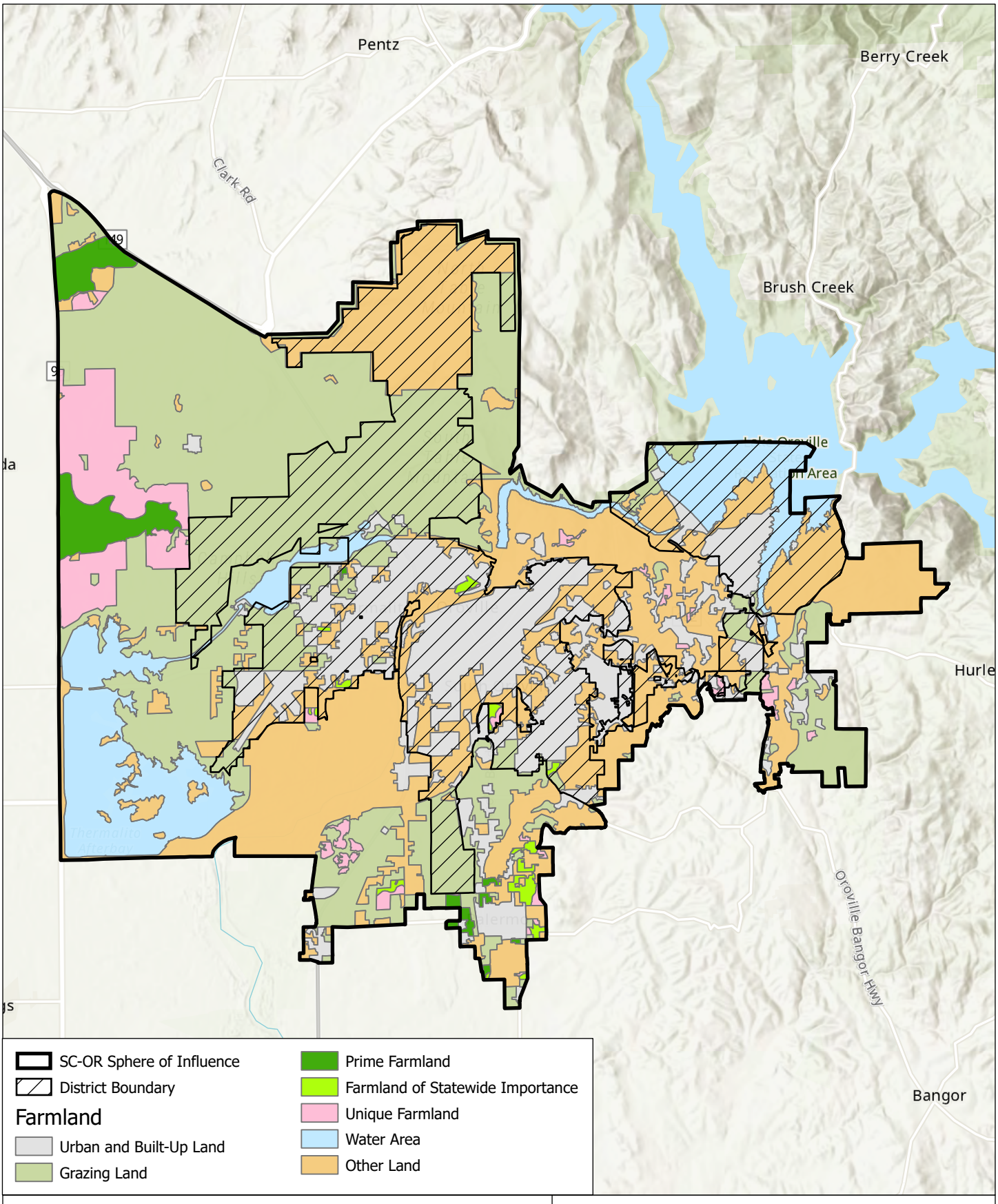
### *5.4.5 Farmland and Open Space*

SC-OR's boundary area and SOI contains a wide range of farmland and open space, including unique farmland, and farmland of statewide importance, as listed in Table 5-7 below. Figure 5-4 shows the spatial arrangement of farmland and open space within the SC-OR boundary and SOI.

Table 5-7: Important Farmland in Boundary and SOI of 3 Member Entities Combined

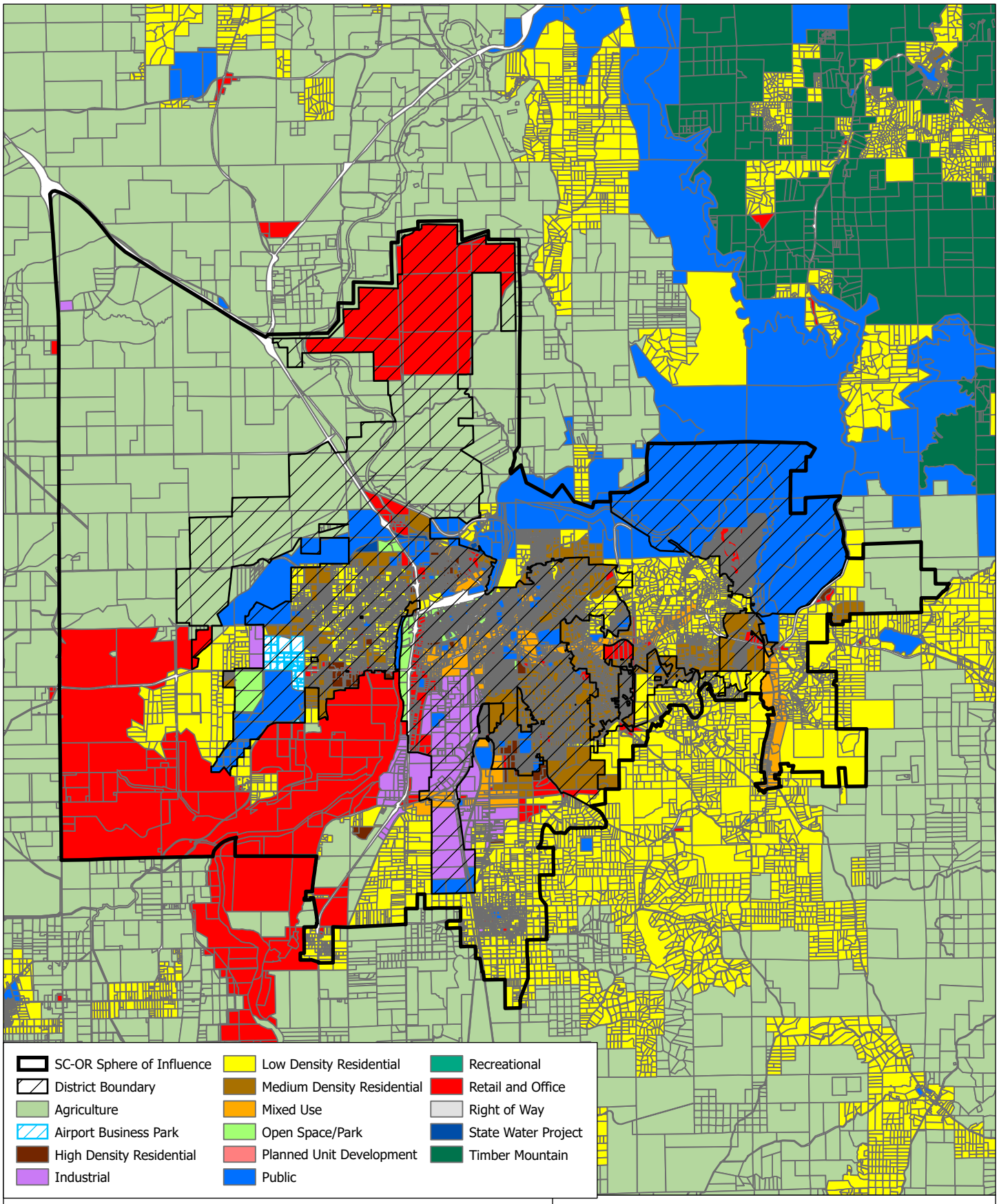
| Land Use | Percentage by Area |
|---|---|
| Urban and Built-Up Land | 18.47% |
| Grazing Land | 35.01% |
| Prime Farmland | 1.81% |
| Farmland of Statewide Importance | 0.68% |
| Unique Farmland | 3.94% |
| Water Area | 7.91% |
| Other Land | 32.19% |
| Data Source: ESRI GIS Data | |

[1] Given 3.1 persons per household * 30,357 EDUs = 94,107




# Figure 5-4
# SC-OR Farmland

*Map Date: 09/29/2021*
*Data Source: Butte LAFCO;*
*Butte County Association of Governments (2021)*




*Map Date: 09/29/2021*
*Data Source: Butte LAFCO;*
*Butte County Association of Governments (2021)*

# Figure 5-5
# SC-OR
# City/County General Plan

A detailed description of farmland within each of the three-member entities is provided in the following MSR chapters:

- Chapter 3, City of Oroville
- Chapter 4, Lake Oroville PUD
- Chapter 7, Thermalito Water and Sewer District

### *5.4.6 City and County General Plan*

The unincorporated area in the Oroville region falls under the Butte County General Plan (Butte LAFCO, 2009). For those areas within the City of Oroville's Sphere of Influence, the City's General Plan can also be considered concerning future development potential upon annexation. A detailed description of the City and County General Plan designations for each of the three-member entities is provided in the following MSR chapters:

- Chapter 3, City of Oroville
- Chapter 4, Lake Oroville PUD
- Chapter 7, Thermalito Water and Sewer District

Figure 5-5, above, provides a cross-walk linking the City and the County General Plan designations to provide a comprehensive picture of each of the three-member entities.

### *5.4.7 Future Land Use*

SC-OR has no control over land uses and traditionally has not directly issued "will-serve" letters. Development projects that require connection to the SC-OR system must obtain a will-serve letter from LOAPUD, TWSD, or the City. The will-serve letter states that the wastewater collection agency currently has the capacity for the proposed project but does not reserve that capacity. The LOAPUD and TWSD will serve letters are valid for one year. In the City of Oroville, approval of a development permit (such as a building permit or a tentative parcel/subdivision map) serves as a will-serve letter, indicating that the City can provide wastewater conveyance services to the development. All SC-OR member entities have development agreements requiring the project developer to either construct or provide funding for any wastewater conveyance improvements needed to serve the project (Butte LAFCO, 2009).

SC-OR allocates access to available treatment capacity at the WWTP on a "first come, first served" basis (SC-OR does not formally reserve capacity at the WWTP for approved projects). To ensure SC-OR has funding for capacity improvements needed to serve new large developments, SC-OR utilizes a *Capacity Agreement.* A Capacity Agreement typically requires all proposed developments with twenty or more residential units or commercial/industrial uses with equivalent wastewater flows to fund the preparation of a site-specific study ("Capacity Impact Study"). The Capacity Impact Study assesses the impact of the development on SC-OR's WWTP capacity and determines whether any necessary expansion or other modification or improvement of capacity is required due to the development's impact (Butte LAFCO, 2009).

Following completion and acceptance of the Capacity Impact Study by SC-OR and if the developer decides to proceed with the development of the project, a mitigation agreement is executed, which generally describes the required improvements, their timing, as well as their financing and construction, and all other requirements of SC-OR and the sewage collection agency that the developer must complete prior to the receipt of service to the project. All developments, 20 EDUs or more, are required to enter into a development agreement to conduct a capacity study (personal communication, M. Salsi, 2022).

For those projects requiring an annexation into the City of Oroville, LOAPUD, or TWSD, SC-OR utilizes a *Pre-Annexation Agreement,* which is substantially the same as the Capacity Agreement. The pre-annexation agreement provides assurance to LAFCo that there will be sufficient treatment capacity at the SC-OR WWTP and in the sewage collection agency's system for the area proposed for annexation (Butte LAFCO, 2009).

### *5.4.8 Determinations for Growth and Population*

Based on the information in Sections 5.2 and 5.4 above, the following written determinations make statements involving each service factor that LAFCO must consider as part of a municipal service review. The determinations listed below in Table 5-8 are based on the data presented and are recommended to the Commission for consideration. LAFCO's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

Table 5-8: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA

| Number | Indicator | Determination |
|---|---|---|
| SC-OR -Pop-1 | Existing Boundary. | SC-OR is a Joint Powers Agency and therefore does not have a LAFCo adopted official district boundary. However, the area served by the SC-OR regional wastewater treatment facility is determined by the boundaries of the three-member entities (COOR, TWSD, and LOAPUD). The 28,712-acre combined service area (i.e., "boundary") encompasses land within the unincorporated County of Butte and the City of Oroville. |
| SC-OR -Pop-2 | Existing Sphere of Influence | SC-OR is not a special district and therefore does not have a LAFCo adopted official sphere of influence. However, the area served by the SC-OR regional wastewater treatment facility is determined by the SOI of the three-member entities (COOR, TWSD, and LOAPUD). SC-OR's three-member agencies have SOIs that encompass 75,199.8 acres and include less than 29,000 parcels. |

| Table 5-8: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| SC-OR -Pop-3 | Extra-territorial Services | The SC-OR does not "directly" provide extra-territorial services outside the boundary of its three-member entities. However, SC-OR accepts and treats domestic septage trucked in by approved septage haulers licensed by Butte County Environmental Health Division and SC-OR. The septage originates from pumped residential septic tanks and is brought to the SC-OR WWTP for treatment and disposal. SC-OR accepts approximately 1 million gallons per year of domestic septage from within their service area. |
| SC-OR -Pop-4 | Projected population in years 2020 to 2045. | From 2020 to 2045, it is anticipated that an additional 7,462 permanent residents will be expected within SC-OR's Service Area. This represents an overall 17.7 percent increase in the projected future population (or 0.65 percent per year). This will bring the total population within the Commission's service area to approximately 49,618 persons by the year 2045. |
| SC-OR -Pop-5 | District boundaries contain a sufficient land area to accommodate projected growth. | Currently, SC-OR's "boundary" area supports an average of 1.27 persons per acre, which is considered to be a low population density. The County General Plan and the City of Oroville General Plan both suggest that growth may occur within the boundaries of the three-member entities. SC-OR's "boundaries" contain a sufficient land area to accommodate projected growth. |
| SC-OR -Pop-6 | Effect that the District's service provision will have on open space and agricultural lands. | The boundaries and SOIs for the three-member entities include grazing land, prime farmland, farmland of statewide importance, and unique farmland. Most farms and agricultural land in the area rely on septic tanks and do not receive wastewater collection services. LOAPUD, in particular, does provide wastewater collection service to state lands associated with Lake Oroville and surrounding open space, thereby protecting water quality. However, the provision of wastewater treatment services generally has minimal effect on agricultural land and open space. Wastewater disposal occurs at a site along the Feather River. SC-OR aims to protect water quality (and associated open space values) by complying with the regulations of the Regional Water Quality Board and other state regulators. |

# 5.5 Disadvantaged Unincorporated Communities

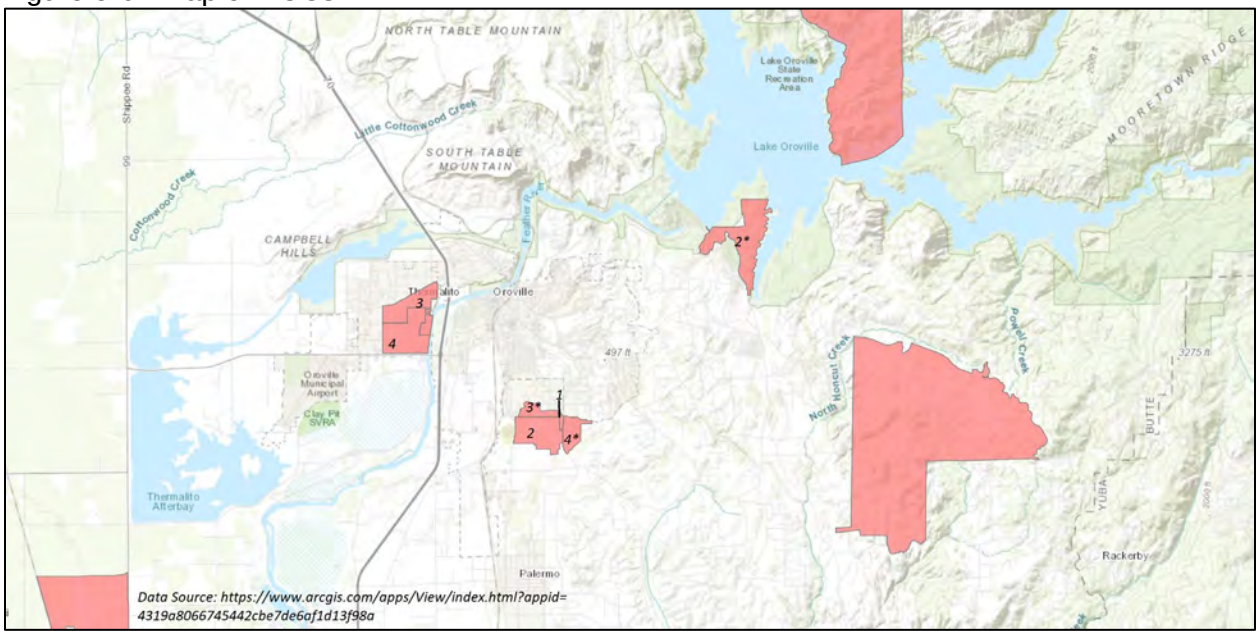
A Disadvantaged Unincorporated Community (DUC) is an unincorporated area of a County in which the annual median household income (MHI) is less than 80 percent of the statewide MHI. The statewide annual median household income (MHI) in California for 2019 was $75,235 (U.S. Census, 2021). The year 2019 is the baseline year because it is the most recent year for which numerical and spatial (GIS) data is consistently available. Eighty percent of the statewide MHI (2019) equals $60,188.00, the threshold used to determine which geographic areas qualify for classification as disadvantaged communities. Seven census blocks meet the threshold for DUC status, as listed in Table 5-9 and shown in Figure 5-6 below.

Table 5-9: Disadvantaged Unincorporated Areas in SC-OR area

| **Block #** | **Block Group Median Household Income** | **# of Registered Voters** |
|---|---|---|
| Block Group 4, Census Tract 37, Butte County, California | $23,210 | 76 |
| Block Group 3, Census Tract 37, Butte County, California | $32,045 | 79 |
| Block Group 2, Census Tract 30.02, Butte County, | 46,964 | 84 |
| Block Group 3*, Census Tract 30.02, Butte County, | 47,500 | 84 |
| Block Group 4*, Census Tract 31, Butte County, | 47,961 | 84 |
| Block Group 1, Census Tract 30.01, Butte County, | 29,792 | 84 |
| Block Group 2*, Census Tract 26.02, Butte County, California | 47,426 | 57 |
| Data Source: CALAFCO Statewide DUC Map using American Community Survey 5-Year Data (2015-19) Updated Mar 2022. Available on-line at: <*https://www.arcgis.com/apps/View/index.html?appid=4319a8066745442cbe7de6af1d13f98a*> | | |

The numbers in Table 5-9 above correspond to the labels shown in the map below.

Figure 5-6: Map of DUCs




Since the City of Oroville is an incorporated municipality, the area within the City boundaries is not classified as a DUC, and City residents are provided public services by numerous local and state agencies.

Census Tract Data for Grants: Although LAFCOs typically rely upon Census "block" data to study DUCs, state and federal funding sources typically utilize Census Tracts to determine DUCs because this level of analysis provides the most uniform income data available statewide. Data for this report was collected from the 2019 American Community Survey 5-Year Estimates at the census tract level. Within the SC-OR service area, 13 Census Tracts meet the DUC threshold and are therefore classified as disadvantaged, as shown in Table 5-10 and Figure 5-7 below. Most of the census tracts cross over both the SC-OR service area and the SC-OR planning area (SOI).

Table 5-10: MHI Choropleth Table for Census Tracts

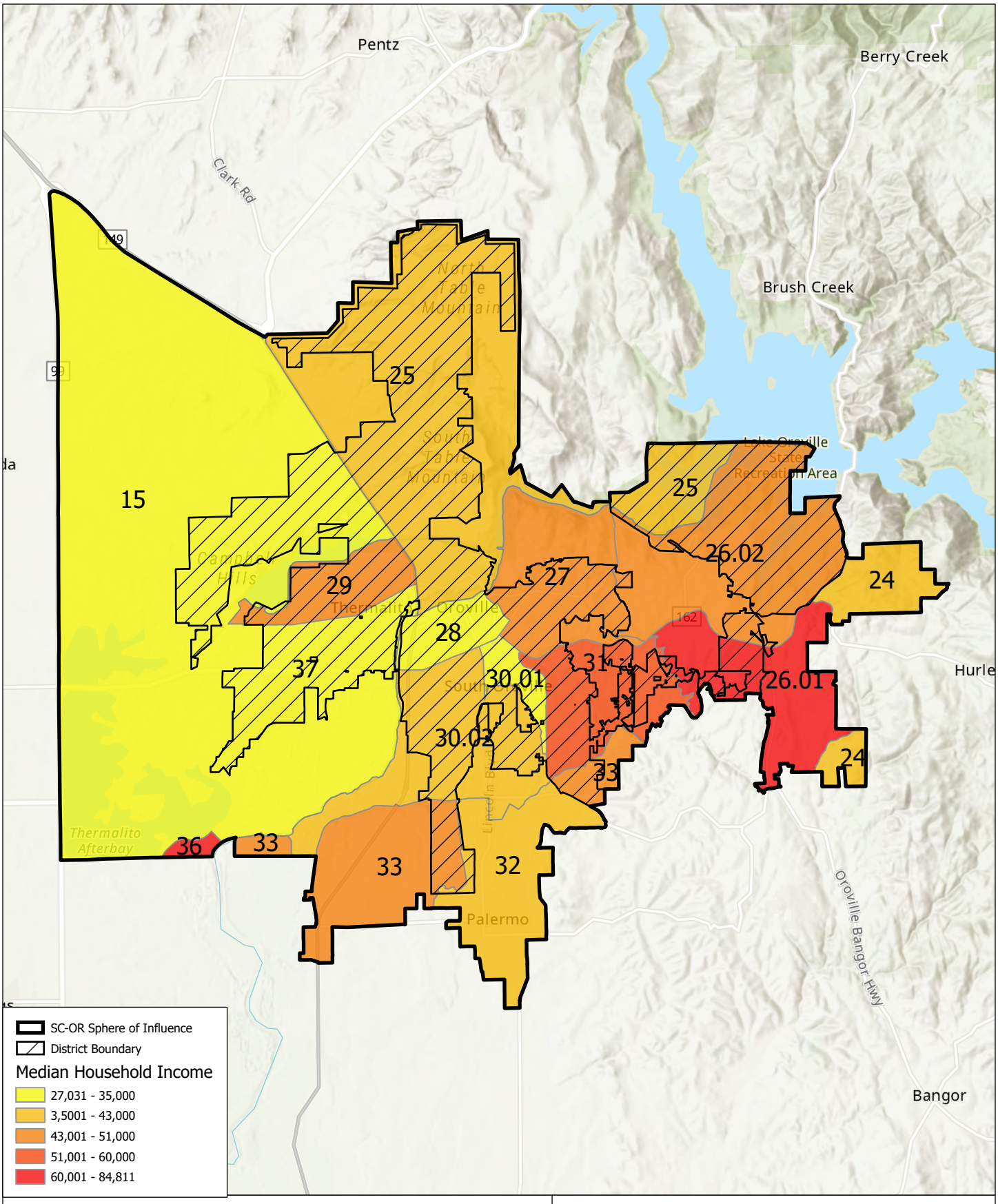
| Census Tract # | Median Household Income (MHI) | Disadvantaged Status |
|---|---|---|
| 15 | $84,811 | No |
| 22 | $53,125 | Yes |
| 24 | $40,071 | Yes |
| 25 | $37,054 | Yes |
| 26.01 | $66,750 | No |
| 26.02 | $48,090 | Yes |
| 27 | $49,029 | Yes |
| 28 | $27,031 | Yes |

| | | |
|---|---|---|
| 29 | $48,497 | Yes |
| 30.01 | $29,235 | Yes |
| 30.02 | $41,377 | Yes |
| 31 | $52,258 | Yes |
| 32 | $40,318 | Yes |
| 33 | $47,411 | Yes |
| 36 | $65,625 | No |
| 37 | $32,401 | Yes |

Also, please note that SC-OR's service area includes the tribal trust lands of Berry Creek Rancheria and Mooretown Rancheria in the LOAPUD boundary.

Water service to the DUCs is provided by several methods, including the Thermalito Water and Sewer District, the South Feather Water and Power Agency, CalWater Oroville, or by individual wells. Wastewater collection services are provided by Thermalito Water and Sewer District, Lake Oroville PUD, the City of Oroville, or by individual septic systems. Wastewater treatment and disposal services are provided by SC-OR. Fire protection service for most of the parcels within the SC-OR service area and planning area (SOI) is provided by two[2] agencies. The City of Oroville under contract with CALFIRE and the County of Butte under contract with CALFIRE.
The SC-OR Service Area and planning area (SOI) areas receive essential municipal services of water, wastewater, and structural fire protection (or acceptable private alternatives). Therefore, no DUCs within the existing SC-OR service area and planning area (SOI) areas lack essential public services, and no public health or safety issues have been identified.

[2] Fire protection services are provided by Cal Fire. Cal-Fire recently took over the fire protection services for the City of Oroville.




# Figure 5-7
# SC-OR Census Tracts

*Map Date: 09/29/2021*
*Data Source: Butte LAFCO; US Census Bureau American Community Survey (ACS)*

| Table 5-11: MSR DETERMINATION: LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| SC-OR DUC-1 | The median household income is identified. The DUC threshold MHI (80 percent of the statewide MHI) is clearly stated. The MHI in the Agency's boundary is described. | The median household income is identified. The DUC threshold MHI (80 percent of the statewide MHI) is clearly stated. The MHI in the Agency's boundary is described. |
| SC-OR DUC-2 | Potential DUCs are considered. The provision of adequate water, wastewater, and structural water or wastewater services to DUCs is considered. | This MSR analysis identified DUCs within the SC-OR service area and planning area (SOI). Water service to the DUCs is provided by several methods, including the Thermalito Water and Sewer District, the South Feather Water and Power Agency, CalWater Oroville, or by individual wells. Wastewater collection services are provided by Thermalito Water and Sewer District, Lake Oroville PUD, the City of Oroville, or by individual septic systems. Wastewater treatment and disposal services are provided by SC-OR. |
| | | (continued)<br>Fire protection service for most of the parcels within the SC-OR service area and planning area (SOI) is provided by the Butte County Fire Department/CAL FIRE. SC-OR's Service Area and planning area (SOI) areas receive essential municipal services of water, wastewater, and structural fire protection (or acceptable private alternatives). Therefore, no DUCs within the existing SC-OR service area and planning area (SOI) areas lack essential public services, and no public health or safety issues have been identified. |

# 5.6: Public Services

## 5.6.1 Service Overview

This Section evaluates the efficiencies of services provided by the Sewerage Commission-Oroville Region (SC-OR) and the associated infrastructure needs, especially as they relate to current and future users. The Sewerage Commission-Oroville Region provides wastewater treatment and disposal to its three-member entities (COOR, TWSD, and LOAPUD). In addition to its wastewater treatment and disposal services, SC-OR also provides a limited amount of water

recycling to irrigate the lawn on its property and solar photovoltaic electricity generation to offset the cost of wastewater treatment. SC-OR is a JPA, and the three-member entities own and operate sewer collection systems within their individual jurisdictions. In accordance with its joint powers agreement, each member entity pays a quarterly sewer usage charge to SC-OR to cover the costs of providing related services.

## 5.6.2: Wastewater Collection and Treatment Services

### *5.6.2.1: Existing Wastewater Collection and Treatment Services*

The Sewerage Commission-Oroville Region (SC-OR) provides wastewater treatment, wastewater and sludge disposal, limited water recycling, and limited collection through its three interceptor/trunk lines. The collected wastewater is discharged to trunk sewers owned and operated by the Sewerage Commission - Oroville Region (SCOR) and conveyed to the SCOR Regional Wastewater Treatment Plant. All retail customer connections are managed by the JPA member entities, COOR, LOAPUD, and TWSD, as listed in Table 5-12 (SC-OR, 2021b). SC-OR also manages a Federally and State-regulated pretreatment program for permitting industrial discharges to the regional collection system (SC-OR, 2021b).

Table 5-12: Number of Customers for Key Municipal Services

| Service | Number of Customers in 2022 |
|---|---|
| Wastewater Treatment and Disposal | 3 |

### *5.6.2.2: Plans*

As detailed in the following paragraphs, SC-OR and the State of California have adopted several planning documents to guide its future and implement its mission.

Sewer System Management Plan

SC-OR adopted a Sewer System Management Plan (SSMP) Update in February 2019. This SSMP is in compliance with the RWQCB rules to complete a Comprehensive Master Plan pertaining to its sewer systems and includes a Sewer Overflow Emergency Response Plan Element for Sanitary Sewer Overflows (SSO) reporting (State Water Resources Control Board, 2006). The SC-OR's Sewer System Management Plan provides a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This helps to reduce and prevent SSOs and mitigate any SSOs that occur (SC-OR, 2019a). The SSMP contains an Operation and Maintenance Program. The SSMP must be updated every 5 years and must include any significant program changes. Re-certification by the SC-OR Board is required when significant updates are made to the SSMP. The updated SSMP must be filed with the State Water

Resources Control Board. It is important to note that the 2019 SSMP is not available on SC-OR's website. It is recommended that the SSMP be posted on SC-OR's website to promote transparency. It is also important to note that the 2019 SSMP is an update to the 2005 SSMP. However, much of the underlying data and assumptions were not updated in 2019 and instead retains the 2005 data. This means that the SSMP contains old data, and it was difficult to utilize this data in this current MSR analysis. This is a situation that needs improvement. Therefore, it is recommended that when SC-OR next updates its SSMP, it should provide a comprehensive update that utilizes up-to-date flow data and population projections. Nevertheless, the SSMP lists several goals for SC-OR as summarized below:

*SC-OR Goals Per SSMP*

1. Be responsive to the needs of its member entities and the public in general, and to work cooperatively with local and state agencies to reduce, mitigate the impacts of, and properly respond to and report Sanitary Sewer Overflows (SSOs).
2. Properly manage and operate SC-OR's facilities to minimize SSOs, thereby protecting public health.
3. Identify, prioritize, renew, and replace sewer system facilities to maintain reliability.
4. Provide capacity for peak wastewater flows as identified in the respective member entity's SSMP or Sewer Master Plan, as incorporated in SC-OR's Sewer System Evaluation and Capacity Assurance Plan (SC-OR, 2019a).
5. Several other goals are also listed in the SSMP.

Master Planning and Financial Assistance Study

A Master Planning and Financial Assistance Study is currently being completed by CH2M HILL. Additional information about this Plan was not readily available.

Risk Management and Hazardous Materials Plan

SC-OR's Risk Management and Hazardous Materials Plan was last updated in 1999. Butte County Environmental Health conducts periodic audits of SC-OR, and they recently recommended that SC-OR's Risk Management/Haz Mat Plan be updated. When the 1999 Plan was written, it did not include sulfur dioxide, which is used to dechlorinate the wastewater prior to disposal in the Feather River. Dechlorination is necessary to prevent adverse impacts on aquatic life. The quantity of chemicals stored on-site at SC-OR necessitates having an updated Risk Management and Haz Mat Plan that an engineer, consistent with federal laws, has signed. At their March 2022 meeting, the Board of Commissioners authorized the preparation of a new update to this Plan. The updated Plan will be available before 2023.

Emergency Response Plan Measures and Activities

SC-OR's Emergency Response Plan Measures and Activities was completed in August 2007. Additional information about this Plan was not readily available.

Basin Plan for Sacramento and San Joaquin River

The Central Valley Water Board adopted a Water Quality Control Plan, Fourth Edition (Revised June 2015), for the Sacramento and San Joaquin River Basins that designates beneficial uses,

establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Plan. The Basin Plan aims to consider the Rivers suitable for municipal or domestic drinking water supply. Beneficial uses applicable to the Feather River from Fish Barrier Dam to the Sacramento River include the following:

- municipal and domestic drinking water supply;
- agricultural irrigation and stock watering;
- water contact recreation, including canoeing and rafting;
- other noncontact recreation;
- warm freshwater habitat;
- cold freshwater habitat;
- warm and cold fish/aquatic migration;
- warm and cold fish spawning;
- wildlife habitat
- Data source: RWQCB, 2021

It is important for SC-OR to meet its water quality objectives in order to maintain these beneficial uses on the Feather River. The Feather River is a significant environmental asset to the local community.

Impaired Water Bodies on CWA 303(d) List

The federal Clean Water Act of 1972 contains section 303(d), which requires states to develop lists of water quality limited River segments. The waters on these lists do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. As shown in Table 5-13 below, the Feather River has impaired water quality for several constituents.

Table 5-13: 303 (d) List for Feather River from Lake Oroville Dam to Sacramento River

| Pollutant | Potential Sources | TMDL Status |
|---|---|---|
| Chlorpyrifos | Agriculture | Adopted and effective 2016 |
| Group A Pesticides | Unknown | Not Completed |
| Mercury | Resource Extraction | Not Completed |
| PCBs | Unknown | Not Completed |
| Toxicity | Unknown | Not Completed |

Data Source for Table 5-13 is RWQCB, 2021

### *5.6.2.3: Permits*

SC-OR is required to comply with all of the terms and conditions of the federal Clean Water Act (CWA) and the California Water Code. A discharge permit from the Central Valley Regional Water Quality Control Board (CVRWQCB) is reviewed every five years for the sewage treatment operation. The District recently received formal approval of its discharge permit in 2021 NPDES No. Ca0079235 and Order R5-2021-0044 effective 10/01/2021.

NPDES Permit

SC-OR is responsible for meeting the wastewater treatment and discharge standards specified in the National Pollutant Discharge Elimination System (NPDES) permit issued by the Central Valley RWQCB. The wastewater treatment plant operated by SC-OR has a design capacity of 6.5 million gallons per day (MGD) average dry weather flow (ADWF). A brief history of NPDES permit issuance for SC-OR is listed below.

- 2000 NPDES permit CA0079235. This NPDES permit required SC-OR to implement its Industrial Pretreatment Program as approved by the Regional Water Quality Control Board (RWQCB) under the authority of the Ca. Code of Regulations (Ca. Water Code § 54739 et al.). SC-OR's Industrial Pretreatment Policy is described in its 2019 SSMP.
- 2005 NPDES permit #CA0079235 and Order#R502005-0010
- 2016 NPDES No. Ca0079235 and Order R5-2016-0024.
- 2021 NPDES No. Ca0079235 and Order R5-2021-0044

The 2021 NPDES permit and associated waste discharge order specify the operating requirements for the emergency storage and solids stabilization pond. Additionally, the 2021 NPDES permit and associated waste discharge order specify water quality parameters related to the discharge of treated wastewater into the Feather River at SC-OR's outfall. The water quality parameters include limitations on constituents such as total suspended solids, pH, copper, dichlorobromethane, biochemical oxygen demand, ammonia, and nitrate (RWQCB, 2021). Additionally, the permit contains prohibitions against bacteria, such as fecal coliform, oils, pesticides, or other harmful substances, from entering the Feather River as a result of SC-OR's discharge. SC-OR is also required to conduct a monitoring and reporting program such that SC-OR takes water samples, analyzes the samples, and sends reports to the RWQCB on a regular basis.

Waste Discharge Requirements

The State Water Quality Control Board established Waste Discharge Requirements for Sanitary Sewer Overflows (SSOs). The Waste Discharge Requirements require reporting SSOs online using the California Integrated Water Quality System (CIWQS). SC-OR complies with the Waste Discharge Requirements order by following the notification and reporting requirements (SC-OR, 2019a). In the event of a SSO, SC-OR will notify the California Office of Emergency Services within 2 hours after becoming aware of any Category 1 SSO greater than or equal to 1000 gallons discharged to surface waters or spilled in a location where it probably will be discharged to surface waters. Also, within 15 days of the SSO end date, SC-OR must re-certify to the RWQCB via CIWQS (WQ2013-0058-EXEC) (SC-OR, 2019a). SC-OR's current WDR Permit can be viewed at:
<*http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/#butte*>.

Industrial Customers

SC-OR has an approved USEPA pretreatment program that includes one non-categorical significant industrial user (SIUs) and two categorical significant industrial users (RWQCB, 2021). Local industrial parcels that wish to establish a new connection to the SC-OR treatment system

must first obtain a SC-OR permit, called an Industrial User Permit (Policy Section 4.2 (A.)), which may contain various conditions and prohibitions (Policy Section 2.1) (SC-OR, 2019a). SC-OR currently has two Sewer EPA Categorical dischargers that are defined categorically as metal finishers (40 CFR 433). . The two Categorical users are Chico Metals and RCBS (personal communication, M. Salsi, 2022). There is one non-categorical Significant Industrial User because of its potential to upset the SC-OR treatment works (SC-OR, 2021b). The one Significant Industrial User is Graphic Packaging.

#### *3.6.2.4: Water Quality Database Reports*

Overview

This section provides the results of database searches on water quality for the SC-OR. Compliance of wastewater agencies with water quality regulations promulgated by the State Water Resources Control Board (State Water Board) and the Central Valley Regional Water Quality Control Board (Regional Water Board) is important to LAFCO. This type of information is especially important since a community cannot rely upon "dilution" as a solution to pollution during a drought. When local water supplies are scarce, keeping that supply at a high level of water quality is desirable.

NPDES Permit

SC-OR's 2021 NPDES permit notes the following "The Discharger committed five (5) violations of effluent limitations for total coliform during the permit term. The Central Valley Water Board took no formal enforcement action, and no specific cause for the violations was identified. (RWQCB, 2021).

California Integrated Water Quality System Project

The California Integrated Water Quality System (CIWQS) is a relational database used by the State and Regional Water Boards to track information about permit violations and enforcement activities. SC-OR has permits from the Central Valley Water Quality Control Board and is therefore classified as a "Permittee." Permittees are allowed to self-report their own permit violations to the CIWQS. CIWQS includes the State Water Board's database of Interactive Violation Reports, which the MSR consultants utilized to generate a report for the wastewater treatment plant and associated facilities. The database query specified criteria to generate a list of violations, including source, agency type, and date range, as listed in Table 5-14 below. The wastewater treatment plant for the SC-OR had a total of six violations during the years from 2016 to mid-2022. Five violations involve exceeding the total coliform 7-day median limit of 23 MPN/100 mL. The four violations spanning from 2017 to 2019 reflect temporary conditions that dropped back down to acceptable levels with subsequent testing. The 2020 violation was a result of seasonal conditions, so no corrective action was needed in this case. The most recent violation occurred on 3/1/2022 when a report (Annual SMR [PRETRPT]) for 2021 was submitted a few days late. This is a minor infraction. All six violations listed in Table 5-14 below were relatively minor and were easily corrected by SC-OR staff.

Table 5-14: Interactive Violation Reports Query Results for SC-OR

| Violation ID | Violated Order | Violation Type | Date | Description | Corrective Action | Source | Classification /Priority | Facility ID |
|---|---|---|---|---|---|---|---|---|
| 1023792 | R5-2016-0024 | Other Effluent Violation | 3/9/2017 | Total Coliform 7-Day Median limit is 23 MPN/100 mL, and reported value was 1600 MPN/100 mL at EFF-001. | Informed inspector and received instructions. SC-OR pulled three separate EFF-001 samples the following week (on March 13, 14, and 15), and each of these confirmed to be lower than total coliform limit of 23 MPN/100mL. | eSMR | U | 246251 |
| 1027086 | R5-2016-0024 | Other Effluent Violation | 5/18/2017 | Total Coliform 7-Day Median limit is 23 MPN/100 mL and reported value was 80 MPN/100 mL at EFF-001. | SC-OR pulled two separate EFF-001 samples the following week (on May 22 and 23) and each of these tests confirmed to be lower than our total coliform limit of 23 MPN/100mL. | eSMR | U | 246251 |
| 1044589 | R5-2016-0024 | Other Effluent Violation | 5/14/2018 | Total Coliform 7-Day Median limit is 23 MPN/100 mL and reported value was 50 MPN/100 mL at EFF-001. | SC-OR did an extra chlorine soak on our filters. Closely monitored the following sample taken (on 5/21/2018). | eSMR | U | 246251 |
| 1057202 | R5-2016-0024 | Other Effluent Violation | 2/11/2019 | Total Coliform 7-Day Median limit is 23 MPN/100 mL and reported value was 47 MPN/100 mL at EFF-001. | SC-OR staff informed the regulator. SC-OR then soaked the filter vessels with chlorine and monitored the next samples to make sure no follow up samples would be required. | eSMR | U | 246251 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1072870 | R5-2016-0024 | Other Effluent Violation | 3/30/2020 | Total Coliform 7-Day Median limit is 23 MPN/100 mL and reported value was 80 MPN/100 mL at EFF-001. | SC-OR staff informed the regulator. Violation was due to seasonal variations of weather and no other corrective action was required. | eSMR | B | 246251 |
| 1102027 | R5-2016-0024 | Late Report | 3/1/2022 | Annual SMR (PRETRPT) report for 2021 (1770517) was due on 28-FEB-22. | null | Report | B | 246251 |
| Data Source: State Water Resources Control Board. California Integrated Water Quality System. On-line Database. Retrieved on June 8, 2022 from: *<https://ciwqs.waterboards.ca.gov/ >.* | | | | | | | | |

Sanitary Sewer Overflow Database

The State Water Board maintains a database of Sanitary Sewer Overflows (SSO) from public/permitted systems and private lateral sewage discharges. Overflows are rare events that release sewage before it reaches the headworks of a wastewater treatment facility. Overflows are a concern because raw sewage contains pathogens, viruses, bacteria, and protozoa. If humans accidentally come into contact with raw sewage, we can potentially contract infections, flu, diarrhea, cholera, hepatitis, or cryptosporidiosis. In addition, people can be exposed via ponding in streets, yards, and parks. The Board's Sanitary Sewer Overflows database is a specific module in the CIWQS. The State Water Board formalized the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003 (SSS WDRs), on May 2, 2006. All public agencies that own or operate a sanitary sewer system comprised of more than one mile of sewer pipes that convey wastewater to a publicly owned treatment facility must be covered under the SSS Waste Discharge Requirements. The SSS Waste Discharge Requirements require enrollees, among other things, to maintain compliance with the Monitoring and Reporting Program. A five-and-one-half-year term from January 1, 2016 to June 1, 2022, was queried in the CIWQS-SSO database. The results of the database queries regarding SC-OR are listed below in Table 5-15.

Table 5-15: SSO Database Query Results

| **Variable in Database** | **Resulting Value** |
|---|---|
| EVENT ID | 880600 |
| Region | 5R |
| Responsible Agency | Sewerage Commission Oroville Region |
| Collection System | Oroville CS |
| SSO Category | Category 3 |
| Start Date | 4/8/2022 |
| SSO Vol | 150 |
| Vol of SSO Recovered | 150 |
| Vol of SSO Reached Surface Water | 0 |
| SSO Failure Point | Force Main |
| WDID | 5SSO10838 |
| Data Source: *State Water Resources Control Board. California Integrated Water Quality System. On-line Database. Retrieved May 2022 from: <https://ciwqs.waterboards.ca.gov/ >.* | |

As shown in Table 5-15 above, during the five-and-one-half-year query period, SC-OR experienced only one SSO. This SSO event occurred on April 8, 2022. 150 gallons of wastewater spilled; however, SC-OR staff recovered and cleaned up all of the spillage. Therefore, wastewater did not enter any of the local streams. This spill event was classified as Category 3, meaning

that the discharge of untreated or partially treated wastewater resulted from an enrollee's sanitary sewer system failure or flow condition.

The CIQWIS Database also indicates that the Sewerage Commission – Oroville Region Wastewater Treatment Plant (SC-OR WWTP) has had six inspections since 2015. No deficiencies were found during this time, and the plant was in compliance with the Waste Discharge Requirements (WDRs) Order. Several requirements and recommendations were made as part of the Pretreatment Compliance Inspection conducted in 2019 to improve the Commission's Program and maintain adherence to the WDRs, each of which were addressed by the SC-OR via written response that included a timeline for implementation (SWRCB CWQIS, 2022).

In summary, SC-OR staff indicate it has an excellent track record of protecting the resources in the Feather River. SC-OR has not had any major water quality violations in the last ten years (Source: SC-OR IRWM grant application).

Water Recycling

SCOR does not operate a formal recycled water program; therefore, recycled water is not available to the Sewage Commission for use as a water source. Therefore, no recycled or reused water is being treated to Title 22 standards for municipal purposes. However, the SC-OR does have a small recycled water system such that recycled wastewater is used only for landscape irrigation at its wastewater treatment plant site.

The recycling of wastewater offers several potential benefits to groundwater-dependent areas of Butte County; however, these opportunities do not currently exist within the SC-OR Service Area. Perhaps the greatest of these benefits is to help maintain a sustainable groundwater supply either through direct recharge or by reducing potable supply needs by utilizing recycled water for appropriate uses (e.g., landscape, irrigation) now being served by potable water. Currently, no wastewater is recycled for direct reuse from the domestic or industrial wastewater streams in the service area of SC-OR. If recycled water is considered in the future, SC-OR will evaluate transmission and distribution costs. Implementing a recycled water program here will need to involve longer-term measures and require regional participation by other member agencies. A recycled water program can be part of a conservation strategy to increase the basic water supply. In addition, recycled water may be cheaper than some other options.
Figure 5-8: Aerial Photograph of SC-OR Site


### *5.6.2.4: Wastewater Collection and Treatment Service to the PLANNING AREA (SOI)*

Currently, the three-member entities do not provide wastewater collection service to their sphere of influence. Since SC-OR is a JPA, it does not have its own separate SOI. SC-OR's planning area (SOI) is comprised of people residing within the SOI of each of the three-member agencies, as described on page 5-19 of this Chapter. SC-OR, therefore, does not provide wastewater treatment service to its planning area (SOI). Many of the properties within the planning area are vacant and do not require wastewater services. Some of the properties rely on private septic tanks for wastewater treatment. In the future, as this area develops, it is anticipated that the property owners may request that their parcels be annexed into one of the three-member entities (and, therefore SC-OR). Since SC-OR has limited remaining unused capacity, it is important to balance the rate of new growth with the potential future expansion of the WWTP.

# 5.7: Infrastructure and Public Facilities

## 5.7.1: Infrastructure Overview

Infrastructure development and maintenance is an important part of the service that the SC-OR provides. SC-OR maintains the following types of infrastructure and facilities:

- Land
- Vehicles
- Administrative office and outbuildings
- Wastewater treatment plant and associated pipes, ponds, and lift stations.

- Main trunk lines and associated lift stations.

Land

SC-OR's office and wastewater treatment facility are located at 2880 S. 5th Avenue in the southern portion of the City of Oroville. The office and WWTP cover six Assessors Parcels totaling 61.88 acres as numbered below:

- 035-390-002,
- 035-390-008,
- 035-390-010,
- 035-390-013,
- 035-390- 014, and
- 035-440-004.

SC-OR also owns land referenced as Assessor's Parcel 035-350-011, totaling 0.09 acres, providing access to SC-OR's Effluent pipe (SC-OR, 2021b).

Vehicles

SC-OR owns four operable trucks, one ford explorer, a front-end loader, a backhoe, track loader, a vacuum truck, and two trailer-mounted pumps (soon to be three) (SC-OR, 2021b). Each of these trucks currently relies upon gasoline or other fossil fuel as an energy source.

The California Air Resources Board (CARB) approved a new rule on Aug 25, 2022, which requires new car sales in California to be zero-emission vehicles (ZEVs) by 2035. While it is not yet clear whether new electric vehicle laws will apply to the type of trucks utilized by SC-OR, it is likely that sometime in the future, SC-OR may be asked to consider purchasing or retrofitting vehicles reliant upon an alternative energy source, such as electricity, biogas, hydrogen, or other source. The price per gallon of gasoline has risen in 2022; therefore, alternative fuel/energy for vehicles can sometimes be cheaper. It is recognized that generating the fuel on-site for these vehicles may be challenging for SC-OR. While SCOR does have a solar system that covers roughly 40% of electrical usage, SC-OR does ***not*** have any equipment or means to charge electric vehicles on site. In addition, SC-OR does ***not*** generate biogas on-site. Furthermore, SC-OR does not have any equipment or processes to generate and store biogas (personal communication, M. Sisal, 2022).

Administrative Office: SC-OR's Administrative Office is located at 2880 S. 5th Ave, Oroville.

Wastewater Treatment Plant: The Wastewater Treatment Plant (WWTP) is described in Section 5.7.2 below.

## 5.7.2: Wastewater Collection and Treatment Facilities

### *5.7.2.1: Existing Wastewater Facilities (Boundary)*

SC-OR operates and maintains an advanced secondary conventional activated sludge wastewater treatment plant (WWTP). The collection systems belonging to the three-member entities (City of Oroville, Lake Oroville PUD, and Thermalito Water and Sewer District) bring the wastewater to SC-OR's facilities. Thus, the three-member entities serve as "satellite" systems to the SC-OR wastewater treatment plant. Additionally, SC-OR is responsible for 2.3 miles of interceptor sewer trunk lines (East, West, and Main) that include a 1.6-mile force main, two pump stations (Ruddy Creek and Feather River), and the effluent outfall pipe and diffuser on the Feather River (SC-OR, 2019a). The Ruddy Creek Pump Station is an older-designed dry well/wet well type sewer lift station with two pumps and a backup generator. Additionally, SC-OR maintains the Feather River Sewer Lift Station (a wet well designed with 3 submersible pump lift station, grinder, and a backup generator). The effluent outfall pipe is roughly 7 miles long and conveys treated wastewater to the outfall discharge point at the Feather River (SC-OR, 2021b). SC-OR's responsibility for the collection system ends at the termination of its interceptor trunk line junctions with member agency facilities (SC-OR, 2019a).

The 3 miles of interceptor sewer has pipes ranging in size from 12"-42" in diameter. This sewer serves three areas:

- West Interceptor serves all of TWSD and portions of the City of Oroville. The Ruddy Creek and Feather River lift stations and their force mains are part of the West Interceptor.
- East Interceptor serves LOAPUD.
- Main Interceptor serves the majority of the City and connects the West and East interceptors with the treatment plant (SC-OR, 2019a).

West Interceptor

The existing West Interceptor sewer pipe delivers sewage into SC-OR's wastewater treatment plant. The West Interceptor pipe is approximately 7,800 feet in length and is composed of 5,000 feet of gravity pipeline and two spans of force main. The system has two pump stations: the Ruddy Creek Pump Station (RCPS) and the Feather River Pump Station (FRPS). There are 23 maintenance holes (MH) labeled MH W001 to MH W023 (SC-OR, 2019a). The West interceptor collects flows from multiple contributing collecting sewers and individual residences. The majority of the West Interceptor's flows originate from three collection lines that tie into the West Interceptor, including:

1) Airport/Industrial area. The Airport/Industrial flows are conveyed to the West Interceptor at the RCPS through the "Airport/Industrial collector."
2) Thermalito Water and Sewer District, and
3) portion of the City of Oroville's service area.

A peak flow is typically the maximum volume of water or wastewater in a pipe or other infrastructure. Peak flows typically occur during wet weather, when soils are saturated, or when infiltration occurs. SC-OR's West Interceptor pipe experiences peak flows that sometimes exceed the theoretical design capacity of those pipes, as shown in Table 5-16 below. This indicates that there is surcharging in the system. It is likely that the West Interceptor pipeline on the East side of the Feather River has sufficient capacity for average flows but that the capacity of the sewer is sometimes being approached or exceeded during peak flow conditions (SC-OR, 2019a).

Table 5-16: West Interceptor – Phase II – Historical Flows and Theoretical Capacities

| Span | Description | Average Dry Weather Flow (mgd) | Peak Hour Flow (mgd) | Theoretical Capacity (mgd) |
|---|---|---|---|---|
| 1 | RCPS to MH W001 | 0.06 | 0.56 | 0.56/ 0.85[a] |
| 2 | MH W001 to MH W004 | 0.29 | 1.85 | 2.04 |
| 3 | MH W004 to MH W007 | 0.66 | 3.78 ◊ | 2.63 |
| 4 | MH W007 to MH W008 | 0.67 | 3.83 ◊ | 3.67 |
| 5 | MH W008 to MH W015 | 0.68 | 3.88 ◊ | 3.33 |
| 6 | MH W015 to MH W020 | 0.71 | 4.03 ◊ | 2.81 |
| 7 | MH W020 to MH W021 | 0.71 | 4.03 ◊ | 2.46 |
| 8 | MH W021 to FRPS | 0.71 | 4.03 ◊ | 2.46 |
| 9 | FRPS to MH W023 | 0.71 | 4.03 | 3.66/ 4.51 |

Note 1: Capacity shown is the firm capacity (largest pump out of operation)/total capacity (all pumps running) mgd = million gallons per day.
Note 2: ◊ symbol indicates actual peak flow exceeds the theoretical design capacity of the pipe.

Data Source: SC-OR, 2019a

A study called the "West Interceptor Phase II" was completed in 2011. This 2011 study contained several recommendations to improve the West Interceptor. Improvements to the West Interceptor were needed to ensure that pipes were sized sufficiently to accommodate most peak flows and reduce the number of SSOs. This West Interceptor – Phase II Study also considered the effect of future population growth given the capacity of the West Interceptor pipe. The study utilized a 4.1 percent growth rate and found that population growth will exacerbate the existing constraints in the West Interceptor pipe such that peak flows will exceed the theoretical design capacity to a greater degree (SC-OR, 2019a). SC-OR also recognizes that the historical long-term average

growth rate has been about one percent. The “West Interceptor Phase II” pipeline improvements have been completed. The West Interceptor Phase II Study recommended that the capacity of the existing interceptor be increased by replacing the existing piping with larger piping (SC-OR, 2019a). This project has been constructed as shown in a sample of the as-built plan shown below for Cal Oak Phase II. The construction occurred along Feather River Blvd and Oro Dam Blvd. As a result of this construction, the larger-sized pipe provides enhanced reliability.

Figure 5-9: As-Built Plan for Cal Oak Phase II, West Interceptor

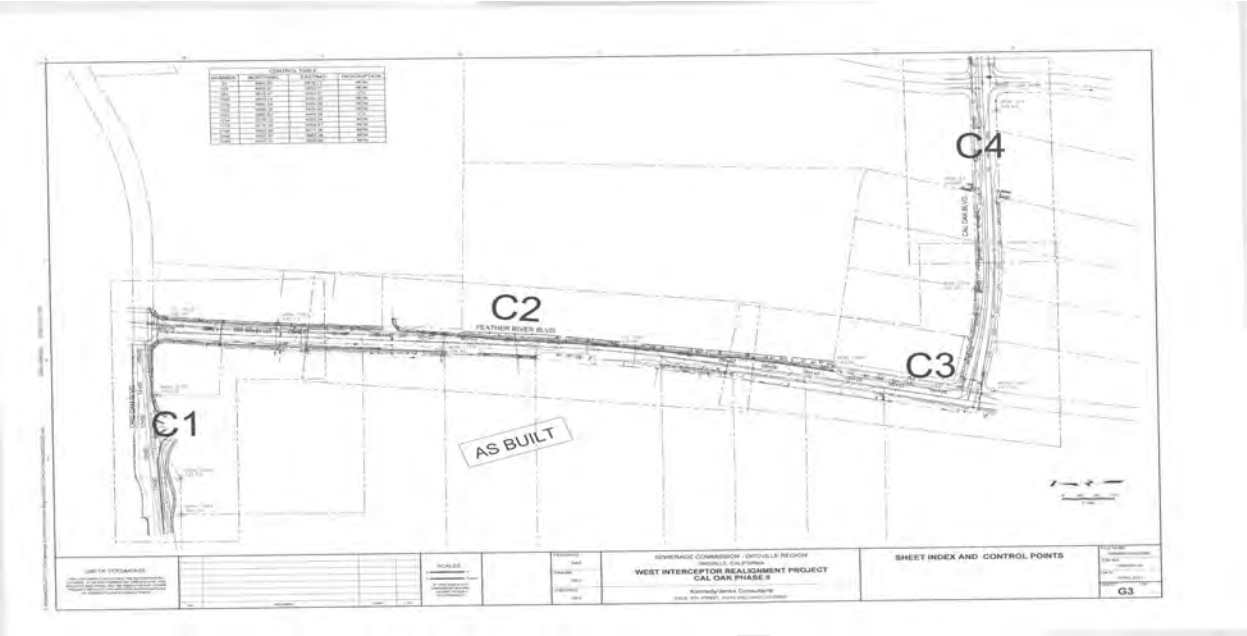
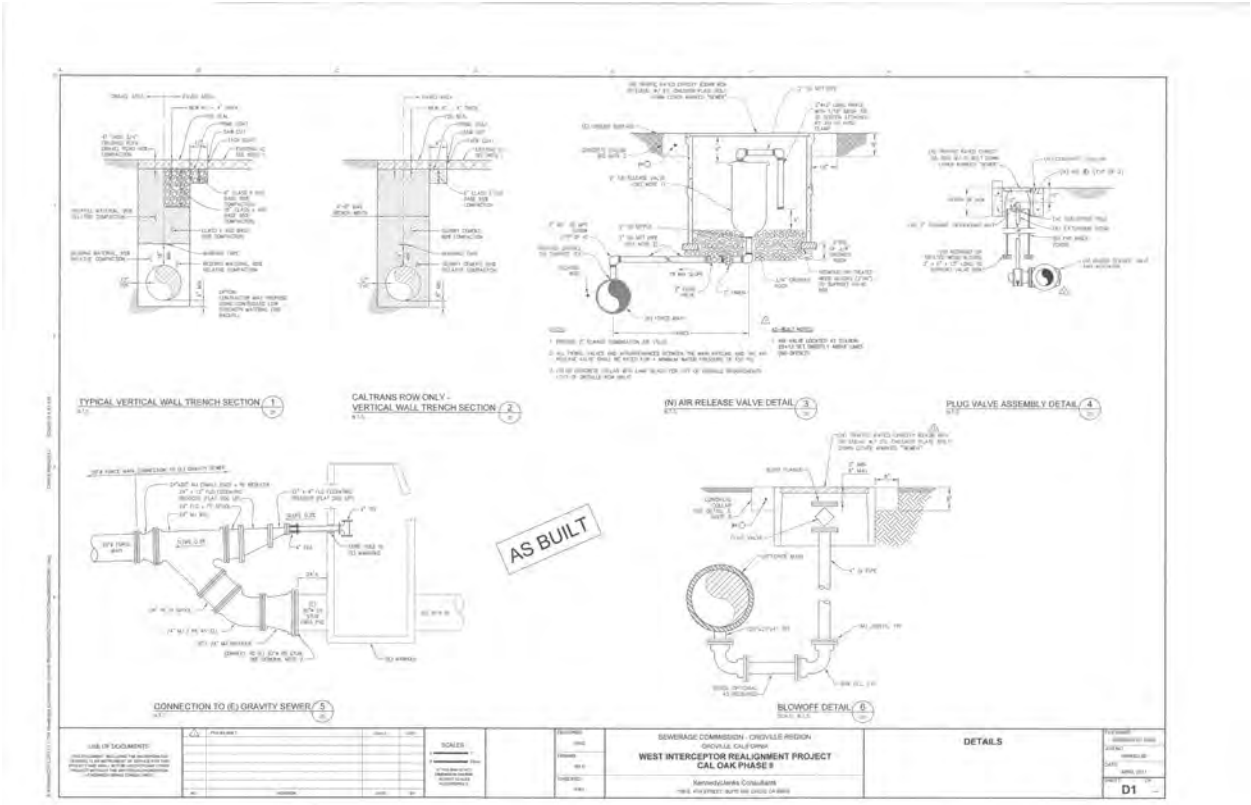


Figure 5-10: Construction Detail for Cal Oak Phase II, West Interceptor




East Interceptor

The East Interceptor pipeline collects wastewater directly from LOAPUD and conveys it to the Main Interceptor. The East Interceptor pipeline comprises 1,550 feet of 24-inch diameter vitrified clay pipe. The capacity of this interceptor is calculated to be approximately 15 mgd (SC-OR, 2019a). As shown in Table 5-17 below, SC-OR estimates that peak flow in 2021 was typically in the 12.5 mgd range, and Average Dry Weather Flow (ADWF) was approximately 1.6 mgd. By 2027 this is expected to increase to peak flow at approximately 13.5 mgd range and ADWF at approximately 1.8 mgd (SC-OR, 2019a). The Oroville region experiences a long dry season from May to October, so the average dry weather flows are common. However, when comparing the peak design capacity at 15 mgd to the 2027 estimated peak flow at 13.5 mgd, one can see that the East Interceptor will soon approach its design capacity. This is a situation that needs improvement. It is recommended that within the next five years or so, SC-OR should make physical upgrades to expand the capacity of the East Interceptor pipeline.

Recently, SC-OR worked closely with LOAPUD to clean and CCTV the pipelines for the East Interceptor. Together, the staffs were able to identify several inflow and infiltration (I&I) related issues in this pipeline that need to be fixed. SC-OR is currently working with Coleman Engineering

on a design to fix the I&I-related issues on the East Interceptor (personal communication, M. Sisal, 2022).

Table 5-17: East Interceptor (LOAPUD) – Projected Year 2027 Flows

| Year | Number of EDUs | ADWF | Peak Flow |
|---|---|---|---|
| 2007 | 5,820 | 0.9 | 9.9 |
| 2008 | 5,920 | 0.9 | 10 |
| 2009 | 6,020 | 1 | 10.1 |
| 2010 | 6,170 | 1 | 10.3 |
| 2011 | 6,295 | 1 | 10.4 |
| 2012 | 6,695 | 1.1 | 10.8 |
| 2013 | 7,070 | 1.2 | 11.2 |
| 2014 | 7,220 | 1.3 | 11.4 |
| 2015 | 7,420 | 1.3 | 11.6 |
| 2016 | 7,570 | 1.4 | 11.7 |
| 2017 | 7,720 | 1.4 | 11.9 |
| 2018 | 7,870 | 1.4 | 12 |
| 2019 | 8,020 | 1.5 | 12.2 |
| 2020 | 8,195 | 1.5 | 12.4 |
| 2021 | 8,345 | 1.6 | 12.5 |
| 2022 | 8,495 | 1.6 | 12.7 |
| 2023 | 8,645 | 1.6 | 12.8 |
| 2024 | 8,795 | 1.7 | 13 |
| 2025 | 8,970 | 1.7 | 13.2 |
| 2026 | 9,120 | 1.8 | 13.3 |
| 2027 | 9,270 | 1.8 | 13.5 |

Notes: EDU data provided by LOAPUD to SC-OR
ADWF is Average Dry Weather Flow

Data Source: SC-OR, 2019a

Main Interceptor

The Main Interceptor serves most of the City of Oroville and connects the East and West Interceptors with the wastewater treatment plant. The Main Interceptor has one linear section with 2,400 feet of 36-inch diameter reinforced concrete pipe and a second section with 600 feet of 30-inch reinforced concrete pipe with a bypass and Auxiliary Pumps Nos. 1A and 2A at the WWTP. The bypass and auxiliary pumps convey wastewater in excess of plant capacity to temporary storage ponds during wet weather. This is not part of the normal, dry-weather operation (SC-OR, 2019a). SC-OR's 2019 SSMP does not explicitly state the design capacity of the Main Interceptor. However, it does indicate that a flow of 25 mgd leaves about 4 feet of freeboard at the upstream maintenance hole (MH I001). Additionally, the SSMP recommends that the capacity of the Main Interceptor be improved before peak flows reach 27 mgd.

By the year 2027, peak flows are expected to reach 23.1 mgd, as listed in Table 5-18 below. It should be noted that the data shown in Table 5-18 appears to have been calculated prior to 2017 (even though the SSMP was updated in 2019). Population growth rates and peak flows have experienced ongoing changes since then. For example, each of the three-member entities has improved their infrastructure, thereby reducing the amount of inflow and infiltration into its system. This reduction trickles downstream such that SC-OR should experience a decrease in its peak flows (rather than the continual increase shown in Table 5-18). Therefore, it is recommended that prior to the next MSR, SC-OR should invite a consulting engineer to update the data listed in Table 5-18 and also provide projections of future conditions twenty years in the future (i.e., to the year 2045). The population projections provided in Table 5-6, Total Estimated & Projected Population (2020 – 2045), should be helpful to SC-OR's engineer in making future flow projections.

Table 5-18: Projected Year 2027 Flows, Main Interceptor

Main and East Interceptor – Projected Year 2027 Flows

*SC-OR Sewer System Evaluation and Capacity Assurance Plan*

| | Overall SC-OR | | | LOAPUD (East Interceptor) | | | Difference (Main Interceptor) | | |
|---|---|---|---|---|---|---|---|---|---|
| Year | Number of EDUs[a] | ADWF | Peak Flow | Number of EDUs[a] | ADWF | Peak Flow | Number of EDUs[a] | ADWF | Peak Flow |
| 2007 | 17,333 | 3.1 | 23.0 | 5,820 | 0.9 | 9.9 | 11,513 | 2.2 | 13.1 |
| 2008 | 17,819 | 3.2 | 23.5 | 5,920 | 0.9 | 10.0 | 11,899 | 2.3 | 13.5 |
| 2009 | 18,318 | 3.4 | 24.0 | 6,020 | 1.0 | 10.1 | 12,298 | 2.4 | 13.9 |
| 2010 | 18,976 | 3.5 | 24.7 | 6,170 | 1.0 | 10.3 | 12,806 | 2.5 | 14.4 |
| 2011 | 19,632 | 3.7 | 25.4 | 6,295 | 1.0 | 10.4 | 13,337 | 2.7 | 15.0 |
| 2012 | 20,593 | 3.9 | 26.4 | 6,695 | 1.1 | 10.8 | 13,898 | 2.8 | 15.6 |
| 2013 | 21,556 | 4.2 | 27.4 | 7,070 | 1.2 | 11.2 | 14,486 | 3.0 | 16.2 |
| 2014 | 22,322 | 4.4 | 28.2 | 7,220 | 1.3 | 11.4 | 15,102 | 3.1 | 16.8 |
| 2015 | 23,175 | 4.6 | 29.1 | 7,420 | 1.3 | 11.6 | 15,755 | 3.3 | 17.5 |
| 2016 | 23,889 | 4.8 | 29.8 | 7,570 | 1.4 | 11.7 | 16,319 | 3.4 | 18.1 |
| 2017 | 24,629 | 5.0 | 30.6 | 7,720 | 1.4 | 11.9 | 16,909 | 3.6 | 18.7 |
| 2018 | 25,260 | 5.2 | 31.2 | 7,870 | 1.4 | 12.0 | 17,390 | 3.7 | 19.2 |
| 2019 | 25,907 | 5.3 | 31.9 | 8,020 | 1.5 | 12.2 | 17,887 | 3.9 | 19.7 |
| 2020 | 26,455 | 5.5 | 32.5 | 8,195 | 1.5 | 12.4 | 18,260 | 4.0 | 20.1 |
| 2021 | 26,988 | 5.6 | 33.0 | 8,345 | 1.6 | 12.5 | 18,643 | 4.1 | 20.5 |
| 2022 | 27,530 | 5.8 | 33.6 | 8,495 | 1.6 | 12.7 | 19,035 | 4.2 | 20.9 |
| 2023 | 28,076 | 5.9 | 34.2 | 8,645 | 1.6 | 12.8 | 19,431 | 4.3 | 21.3 |
| 2024 | 28,627 | 6.0 | 34.7 | 8,795 | 1.7 | 13.0 | 19,832 | 4.4 | 21.8 |
| 2025 | 29,212 | 6.2 | 35.4 | 8,970 | 1.7 | 13.2 | 20,242 | 4.5 | 22.2 |
| 2026 | 29,781 | 6.3 | 35.9 | 9,120 | 1.8 | 13.3 | 20,661 | 4.6 | 22.6 |
| 2027 | 30,357 | 6.5 | 36.5 | 9,270 | 1.8 | 13.5 | 21,087 | 4.7 | 23.1 |

[a] EDU projections provided by member agencies

Wastewater Treatment Plant

SC-OR's wastewater treatment plant (WWTP) is classified as a publicly owned treatment works with a design flow and a permitted average dry weather flow of 6.5 mgd and can temporarily receive influent flows up to 10.6 MGD maximum (RWQCB, 2021). SC-OR's WWTP is an advanced secondary treatment facility capable of processing wastewater under current flow and loading conditions to comply with the parameters of its Waste Discharge Requirements. The

treatment process at SC-OR's WWTP consists of screening for the removal of large solids, grit removal, primary clarification, activated sludge treatment with secondary clarification, filtration, chlorination, and dechlorination. The treatment process at the WWTP is summarized in Figure 5-12 (next page). Primary and secondary solids are aerobically digested and then dewatered using a storage basin. Dried biosolids are hauled to the Neal Road Landfill. In 2020, the Facility generated 415 dry metric tons of biosolids (RWQCB, 2021). Treated wastewater is discharged to the Feather River.

In 2017, SC-OR commissioned the Master Planning and Financial Assistance Study from CH2M HILL, Inc. consultants. This Master Plan considered previous studies and presented recommendations for upgrading the existing WWTP to accommodate influent, regulatory, and service area changes over a 20-year planning period through 2037. When considering upgrades to the WWTP, the Master Plan notes several issues:

- Regulatory discharge limits for ammonia-nitrogen in the effluent will likely become stricter in the future,
- Peak wet weather flow will likely increase in the future
- Odorous air management
- Aged and obsolete equipment

Essentially, in order to meet the new stringent effluent limits, improvements to the wastewater treatment plant are needed. SC-OR has begun the studies and design work for this upgrade. SC-OR has also investigated funding sources, including a CDBG grant and loans from state and federal agencies.

SC-OR submitted water quality monitoring data to the California Regional Water Quality Control Board. The wastewater treatment plant effluent was/is monitored for biological oxygen demand, total suspended solids, pH, electrical conductivity, total coliform, ammonia, total chlorine residual, copper, silver, zinc, and chlorordibromomethane in 2015. A review of this data shows that SC-OR is well below the effluent limits. This indicates that the treated wastewater it discharges to the Feather River meets the water quality criteria to protect the River. Additionally, SC-OR has an industrial pretreatment program approved by RWQCB in 2000, and this program works to protect water quality. However, please also see other database results listed in Table 5-14, which show other types of violations.

In 2015, the average dry weather flow over a one-month period was 2.49 mgd, significantly lower than the permitted capacity limit of 6.5 mgd, indicating that during dry weather, the wastewater treatment plant had remaining capacity. Newer data is also available as shown in Figure 5-11 and Table 5-19 below.

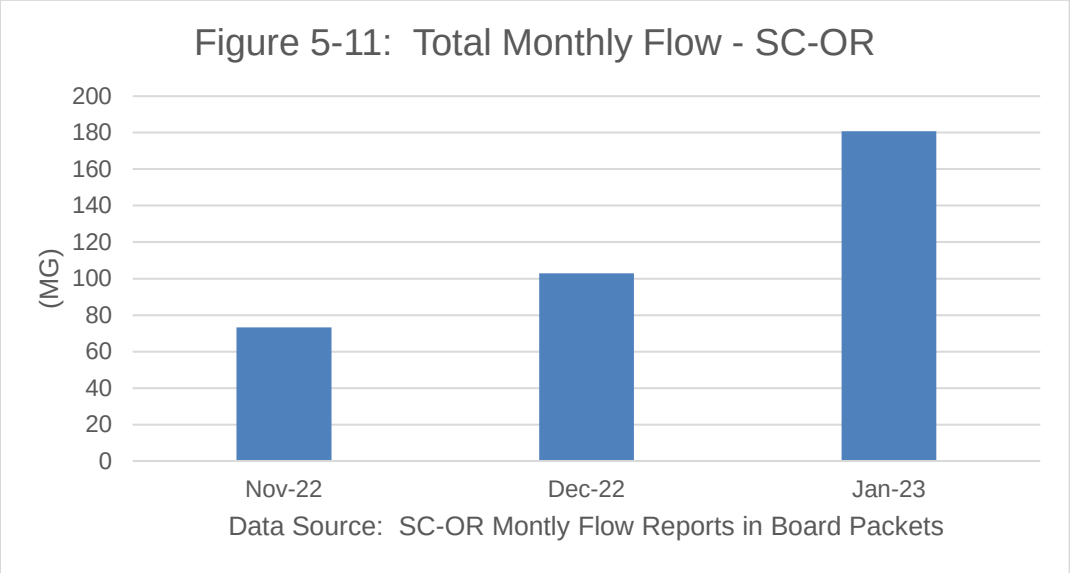



Table 5-19: Monthly Flows – SC-OR

| Name of Agency | Total Monthly Flow (MG ) | Average Daily Flow (MG ) | Total Peak Flow (MG ) | Date of Peak Flow | Month |
|---|---|---|---|---|---|
| SC - OR Plant Total | 73.211 | 2.44 | 6.8 | 11/8/2022 | Nov-22 |
| SC - OR Plant Total | 102.831 | 3.317 | 20.5 | 12/31/2022 | Dec-22 |
| SC-OR Plant Total | 180.773 | 5.831 | 15 | 1/14/2023 | Jan-23 |

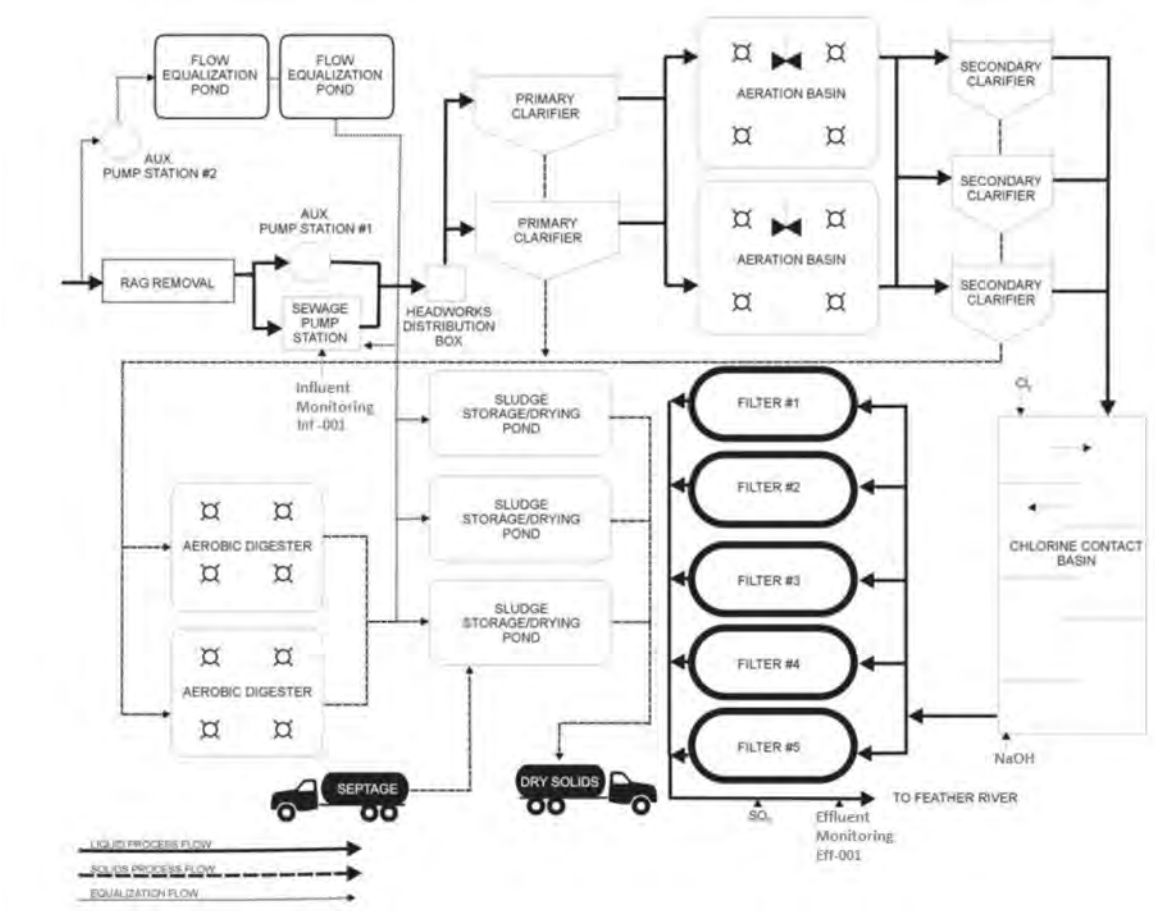
Data Source: SC-OR Montly Flow Reports in Board Packets

The timeframe shown in Table 5-19 above (Nov 2022 to Jan2023) reflects a very wet water year due to atmospheric rivers that crossed the entire State. Therefore, flows to the WWTP are higher than normal.

Peak Flows

The peak flows for SC-OR's West Interceptor, and Main Interceptor (described in the previous pages) continue to flow to SC-OR's WWTP. Peak flows are exacerbated by inflow and infiltration problems (the responsibility of collection system agencies) which are a legacy and ongoing problem. High influent flows that exceed the design capacity of the wastewater treatment plant are attenuated with lined emergency storage basins located onsite and returned to the treatment system when flows decrease (RWQCB, 2021). SC-OR reports that peak flows occurred eight times within the past five years, as listed in Table 5-20 (next page).

Figure 5-12: Wastewater Flow Schematic (RWQCB, 2016)




| Table 5-20: Peak Flow Exceeded Design Capacity Of The WWTP (10.6 MGD as of December 2022) | |
|---|---|
| **Date of Peak Flow Event** | **Volume** |
| January 18, 2016 | 14.4 MGD |
| March 5, 2016 | 16.4 MGD |
| December 15, 2016 | 22 MGD |
| January 8, 2017 | 19.8 MGD |
| February 9, 2017 | 18.8 MGD |
| April 7, 2018 | 13.4 MGD |
| January 16, 2019 | 27 MGD |
| February 26, 2019 | 21 MGD |
| Data Source: (SC-OR, 2021b) | |

*Proposed Physical Upgrades*: In July 2022, SC-OR completed a CEQA document for the SC-OR WWTP Upgrade Project. The current plant has an operational capacity of 10.6 million gallons per day (MGD). Although the Project is not a capacity expansion project but rather an upgrade project

to improve the quality of water discharged to the Feather River and handle existing peak flows (estimated at +25 MGD), the component upgrades will result in a minor residual additional average flow capacity increase of about 9%. The upgrades to the plant will add 1,852 Equivalent Dwelling Units (EDUs) to the current 20,703 EDUs, for total new capacity of 13.3 MGD. The Project will not create a new discharge location into the Feather River nor relocate the existing discharge location (SC-OR, 2022).

Several components of the long-planned upgrade (a new influent pump/lift station, replacement of existing rag removal screens with multi-rake screens, installation of new baffles in the existing grit washing system, and replacement of the obsolete and leaking grit pump) were evaluated in a separate approved environmental document. The influent pump station will replace aged equipment and expands pumping capacity to handle peak wet weather flows up to 23 MGD. (Note: the Influent Pump Station Project has recently experienced supply chain issues associated with electrical components. However, the completion date is estimated to be March 2023.) Additionally, there will be improvements to the Aeration Basins, a secondary clarifier, filters, and several other components (SC-OR, 2022).

The facilities and infrastructure on which SC-OR depends have varying ages. SC-OR replaces and repairs infrastructure on a regular basis. In addition, the SC-OR has implemented collection system BMPs and addresses preventative maintenance and scheduled replacement of aging infrastructure. Generally, new development within the SC-OR's existing service area could result in an increased demand for sewer services and the need for additional infrastructure.

Discharge Point for Treated Effluent

Treated wastewater is discharged to the Feather River via a seven-mile pipeline from the WWTP to the discharge point. The discharged effluent is subject to numerous water quality permit requirements. The discharge point is located along the Feather River, in the Oroville State Wildlife Area, located south of state route 162 and west of highway 70. Specifically, the discharge point is south of the Feather River Boat Launch and the campground, as shown in Figure 5-13. The Oroville Wildlife Area is approximately 11,800-acres in size and supports riparian woodland habitat along the Feather River and grasslands around the Thermalito Afterbay.

Figure 5-13: SC-OR Discharge Point on the Feather River

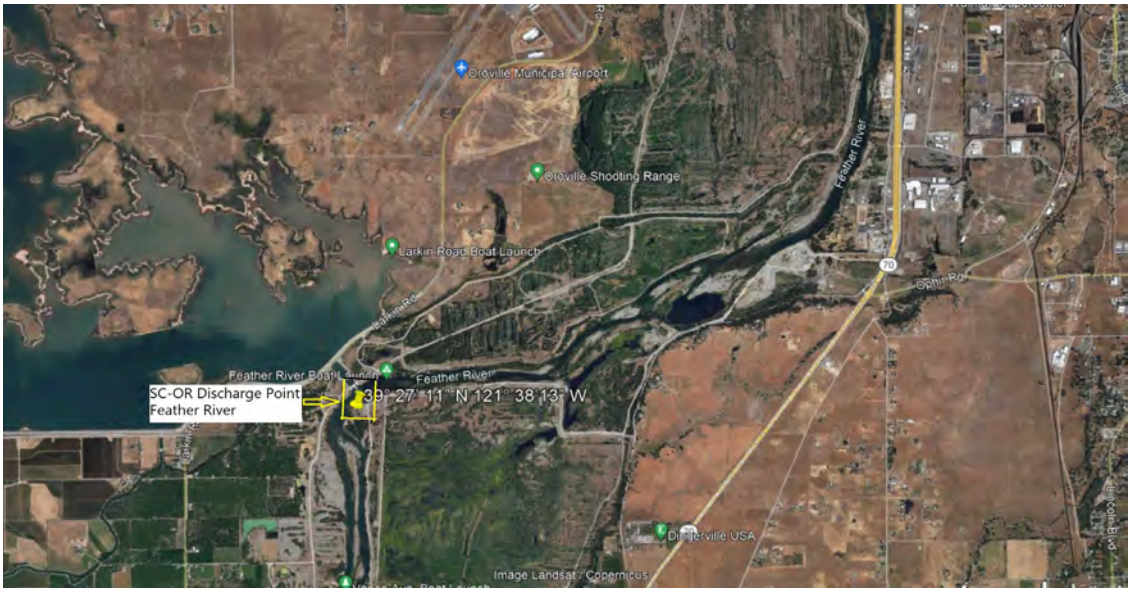



*Figure 5-13 provided courtesy of Google Earth*

Biosolids

The settling ponds at the wastewater treatment plant are where the water is pumped out and sent back into the treatment plant. The remaining dry organic material in the settling ponds is called "biosolids" or sludge. The dried biosolids are then transported by truck to the Neal Road landfill. Currently, SC-OR's biosolids are class B, which can sometimes be utilized in a limited manner (SC-OR, 2022p). However, after the proposed upgrade to the WWTP is implemented, the dried biosolids can be screened, processed, and utilized directly by SC-OR as fertilizer (SC-OR, 2022p).

Maintenance And Operation

To properly operate and maintain the WWTP and associated facilities, SC-OR's staff conducts equipment inspections according to procedures and schedules dictated by the SSMP. SC-OR maintains checklists for the routine maintenance and inspection of its equipment. The equipment maintained by SC-OR includes generators, portable pumps, air compressors, controllers, grinders, vehicles, and large equipment. JPA member agencies also loan equipment to SC-OR as needed for collection system maintenance and repair. Routine vehicle maintenance is typically outsourced, but the maintenance and inspection services performed are recorded. For example, SC-OR staff conduct routine maintenance and inspection activities on generators, and daily inspection includes checking of fluids (oil and fuel level) and inspection of general condition. Regular inspection includes weekly or bi-weekly operation and checking for engine stability, noise, and exhaust smoke color. Monthly inspection includes checking fuel, oil, coolant, and battery electrolyte levels, cleaning battery terminals and air cleaner, and inspecting belt tension and conditions of hoses and radiator. In addition to the generators, SC-OR actively maintains pumps, air compressors, vehicles, batteries, filters, screens, and other equipment. Pipelines, pump

stations, maintenance holes, and valves also receive regular maintenance (SC-OR, 2019a). A testing and inspection schedule for its equipment is provided in the 2019 SSMP.

There are several measures of integrity for a wastewater collection system, including peaking factors, efforts to address infiltration and inflow (I/I), and inspection practices. The SC-OR undertakes testing and other measures to ensure the integrity of the system. SC-OR also relies upon the three-member entities for assistance with maintaining its sanitary sewer collection system (SC-OR, 2021b).

Existing Demand for Wastewater Treatment

Demand for sewer services is influenced by population, land use, and any new development occurring within the service area. SC-OR utilizes a metric called an Equivalent Dwelling Unit (EDU). One Equivalent Dwelling Unit (EDU) is defined as the average wastewater discharge from a single-family dwelling. An EDU is sometimes used as an account metric by planners because it consistently considers a fixed-based calculation for purposes of planning assessments. Multifamily residential units and non-residential facilities are calculated as a percentage of an EDU, depending on the use. This MSR also assumes that one single-family home equates to one EDU and a multifamily unit equates to 0.8 EDUs.

In 2019, SC-OR noted that the wastewater treatment facility continuously treated an average of 1.92 million gallons of wastewater per day during the dry season (Butte County WRCD, 2019). In 2021, the average flow volume was 2.8 mgd which calculates to approximately 151 gpd/edu[3] (SC-OR, 2021b). Also, in 2021, SC-OR had 18,528 EDUs sold (SC-OR, 2021b). The peak flow in the recent past was 8 mgd in January 2020, which calculates to approximately 431 gpd/edu (SC-OR, 2021b). Influent flows from 2005 to 2009 typically did not exceed 8 mgd; however, on January 16, 2019, daily peak flows were recorded as 27 mgd, as listed in Table 5-20.

In addition to treating wastewater from the member entities, SC-OR also accepts and treats approximately 1 million gallons per year of domestic septage from within their service area. Approved septage haulers licensed by Butte County and SC-OR pump residential septic tanks and dispose of the waste at the SC-OR WWTP for treatment and disposal.

Existing Capacity at WWTP

SC-OR's wastewater treatment plant (WWTP) has a permitted capacity and design capacity of 6.5 million gallons per day (mgd) average dry weather flow. Although the designed average dry weather flow of the facility is 6.5 mgd, the treatment plant can temporarily handle influent flows up to 10.6 mgd by utilizing on-site storage ponds and other methods. The existing capacity of the

[3] Typically, in northern California, one EDU is equal to a volume of two hundred thirty (230) gallons per day (average dry weather flow [ADWF]). However, local agencies in Butte County assume each EDU generates 210 gallons of wastewater daily (as defined in the current Master Plan) (Butte County, 2014). For example, a commercial business with an EDU of 7 would have an ADWF of 1,470 gallons per day (7 x 210 GPD).

WWTP (6.5 mgd ADWF) is sufficient to accommodate the current ADWF of 2.8 mgd. Specifically, average dry weather wastewater flows can range from 2.8 mgd to approximately 3.2 MGD, leaving a surplus capacity of approximately 3.3 MGD under average dry weather flow conditions (LOAPUD 2013). Peak flows of 11.14 mgd in 2005 exceeded the design capacity of the WWTP, and on-site storage ponds were used to temporarily hold wastewater until it could be processed through the WWTP. However, the eight peak flow events listed in Table 5-20 exceed the design capacity of the WWTP. This is a situation that needs improvement.

Projected Future Demand for Wastewater Treatment Services

Because the SC-OR does not have the legal authority to make land-use decisions, future demand is anticipated through the developments and annexations to the City of Oroville and/or the two wastewater districts (LOAPUD and TWSD). Prolonged drought and associated water conservation measures can also reduce inflow to the SC-OR treatment system. SC-OR does not reserve WWTP capacity for a planned or proposed development. SC-OR does not issue will-serve letters to private developers (SC-OR, 2021b). However, SC-OR works with the developers to provide capacity studies (proposals greater than 20 units/EDU's) from SC-OR's consulting engineers to let project proponents (i.e., applicants) know whether sufficient capacity is available to serve their project (SC-OR, 2021b).

SC-OR anticipates that the projected future demand for services in the years 2025, 2030, 2035, and 2040 will not increase significantly, as it anticipates a growth rate of less than one percent (SC-OR, 2021b). SC-OR does not anticipate any future demand for services originating outside its service area boundary (SC-OR, 2021b). It is noted that SC-OR has not recently assessed the potential for new growth and development within its service area. As part of its 2019 SSMP, SC-OR developed a System Evaluation and Capacity Assurance Plan, including a capital improvement plan. However, the 2019 SSMP update was not a comprehensive update and relied upon older data from 2005. Therefore, it is difficult to determine the wastewater system's capacity and whether or not future growth could be accommodated. However, Table 5-6 in this MSR lists projected future growth in five-year increments within the SC-OR service area. This indicates that during the years 2020 to 2045, the population is expected to increase by 17.7 percent. This equates to a compound annual growth of 0.65 percent. The addition of 7,462 more people to the SC-OR by 2045 is expected. Given that the Oroville area has approximately 3.10 persons per household, this equates to another 2,407 new households expected, and this could include a mix of single-family homes and multi-family units. For calculation purposes, it is assumed that 80 percent of the new homes will be single-family homes.

SC-OR recommends using Equivalent Dwelling Unit (EDU) calculations as a conservative estimate of remaining capacity. Considering that 2,407 new residential units are expected by 2045, this equates to an additional 2,311 EDUs. This estimate of 2,311 new EDUs by 2045 is much less than SC-OR's estimate of 30,357 EDUs by 2027, indicating that the past growth rates have been much slower than originally anticipated by SC-OR's SSMP as listed in Table 5-21 below.

| Table 5-21: Projected Population and Flows at WWTP | |
|---|---|
| **Description of Population and Flows** | **Data** |
| Existing (2020) SC-OR Population | 41,131 |
| Projected Future Population in 2045 | 49,618 |
| Existing EDUs | 18,528 |
| Projected EDUs in 2027 under a "Faster Growth" scenario in SC-OR's 2019 SSMP | 30,357 |
| Projected EDUs in 2045 under this MSR's "Slower Rate of Growth" as indicated in Table 5-6 | 20,839 |
| Existing (2021) ADWF | 2.8 mgd |
| Calculated ADWF in 2045 | 3.0 mgd |
| Past Peak Flows (2005) at WWTP | 11.14 mgd |
| Peak Flows (Jan 2019) at WWTP | 27 mgd (which calculates to approximately 1,450 gpd/edu) |
| *Data source: SC-OR SSMP, 2019a and Table 5-6* | |

LAFCO's MSR analysis is primarily interested in documenting whether or not there is sufficient wastewater infrastructure capacity to accommodate the projected rate of growth. There are four key physical components to the SC-OR's infrastructure, as listed below. Accommodation of peak flows is the primary concern. Peak flow volumes indicate that SC-OR may sometimes temporarily exceed the design capacity of its infrastructure. However, the 2019 SSMP's Sewer System Evaluation and Capacity Assurance Plan (as listed in its Table 5) suggests designing infrastructure capacity to accommodate peak flows of 36.6 mgd and ADWF of 6.5 mgd when future growth reaches a level of 30,357 EDUs. The existing number of EDUs (18,528) is only 60 percent of the SSMP's projected future EDUs of 30,357. This suggests that if SC-OR completes all the infrastructure improvements listed in its SSMP, it could potentially accommodate growth of up to 30,357 EDUs

1) Wastewater Treatment Plant: SC-OR's WWTP has a designed capacity to treat 6.5 mgd average dry weather flow of wastewater. Flows in excess of 6.5 mgd can be stored in on-site ponds and treated in the following days to ensure that all wastewater is treated. SC-OR's wastewater treatment plant has sufficient capacity to treat its ADWF. This 6.5 mgd ADWF capacity has been deemed sufficient to accommodate 30,357 EDUs (SC-OR, 2019a). However, peak flows are the bottleneck. Peak flows occur primarily during winter storms when I&I contributes flow into the system. SC-OR's 2019 SSMP does not provide sufficient information to document whether the WWTP has sufficient capacity to accommodate peak flows through the year 2045. One example of a needed infrastructure improvement would be the expansion of storage ponds at the WWTP site to temporarily store peak flows. This is a needed improvement since processing peak flows appears to be a constraint.
2) West Interceptor: SC-OR's 2019 SSMP indicates that their West Interceptor Phase I Study determined that the portion of the West Interceptor on the East side of the Feather

River has sufficient capacity for average flows. However, the capacity of the sewer is being approached during peak flow conditions. Table 3 in the SSMP shows that the observed peak hour flow exceeds the theoretical capacity of several of the pipe spans (SC-OR, 2019a). SC-OR has recently completed improvements to the West Interceptor, and these physical improvements likely address the capacity constraint.

3) East Interceptor: SC-OR's 2019 SSMP indicates that their East Interceptor currently has sufficient capacity to accommodate peak flows. However, by the year 2027, projected peak flows of 13.5 mgd are expected to approach the design capacity of 15 mgd (SC-OR, 2019a). This indicates that within the next five years, SC-OR should figure out how to either reduce peak flows or expand the capacity of the East Interceptor.
4) Main Interceptor: SC-OR's 2019 SSMP indicates that their Main Interceptor's current ADWF is approximately 3.1 mgd (SC-OR, 2019a). Peak flow occurred in December 2005 and reached approximately 23 mgd, which is approaching the pipe's design capacity (SC-OR, 2019a).

Accommodating the projected level of future growth will continue to require close coordination between SC-OR, the City of Oroville, and the County of Butte. Additionally, SC-OR will also need to continue to coordinate with TWSD and LOAPUD. SC-OR aims to plan for the adequate provision of public services and infrastructure. Generally, proposed development projects are responsible for the construction of all sanitary sewer lines and associated infrastructure serving each development. As part of this MSR process, the consultants asked SC-OR staff whether the wastewater treatment system has sufficient capacity to service projected future needs through the year 2045. The SC-OR staff indicated that there is the potential to expand capacity in the future to address the projected increase in demand for wastewater service. However, given that the current growth rate is less than one percent per year, they are worried about prematurely expanding the facilities because there may not be sufficient flows to recoup the costs of an expanded facility (SC-OR, 2021b).

#### *5.7.2.2: Wastewater Facilities (SOI)*

Since SC-OR is a JPA, it does not have a defined SOI. As previously noted, this MSR defines the SOI of the three-member agencies as SC-OR's planning area. Parcels within SC-OR's planning area (SOI) are currently unincorporated and located within the County's jurisdiction. These parcels do not currently receive municipal sewer service. New development occurring within the planning area (SOI) should be evaluated in relation to potential impacts on the provision of sewer services.

LAFCO often works with the three-member entities and SC-OR to consider boundary and SOI adjustments. LAFCO is sometimes asked to make two key decisions: 1) Whether to annex an planning area (SOI) area into the service area or 2) Whether to expand the planning area (SOI). When making these types of decisions, LAFCO should consider these key points: maximum daily flow of sewage projected for SC-OR service area and planning area (SOI), design standards for

flow projections, ability to meet the demands of the provider's existing commitments, updates to modeling software, capacity analyses in the SSMP.

#### *5.7.2.3. Infrastructure Needs and Deficiencies*

SC-OR evaluates infrastructure needs and deficiencies in terms of facilities' condition, service demand, and capacity. Necessary infrastructure improvements are described in the 2019 SSMP. However, SC-OR does not have a capital improvement plan. Infrastructure needs and deficiencies (i.e., pipelines, hydrants, tanks, reservoirs, etc.) are described by SC-OR staff as follows: Ruddy Creek Pump Station upgrade/Replacement, West Interceptor at Feather River Bridge, and the New Influent Pump Station (out to bid) (SC-OR, 2021b).

<u>New Influent Pump Station</u>

SC-OR needs a New Influent Pump Station because the existing pump station is 60 years old and should be replaced. The existing influent pump station is located at SCOR's wastewater treatment plant. The existing building that houses the pump is showing signs of age. Because of the corrosive nature of wastewater, many of the major components have been repaired or replaced, in some cases, multiple times. The electrical components are outdated, making it extremely difficult to repair or replace them when needed, as many are no longer being manufactured. In addition, the existing pump station also poses the potential for confined space hazards, which, when dealing with sewage, can be highly toxic and even deadly, requiring extra safety precautions when working in and around the building. An additional problem is that as warming air improves the probability of experiencing atmospheric rivers, more versatility will be required from the influent pump station. SC-OR has experienced increasing storm-related infill and infiltration into the sewer system, reaching the peak influent pumping capacity of 25 mgd. SC-OR must rely on an auxiliary pump station to pump excess flows to the emergency storage pond. There is some risk associated with excessive I&I, which could result in inundation at the wastewater plant and ultimately result in unsanitary sewer overflows discharging to surface waters.

SC-OR proposes installing a New Influent Pump Station, a state-of-the-art pumping facility that will help reduce the risk of SSOs related to infrastructure failure. Major project components include the construction of a new Primary Influent Pump Station, SCADA operating system, approximately 420 linear feet of pipeline, junction boxes, flow meters, valves, and construction of a new 276 sq ft electrical building with a transformer and standby generator. The new pumping facility will be a state-of-the-art pump facility with four 60-hp submersible pumps. The new pump station will reduce any risks associated with sanitary sewer overflows by expanding the pumping capacity by 2 mgd and having the ability to pump to both the emergency storage ponds and the wastewater plant simultaneously. This project would ensure that any SSOs related to infrastructure failure and I&I would be significantly reduced, thereby protecting public health, an important water supply source for the region, and the environmental resources of the Feather River. Please note that while this project will increase pumping capacity, it will not change the engineered designed capacity of the wastewater treatment plant, nor will it change the pond storage capacity, and it will not change the treatment capacity of the wastewater plant. The proposed budget for this

project is shown in Table 5-22 below. Grant funding from state agencies has been requested for this project.

Table 5-22: Budget for Construction of New Influent Pump Station

| Table 1 - Project Budget | | | | | |
|---|---|---|---|---|---|
| Category | | (a) Cost Share: Non-State Fund Source | (b) Requested Grant Amount | (c) Other Cost Share (including other State Sources) | (d) Total Cost |
| (a) | Project Administration | $88,608 | $347,017 | | $435,625 |
| (b) | Land Purchase/ Easement | | | | |
| (c) | Planning/Design /Engineering /Environmental Documentation | $349,299.00 | | | $349,299.00 |
| (d) | Construction/ Implementation | | $3,470,165 | | $3,470,165 |
| (e) | Grand Total (Sum rows (a) through (d) for each | $437,907 | $3,817,182.00 | | $3,908,072.00 |
| Note: Provide information or other documentation to support the cost estimate in a separate attachment. Identify the source of all cost share and other funds. If other funds are not used, describe efforts to obtain other funding and/or why other funding sources were not used. | | | | | |
| See project estimate attached. The $349,299.00 was the amount spent on engineering specifications, bid documents and the project plans. | | | | | |

Planned Upgrades to WWTP

SC-OR is planning multiple projects during the next several years. In addition to the projects described above, SC-OR is planning for upgrades to the existing WWTP's grit removal system, retrofitting the existing aeration basins to provide nitrification and denitrification, replacing the chlorine disinfection with UV disinfection, and adding capacity to the existing secondary clarifiers and filters (RWQCB, 2021).

Other Recommendations

The American Society of Civil Engineers, Region 9 has several recommended remedies for California's aging wastewater infrastructure as outlined in Appendix K and as summarized below:

1. The State of California should continue to provide loans and grant funding for the repair and rehabilitation of wastewater collection and treatment systems and reuse projects.
2. The State of California should continue to implement indirect and direct potable reuse regulations.
3. Implement an education program at the state and local level about what a wastewater treatment plant is, what kind of wastes it can treat, and what impact wastes have on the sewer pipes, such as grease and flushable wipes, etc. Continue educational programs about identifying a sewer overflow and whom to call if such an event occurs.
4. Make risk-based decisions on capital improvements, maintenance, and operations (i.e., implement asset management programs).
5. Continue advancements in water reuse/recycling.

Recommendations # 1 and 2 above apply to the State and are beyond LAFCo's purview. However, Recommendations # 3, 4, and 5 are pertinent to SC-OR and will therefore be put forward as recommendations from this MSR.

Complaints

Comments or complaints can be sent to the general information email listed on SC-OR's webpage as Info@SC-OR.org or sent to PO Box 1350, Oroville, CA, 95965, or directly at the office at 2880 South 5th Avenue Oroville Ca, 95965 during normal our business hours 7:30 am -4:00 pm (SC-OR, 2021b SC-OR staff indicates the Commission has not received any complaints in recent years (personal communication, M. Salsi, 2022).

## 5.7.3: Solar Power

An array of solar panels generates photovoltaic electricity on the SC-OR property. This electricity is used to reduce the energy costs associated with running a power-hungry wastewater treatment plant. Since 2000, California has experienced summer power outages and rapidly rising electricity rates. Since WWTPs require a lot of energy to operate, SC-OR saw its power costs skyrocket by 41% in the year 2001. Typically, these high-power costs would be passed on to the ratepayers in the form of higher utility bills. Given this volatility, the Sewerage Commission explored alternative energy sources to stabilize its energy supply and reduce energy expenses. The PV system was commissioned and went online in November 2002. SC-OR installed a 520-kW solar photovoltaic (PV) array, including 5,184 panels, on three acres of land located adjacent to the wastewater treatment ponds. The PV solar system and power credits from PG&E reduced annual net power bills by over 80%. SC-OR's solar panels are one of the larger-sized dual-tilt arrays in the state. It is also the first wastewater treatment plant in the country to be powered primarily by solar energy (Thompson and Sousa, 2004).

Table 5-23: MSR DETERMINATION: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES, INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES

| Number | Indicator | Determination |
|---|---|---|
| SC-OR-PUB-1 | Has the Agency been diligent in developing plans to accommodate the infrastructure and service needs of current and future constituents? Regularly reviews and updates its service plans to help ensure that infrastructure needs and deficiencies are addressed in a timely manner. | SC-OR has been moderately diligent in developing plans to accommodate the infrastructure and service needs of current and future constituents. SC-OR adopted a Sewer System Management Plan Update in February 2019. This SSMP is in compliance with the RWQCB rules to complete a Comprehensive Master Plan pertaining to its |

| | | |
|---|---|---|
| | | (continued)<br>sewer systems and includes a Sewer Overflow Emergency Response Plan Element for Sanitary Sewer Overflows reporting. The 2019 SSMP is not available on SC-OR's website. It is recommended that the SSMP be posted on SC-OR's website to promote transparency. The 2019 SSMP is an update to the 2005 SSMP. However, much of the underlying data and assumptions were not updated in 2019 and instead retains the 2005 data. This means that the SSMP contains old data, and it was difficult to utilize this data in this current MSR analysis. This is a situation that needs improvement. Therefore, it is recommended that when SC-OR next updates its SSMP, it should provide a comprehensive update that utilizes up-to-date flow data and population projections. |
| SC-OR-PUB-4 | The District meets infrastructure needs for existing and future demands on the wastewater system. | SC-OR's infrastructure relates to the treatment and disposal of wastewater. SC-OR operates and maintains an advanced secondary conventional activated sludge wastewater treatment plant. The collection systems belonging to the three-member entities (City of Oroville, Lake Oroville PUD, and Thermalito Water and Sewer District) bring the wastewater to SC-OR's facilities. SC-OR is responsible for 2.3 miles of interceptor sewer trunk lines (East, West, and Main), including a 1.6-mile force main, two pump stations (Ruddy Creek and Feather River), and the seven-mile effluent outfall pipe and diffuser on the Feather River. |
| SC-OR-PUB-5 | Is there duplicate infrastructure by other agencies nearby? | There is no duplicate infrastructure or service by other agencies nearby. However, SC-OR does have three-member entities (City of Oroville, Lake Oroville PUD, and Thermalito Water and Sewer District), and each has expertise in wastewater conveyance (as opposed to treatment). The three-member agencies provide support and assistance to SC-OR. |

| | | |
|---|---|---|
| SC-OR-PUB-6 | The Agency has preventative maintenance measures and has planned for the replacement of aging infrastructure. | SC-OR's 2019 Sewer System Management Plan describes preventative maintenance measures and has planned for the replacement of aging infrastructure. Additionally, SC-OR has successfully obtained a state grant to assist with costs associated with the New Influent Pump Station. However, infiltration and inflow remain significant within the SC-OR existing service area due to the age and deteriorated condition of older pipes, joints, and related infrastructure maintained by the three-member entities. |
| | | (continued)<br>The American Society of Civil Engineers, Region 9 has several recommended remedies for California's aging wastewater infrastructure as outlined in Appendix K and as summarized below:<br><br>1. Implement an education program at the state and local level about what a wastewater treatment plant is, what kind of wastes it can treat, and what impact wastes have on the sewer pipes. Continue educational programs about identifying a sewer overflow and whom to call if such an event occurs.<br>2. Make risk-based decisions on capital improvements, maintenance, and operations.<br>3. Continue advancements in water reuse/recycling. |
| SC-OR-PUB-7 | Evaluation of agency's capacity to assist with and/or assume services provided by other agencies. | SC-OR has demonstrated some capacity to assist with or assume services provided by other agencies. For example, the SC-OR has close collaborative relationships with its three-member entities, including TWSD, LOAPUD, and the City of Oroville. However, SC-OR's leadership capacity could be improved by implementing the recommendations from this MSR. For example, SC-OR should develop a capital improvement plan and should post its Sewer System Management Plan on the website in a timely manner. |

# 5.8: Finances

### *5.8.1 Introduction to Financial Metrics*

LAFCO is required by the CKH Act to make a determination regarding the financial ability of the SC-OR to provide public services. This Chapter provides an overview of financial health and context for LAFCO's financial determinations. The audited Annual Financial Statements (AFS) from SC-OR for the fiscal years 2018, 2019, and 2020 are the primary source of information for this Chapter. Based on recent recommendations from the Little Hoover Commission, this determination on the financial ability to provide services is based upon several key financial performance indicators that LAFCOs throughout the State consider in MSRs.

In California, special districts are classified as enterprise or non-enterprise districts based on their source of revenue:

- Enterprise districts: Finance of district operations is via fees for public service. Under this model, customers who consume goods or services such as drinking water, sewage disposal, or electricity pay a fee. Rates are set by a governing board, and there is a nexus between the costs of providing services and the rates customers pay. Sometimes enterprise districts may also receive property taxes which comprise a portion of their budget.
- Non-enterprise districts: Districts that receive property taxes are typically classified as non-enterprise districts. Services that indirectly benefit the entire community, such as flood or fire protection, community centers, and cemetery districts, are often funded through property taxes.

SC-OR is a JPA that functions as an enterprise district, charging fees for wastewater treatment and disposal services. A JPA Agreement can specify that the debts, liabilities, and obligations of the JPA Agency are not the debts, liabilities, and obligations of the parties to the JPA Agreement. SC-OR does not collect property taxes in relation to wastewater service. In general, SC-OR's annual budget shows that revenues and transfers from reserves are equal to the sum of expenses, debt service, capital projects, and transfers to reserves {SC-OR Budget, 2022c).

### *5.8.2: Financial Policies & Transparency*

A District's financial policies function as business rules that ensure an agency's transactions are recorded consistently and correctly. Therefore, it is important for a District's financial policies to be made available to the public. Following prescribed financial policies allows an agency to exhibit transparent decision-making. SC-OR has several financial policies, including the following:

- Investment in Local Agency Investment Fund Policy was adopted by the Board of Commissioners and is available on its website at <*https://www.sc-or.org/board-policies*>. SC-OR Policy #3130 was originally adopted on December 18, 1985, and subsequently

updated on August 22, 2007. The Local Agency Investment Fund (LAIF) is operated by the State Treasury, and CA Government Code Section 16429.1 describe the purposes of these investments.

- Reimbursement Policy: SC-OR policy #5200 establishes the policy on travel expenditure reimbursements. Policy #5200 applies to all personnel and any person sponsored by the SC-OR. The Reimbursement Policy is posted on SC-OR's website at: <*https://seweragecommission.specialdistrict.org/sewerage-commission-oroville-region-reimbursement-policy*>. The Policy prescribes how SC-OR employees and commissioners may be reimbursed for expenditures related to SC-OR business, and how commissioners may be compensated for their service. Members of the Board of Commissioners receive a monthly "Commissioner's Fee", the amount of which shall be established by the Board in its annual budget. Additionally, whenever SC-OR employees or commissioners desire to be reimbursed for out-of-pocket expenses for item(s) or service(s) appropriately relating to SC-OR business, the Policy requires they submit their requests on a reimbursement form to the Manager for approval.
- Additionally, SC-OR's Annual Financial Statement contains several financial policies, including the following:
    - Measurement Focus, Basis of Accounting, and Financial Statement Presentation: The transactions of the Commission are accounted for on a flow of economic resources measurement focus. Also, the Commission uses the full accrual basis of accounting. Under this basis, revenues are recorded when earned, and expenses are recorded when incurred, even though actual payment or receipt may not occur until after the period ends.
    - Budget Basis of Accounting: The Commission's policy is to prepare and adopt an annual budget to plan and monitor its revenues and cost of operations. The budget is primarily prepared using a basis consistent with generally accepted accounting principles, except for the following items: 1) Depreciation is not budgeted as an expense; 2) Capital outlays arc budgeted as a current expense; and 3) Certain non-operating revenues are not budgeted.
    - Cash and Cash Equivalents: Cash and cash equivalents, for purposes of the statement of cash flows, include restricted and unrestricted cash on hand or on deposit, demand deposits in the Local Agency Investment Fund (LAIF). or other highly liquid investments with a maturity of three months or less.
    - Investment Policy: The Commission may invest in the following types of investments:
        - Passbook savings account demand deposits
        - Money market accounts
        - Certificates of deposit with commercial banks and/or savings and loan companies
        - Local Agency Investment Fund (State Pool) demand deposits
        - Mutual funds

      The Commission has, in practice, limited deposits and investments to insured and/or collateralized demand deposit accounts, the State Treasurer's Local

Agency Investment Fund (LAIF), and certificates of deposit. The Commission does not enter into reverse repurchase agreements.

The Annual Financial Statement contains many other financial policies, and readers are encouraged to refer to the Statement for additional details.

Financial Practices: The District prepares and approves a budget with an annual timeframe. However, the annual budget includes one table with a look-back comparison of the past four years' operating budget {SC-OR Budget, 2022c). The current budget and the past three years of Financial Statements are available to the public via the District's website. In addition, it is SC-OR's practice to present two financial reports during the Commission's regular monthly meetings as follows:

- Authorization of Warrants: The Board will review the warrants and take action to approve their payment for the period ending at a specified timeframe.
- Fiscal Reports: The Board will review the fiscal reports for a specific timeframe (usually for the previous month).

SC-OR publishes an audited Comprehensive Annual Financial Statement (AFS) every year. The CA Government Code requires an annual independent audit of the District's financial records by a certified public accountant who serve as an independent auditor. There are four types of audit opinions: unqualified, qualified, adverse, and disclaimer. An unqualified opinion is a clean opinion meaning the entity passed its audit. A qualified opinion means the entity passed the audit with notable exceptions. A disclaimer or adverse opinion essentially means the entity flunked its audit. The independent audit on FY 2020-2021 was performed by Fechter & Company Certified Public Accountants from Sacramento. Fechter & Company conducted the audit in accordance with auditing standards generally accepted in the United States of America. and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States and the State Controllers Minimum Audit Requirements for California Special Districts (SC-OR, AFS, 2021c). The auditors expressed their opinion that the District's financial statements are presented fairly, in all material respects, the financial position of the Sewerage Commission- Oroville Region as of June 30, 2021, and 2020, and the respective changes in financial position and cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America, as well as accounting systems prescribed by the State Controller's Office and State regulations governing special districts. The Auditors also note that SC-OR Management has omitted management's discussion and analysis that accounting principles generally accepted in the United States require to be presented to supplement the basic financial statements. Although not a part of the basic financial statements, such missing information is required by the Governmental Accounting Standards Board, which considers it an essential part of financial reporting for placing the basic financial statements in an appropriate context. This missing information does not affect the Auditor's opinion of the financial statements. Overall, the auditors opined that the information is fairly stated in all material respects in relation to the financial statements taken as a whole (SC-OR, AFS, 2021c). Additionally, the auditors noted that the Sewerage Commission - Oroville

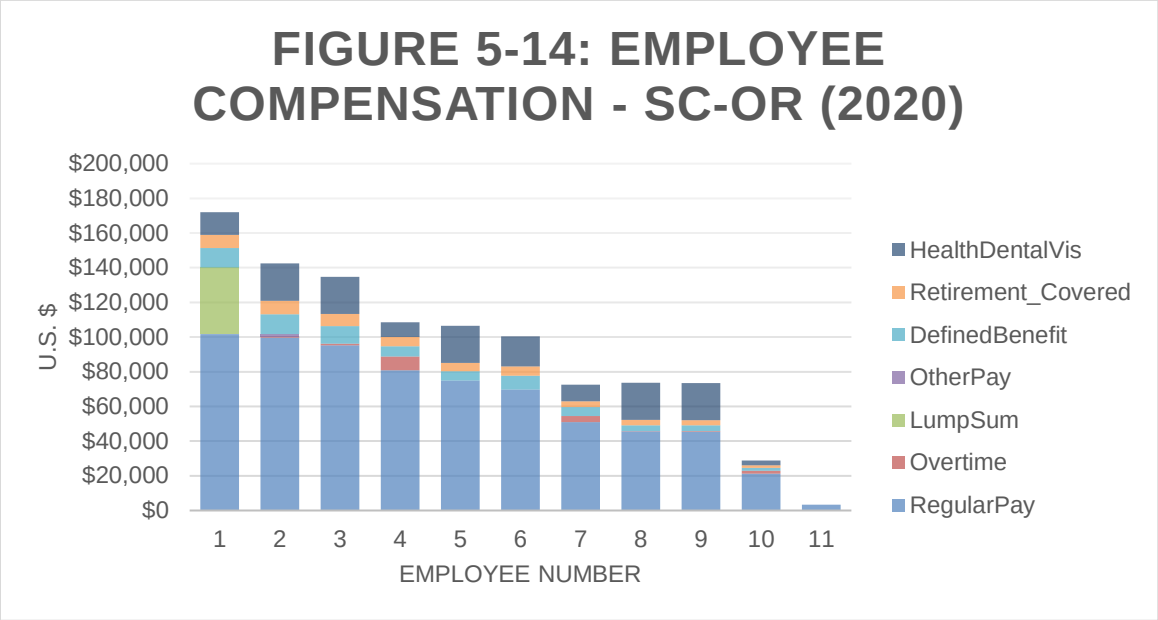
Region does not have an employee experienced in generally accepted accounting principles to the degree required to make a determination that a misstatement has occurred; nor has an outside accountant been engaged by the Sewerage Commission – Oroville Region to provide the additional expertise. The MSR authors recommend that SC-OR consider teaming up with one of its three member entities to jointly fund an accountant position to address this concern.

## Financial Data Transparency

Financial data transparency promotes accountability and provides information to citizens about what their local government is doing. Transparency allows residents to stay informed and learn about local government revenue, spending and debt. SC-OR's General Manager makes regular reports to the Board of Commissioners regarding finances, and this information is available to the public via the meeting agenda packet.

### Employee Salaries

Transparency with salary data is also an important attribute for special districts in California. The Sewerage Commission - Oroville Region provides competitive compensation and a benefits package to full-time, regular employees, as shown in Figure 5-14 below. Employee wage scale by bargaining unit and the unrepresented employee wage scale are available on the SC-OR website. Additionally, the {Sewerage Commission - Oroville Region} forwards a report to the California State Controller for Government Compensation in California per Government Code Section 53891. SC-OR's website links to this data on the State Controller's Public Pay website. In 2020 the California Auditor reported that SC-OR had a total of 11 regular employees, including ten full-time employees and one part-time employee. Additionally, seven Commission members were on the payroll to receive board meeting stipends. Total Wages and other benefits, including Retirement & Health Contributions, paid in 2020 for employees was $1,013,314. Among the employees, total compensation (including regular pay and benefits) averaged $92,119 for 2020 , as shown in Figure 5- 14 below (State Controller, 2022).




*Data Source for Figure 5-14 above is <https://publicpay.ca.gov/Reports/SpecialDistricts/SpecialDistrict.aspx?entityid=2179&year=2020>.*

### *5.8.3: Revenues, Expenditures, and Net Position*

#### Revenues

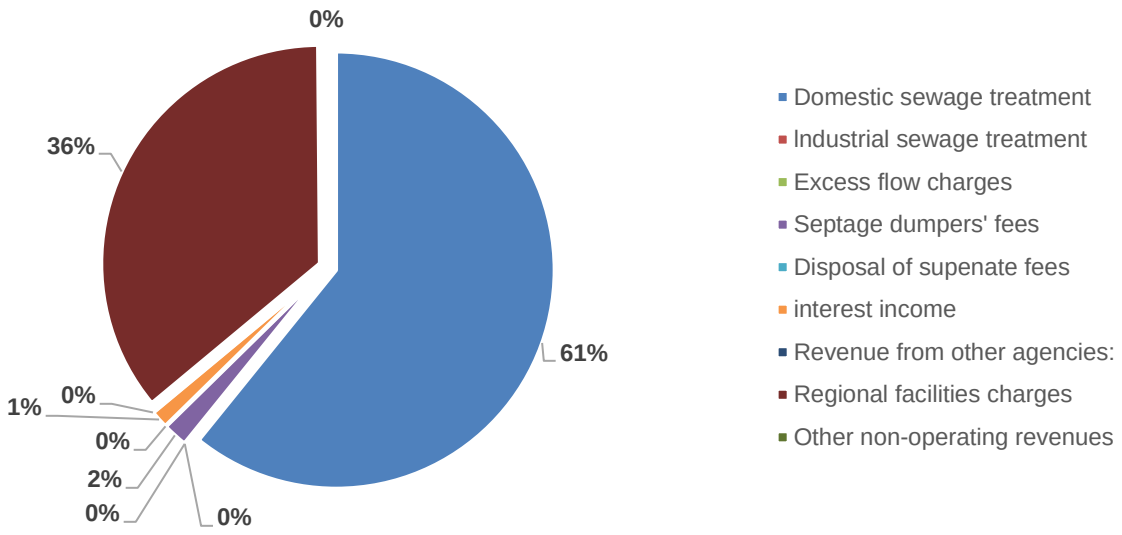
SC-OR has two basic types of revenue:

- Operating revenues consist primarily of charges for services.
- Non-operating revenues and expenses are related to financing and investing type activities.

The District has multiple sources of revenue, including fees charged to its three-member entities, septage dumpers' fees, and other charges, as shown in Figure 5-15 and as listed in Table 5-24 below.

In FY 20-21, SC-OR's total revenue for the Wastewater utility was $5,786,946 (i.e., $5.8 million), as shown in Table 5-24. The largest source of revenue (61 percent) in FY20-21 fees charged to the three-member entities for Domestic sewage treatment (SC-OR, AFS, 2021c). Wastewater revenues increased 19.7 percent in FY20-21, primarily due to an increase in the Regional facilities charges, which is a non-operating revenue source. Other non-operating revenues include: 1) interest income, 2) Regional facilities charges, and 3) Other non-operating revenues (SC-OR, AFS, 2021c).

Figure 5-15: Total Revenues FY20-21 - SC-OR




*Source:* (SC-OR, AFS, 2021c)

Tax Revenues/Service Ratio: A financial metric called Tax Revenues/Service Ratio is sometimes utilized by LAFCOs to determine the amount of property tax revenue an agency receives per customer. Since SC-OR is an enterprise district, it does not receive any property tax. Also, SC-OR has only three primary customers, its member entities. Therefore, the Tax Revenues/Service Ratio for SC-OR is zero (0).

Surcharge for Inflow and Infiltration

High inflow and infiltration create costs for SC-OR to treat because flows can sometimes approach the physical capacity of infrastructure and because additional chemicals, energy, and labor are needed to treat the extra flow. Therefore, operating policies adopted by SC-OR include a surcharge fee to the member entities for times when their peak flows exceed 1,040 gpd/EDU and for times when their average monthly flow exceeds 260 gpd/EDU. Recently these surcharge fees have been increased in order to 1) better recover the costs of treating this excess flow, and 2) provide more incentive to the member entities to address their I/I contribution to SC-OR (SC-OR, 2019a). The current surcharge fees are based on the following:

- The surcharge fee for exceeding the peak flow of 1,040 gpd/EDU is expensive and charged on a per mgd basis (per SC-OR's SSMP, 2019a).
- The surcharge for exceeding the average monthly flow is calculated using the cost per million gallons (MG) for chlorine, sulfur dioxide, sodium oxide, power, and labor associated with high flow events over and above the normal hours for operation and maintenance of the plant and interceptors. This surcharge is calculated on a monthly basis and applied at the close of the fiscal year (SC-OR, 2019a).

Table 5-24: Statement of Revenues, Expenses and Changes in Net Position

**SEWERAGE COMMISSION - OROVILLE REGION**
**STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION**
**FOR THE YEARS ENDED JUNE 30, 2021 AND 2020**

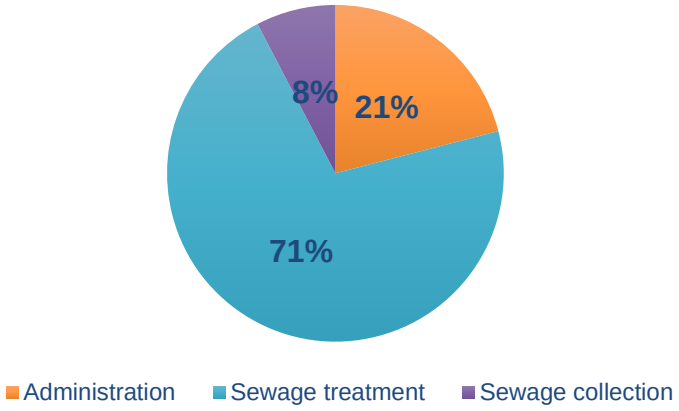
| | 2021 | 2020 |
|---|---|---|
| **OPERATING REVENUES** | | |
| Domestic sewage treatment | $ 3,519,486 | $ 3,059,825 |
| Industrial sewage treatment | 1,046 | 2,161 |
| Excess flow charges | - | - |
| Septage dumpers' fees | 105,320 | 586,777 |
| Disposal of supernate fees | - | 266,305 |
| Total Operating Revenues | 3,625,852 | 3,915,068 |
| **OPERATING EXPENSES** | | |
| Administration | 583,734 | 567,732 |
| Sewage treatment | 1,986,918 | 1,899,476 |
| Sewage collection | 213,113 | 217,261 |
| Total Operating Expenses | 2,783,765 | 2,684,469 |
| Operating income | 842,087 | 1,230,599 |
| **NON-OPERATING REVENUES** | | |
| Interest income | 75,720 | 266,866 |
| Revenue from other agencies: | | |
| Regional facilities charges | 2,077,694 | 643,886 |
| Other non-operating revenues | 7,680 | 7,679 |
| Non-Operating Revenues | 2,161,094 | 918,431 |
| **CHANGE IN NET POSITION** | 3,003,181 | 2,149,030 |
| **NET POSITION - BEGINNING OF YEAR** | 21,883,109 | 19,734,079 |
| **NET POSITION - END OF YEAR** | $ 24,886,290 | $ 21,883,109 |

*Source:* (SC-OR, AFS, 2021c)

### Expenses

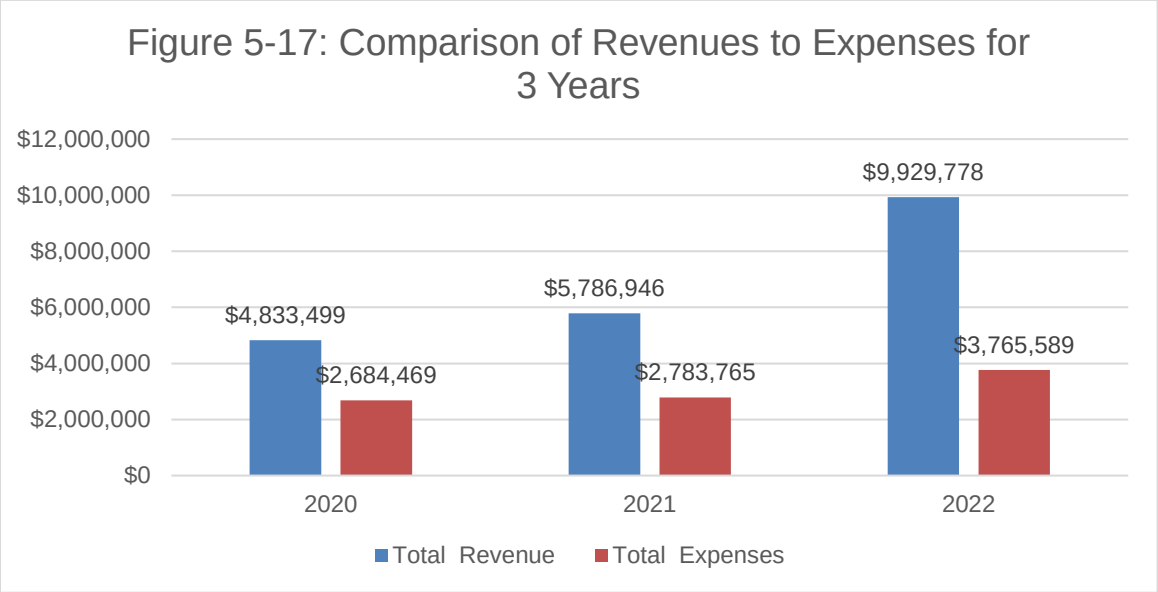
In FY 20/21, total expenses (including both operating and non-operating) were $2,783,765.00 (i.e., almost $2.8 million, as shown in Table 5-24 above (SC-OR, AFS, 2021c). The largest expense is sewage treatment, including operations and maintenance, at $ 1,986,918.00 (71%). The second largest expense was administration which includes management and permitting at $583,734.00 (21%), as detailed in Figure 5-16 below.

Figure 5-16: Total Expenses, FY 20/21, SC-OR




Source: (SC-OR, AFS, 2021c).

A comparison of annual total revenue to total expenses, as provided in Figure 5-17 (next page), shows that annual revenues exceeded expenses in each of the three years studied (i.e., FY 2020, 2021, and 2022). Total Revenues for FY 21/22 were much higher than in previous years due to a capital grant associated that SC-OR received. Expenses increased by approximately $100,000 between FY 2020 to 2021. There was a larger increase in expenses associated with FY 2022; however, these expenditures are associated with capital improvement projects. This indicates that having sufficient reserve funds is important to SC-OR to help fund capital improvement projects and to help it weather the economically lean years. Please also see the discussion of rates in Section 5.8.8 presented on page 5-82 in this Chapter. SC-OR's per capita expenditures amounted to $91.50 per permanent resident in FY21/22. Average per-acre expenditures amounted to $131.15 per acre in FY21/22.




## Net Position

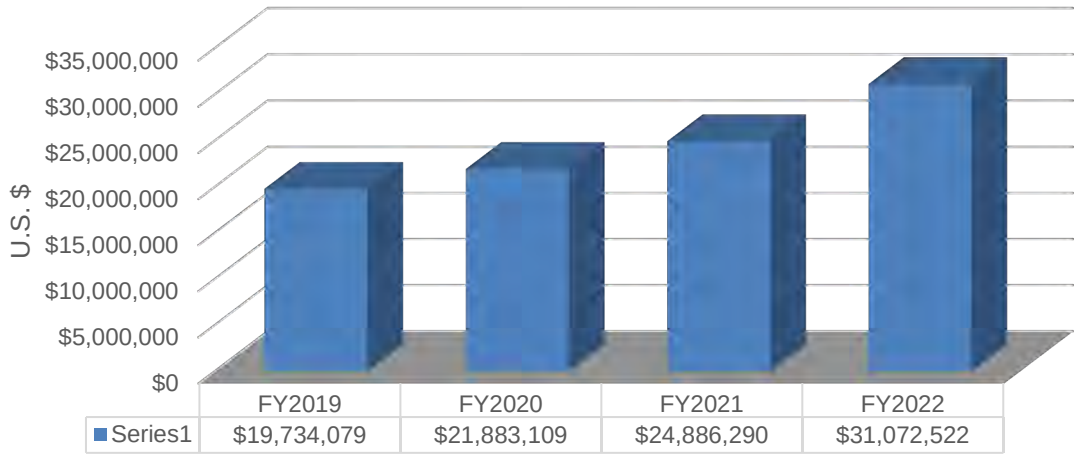
SC-OR's statement of net position shows business-type activities such that assets plus deferred outflows, less liabilities, less deferred inflows of resources, equals net position. The Statement of Net Position provided in Table 5-25 (next page) includes all of SC-OR's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, which provide information about the nature, and amounts, of investments in assets and obligations to creditors. They also provide the basis for computing rates of return, evaluating the capital structure of the agency, and assessing the financial flexibility of the agency. At fiscal year ended June 30, 2021, the District's total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources by $ 24,886,290. This figure, referred to as the net position, was $3 million higher/lower than the previous year (FY2020) year-end balance (SC-OR, AFS, 2021c).

Table 5-25: Statement of Net Position FY21

**SEWERAGE COMMISSION - OROVILLE REGION**
**STATEMENTS OF NET POSITION**
**JUNE 30, 2021 AND 2020**

| | 2021 | 2020 |
|---|---|---|
| **ASSETS** | | |
| Current Assets: | | |
| Cash and cash equivalents | $ 12,218,439 | $ 11,154,510 |
| Member entities receivable | 1,668,321 | 812,211 |
| Interest receivable | 11,250 | 50,254 |
| Inventory | 19,818 | 17,100 |
| Prepaid expenses | 3,711 | 3,206 |
| Deposits | 8,000 | 8,000 |
| Restricted assets: | | |
| Restricted cash and cash equivalents | 2,545,328 | 2,634,082 |
| Capital assets, net of accumulated depreciation | 10,544,109 | 9,345,147 |
| Total Assets | 27,018,976 | 24,024,510 |
| **DEFERRED OUTFLOWS OF RESOURCES** | | |
| CalPERS deferred pension outflows | 512,322 | 548,891 |
| Total Deferred Outflows of Resources | 512,322 | 548,891 |
| **LIABILITIES** | | |
| Accounts payable | 212,743 | 317,182 |
| Accounts payable - power | 137,913 | 96,097 |
| Accrued salaries and wages | 38,679 | 12,984 |
| Noncurrent liabilities: | | |
| Due within one year | 65,024 | 102,010 |
| Due in more than one year | 56,803 | 63,729 |
| Net pension liability | 2,067,986 | 1,981,952 |
| Total Liabilities | 2,579,148 | 2,573,954 |
| **DEFERRED INFLOWS OF RESOURCES** | | |
| CalPERS deferred pension inflows | 65,860 | 116,338 |
| Total Deferred Inflows of Resources | 65,860 | 116,338 |
| **NET POSITION** | | |
| Net investment in capital assets | 10,544,109 | 9,345,147 |
| Restricted | 2,545,328 | 2,634,082 |
| Unrestricted | 11,796,853 | 9,903,880 |
| Total Net Position | $ 24,886,290 | $ 21,883,109 |

Figure 5-18: Net Position FY 2019 to FY 2022, SC-OR




Data Source: SC-OR Annual Financial Statment FY 2019 to 2022

The Net Position for this wastewater utility has increased moderately each year from FY 2019 to FY 2022, with an average increase of $2.8 million per year, as shown in Figure 5-18 above.

### *5.8.4: Capital Improvement Plan*

A Capital Improvement Plan is a fiscal and planning tool that helps organizations make thoughtful budgeting decisions for large projects and purchases based on goals and objectives. Most capital improvement plans cover multiple-year periods.

Although SC-OR's annual budget does not include a formal capital improvement plan, it does contain a page detailing the "Capital Outlay Fund Comparison of Estimated Income and Expenditures". The budget for FY 22/23 lists the following capital outlay projects:

- East Interceptor Design and Repair
- Ruddy Creek (Engineering and Drawings)
- Unknown Expenditures
- (Data Source: SC-OR Budget, 2022c)

The total estimated expenditures for this fiscal year for the above three capital projects are $1.8 million. Additionally, the FY2022 Budget lists several pieces of equipment that will be purchased, including a vac truck, an electric jackhammer, and a mule UTV. These expenditures to replace aging equipment are routine for wastewater service agencies.

SC-OR has proposed another noteworthy capital improvement project called the Wastewater Treatment Plant (WWTP) Upgrade Project. An Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared to study the potential environmental effects of the project (SC-OR, 2022). The Upgrade Project includes several components such as:

- Aeration Basins: The existing aerobic digesters will be converted to aeration basins, effectively doubling the aeration basin capacity.

- Secondary Clarification: One new secondary clarifier will be constructed to accommodate anticipated 15 MGD peak wet weather flows through the plant and acceptable hydraulic loading rates. Volumes of wet-weather flows exceeding 15 MGD will be sent to the equalization ponds.
- Filtration: Four new filter supply pumps and two new No. 2 Water (2W) supply pumps will be installed adjacent to the existing chlorine contact basin.
- Disinfection: A new, open-channel ultraviolet (UV) disinfection system will be installed inside the existing chlorine contact basins.
- Solids Handling: A rotary drum thickener (RDT) to thicken waste-activated sludge from the aeration basins will be installed. The RDT will pre-thicken waste-activated sludge (WAS) or recuperatively thicken digested sludge.
- And several other construction components as listed in the CEQA document.

### *5.8.5: Reserves*

In California, many independent special districts have accumulated reserves. Although there are no rules guiding the size and use of reserve funds, general best management practices suggest that an agency should have a reserve fund that allows for operations of between six months to a year. Reserve funds provide the following benefits:

- allow for the continued operation of the agency even in downturns and unfavorable conditions,
- can contribute towards capital improvement projects which would reduce the potential need to accumulate a high debt load, and
- helps to ensure the continued solvency of the District.

SC-OR's investment policy and the California Government Code allow the District to invest, provided the credit ratings of the issuers are acceptable to the District and approved percentages and maturities are not exceeded. Reserve and investment policies are listed in the annual financial statements. The Board of Commissioners has the following Investment Policies – The Commission may invest in the following types of investments:

- Passbook savings account demand deposits
- Money market accounts
- Certificates of deposit with commercial banks and/or savings and loan companies
- Local agency Investment Fund (LAIF) demand deposits, and
- Mutual funds.

SC-OR has several reserve funds, including deposits with financial institutions ($696,700), LAIF State Pool ($14,066,906), the Wastewater Capital Reserve Fund ($785,169), and several other funds as listed in Table 5-26 and Table 5-27 below (FY 2021).

Table 5-26: Investments and Reserves

| | 2021 | 2020 |
|---|---|---|
| Cash on hand | $ 161 | $ 161 |
| Deposits with financial institutions | 696,700 | 124,249 |
| LAIF | 14,066,906 | 13,664,182 |
| Total Cash and Cash Equivalents | $ 14,763,767 | $ 13,788,592 |

Restricted Cash and Cash Equivalents

Cash and investments that are restricted by legal or contractual requirements at June 30, 2021 and 2020, consist of the following:

| | 2021 | 2020 |
|---|---|---|
| Wastewater Capital Reserve Fund | $ 785,169 | $ 731,544 |
| Regulatory and Capital Account Fund | 1,760,159 | 1,902,538 |
| Total Restricted Cash and Cash Equivalents | $ 2,545,328 | $ 2,634,082 |

*Source: SC-OR, AFS, FY2021*

Table 5-27: Other Reserve Funds

**SEWERAGE COMMISSION - OROVILLE REGION**
**SCHEDULE OF CHANGES IN RESTRICTED AND COMMISSION RESERVED NET POSITION**
**FOR THE YEAR ENDED JUNE 30, 2021**

| | Restricted and District Reserved Net Position | | | | | | | Net Position | |
|---|---|---|---|---|---|---|---|---|---|
| | Restricted For WCRF | Restricted For R&CA | Reserved For Capital Outlay | Reserved For Annual O & M | Reserved For Penalties & Fines | Reserved For Flexible Spending | Unreserved | Total 2021 | Total 2020 |
| Balance, July 1 | $ 731,544 | $ 1,902,538 | $ 7,475,729 | $ 300,000 | $ 8,423 | $ 25,156 | $ 11,439,719 | $ 21,883,109 | $ 19,734,079 |
| Change in Net Position | - | - | - | - | - | - | 3,003,181 | 3,003,181 | 2,149,030 |
| Transfers from WCRF for: | | | | | | | | | |
| Purchase of capital assets | (28,326) | - | - | - | - | - | 28,326 | - | - |
| Transfers to WCRF for: | | | | | | | | | |
| Interest income | 4,191 | - | - | - | - | - | (4,191) | - | - |
| Purchase of capital assets | - | - | - | - | - | - | - | - | - |
| Portion of sewer service charges | 77,760 | - | - | - | - | - | (77,760) | - | - |
| Transfers from R&CA for: | | | | | | | | | |
| Purchase of capital assets | - | (1,319,133) | - | - | - | - | 1,319,133 | - | - |
| Transfers to R&CA for: | | | | | | | | | |
| Interest income | - | 10,351 | - | - | - | - | (10,351) | - | - |
| Portion of sewer service charges | - | 1,166,403 | - | - | - | - | (1,166,403) | - | - |
| Transfers from Capital Outlay for: | | | | | | | | | |
| Purchase of capital assets | - | - | (1,081,386) | - | - | - | 1,081,386 | - | - |
| Transfers to Capital Outlay for: | | | | | | | | | |
| Regional facility charges | - | - | 2,077,694 | - | - | - | (2,077,694) | - | - |
| Interest income | - | - | 44,582 | - | - | - | (44,582) | - | - |
| WWTP upgrade final design | - | - | 1,066,269 | - | - | - | (1,066,269) | - | - |
| Bypass station improvements | - | - | 102,897 | - | - | - | (102,897) | - | - |
| Solar savings | - | - | 100,000 | - | - | - | (100,000) | - | - |
| Transfers to Penalties & Fines for: | | | | | | | | | |
| Interest income | - | - | - | - | 47 | - | (47) | - | - |
| Balance, June 30 | $ 785,169 | $ 1,760,159 | $ 9,785,785 | $ 300,000 | $ 8,470 | $ 25,156 | $ 12,221,551 | $ 24,886,290 | $ 21,883,109 |

Note: The Wastewater Capital Reserve Fund (WCRF) is restricted externally by the State of California. The reserves for Capital Outlay, Annual O&M, Penalties & Fines and Flexible Spending were established by the District to accumulate funds to assist in financing future facility expansions and betterments, provide an emergency reserve for operations and unexpected fines and penalties, and accumulate resources for the Section 125 Flexible Spending Plan.

Source: SC-OR, AFS, 2022

### *5.8.6: Outstanding Debts and Liabilities*

For local government agencies, liabilities typically include current liabilities such as accounts payable, salaries payable, bond interest payable, and long-term liabilities such as serial bonds payable, installments payable, and contracts payable. SC-OR has no public debt (SC-OR, RFI Response 2021b). This lack of debt means that SC-OR has a solid financial foundation.

SC-OR does have a routine type of accounting liability. Total Liabilities were $2,579,148 in FY 2021 per the AFS Statement of Net Position. The liabilities that SC-OR manages include account payable, electricity bill, accrued salaries and wages, and noncurrent liabilities, including Net Pension Liability. Table 5-28 below shows that the Net Pension Liability increased slightly from $1,981,952 on July 2020 up to $2,189,813 in July 2021.

Table 5-28: Changes in Long-Term Liabilities.

**Changes in Long-Term Liabilities**

Long-term liability activity for the fiscal year ended June 30, 2021, was as follows:

| | Balance July 1, 2020 | Additions | Deletions | Balance June 30, 2021 | Due Within One Year |
|---|---|---|---|---|---|
| Compensated absences | $ 140,777 | $ 31,987 | $ (58,574) | $ 114,190 | $ 57,387 |
| Other post-employment benefits - insurance | 24,962 | | (17,325) | 7,637 | 7,637 |
| Net pension liability | 1,981,952 | 86,034 | - | 2,067,986 | - |
| Total Long-Term Liabilities | $ 2,147,691 | $ 118,021 | $ (75,899) | $ 2,189,813 | $ 65,024 |

### *5.8.7: Pension Payments*

On behalf of its full-time employees, SC-OR contributes the pension payments to the California Public Employees Retirement System (CalPERS), a multiple-employer public employee-defined benefit pension plan. CalPERS provides retirement, disability, and death benefits to plan members and beneficiaries. In addition, CalPERS acts as a common investment and administrative agent for participating public entities within the State, including SC-OR. Copies of CalPERS' annual financial report may be obtained from its executive office at 400 Q Street, Sacramento, California 95811. Please note that CalPERS recognizes that the scale and multi-faceted nature of climate change presents a systemic risk to retirement portfolios SC-OR the Board. The risks include:

- disruption to portfolio companies' supply chains and operations,
- heightened volatility to financial markets,
- reduced economic growth,
- fixed assets (e.g., real estate), and
- impacts on the financial success of existing business models and portfolio companies

CalPERS has implemented its Sustainable Investments Program to mitigate these systemic risks (CalPERS, n.d.)

LAFCOs commonly utilize a fiscal indicator to describe the relationship between pension contributions as a percentage of covered-employee payroll. GASB 68 was revised and established new financial reporting for pensions effective in 2015. This percentage is calculated using the following formula: contributions in relation to the actuarially determined contribution divided by covered payroll. Table 5-29 below shows that as of June 30, 2020, the proportionate share of the net pension liability as a percentage of its covered-employee payroll was 303.53 percent.

Table 5-29: Pension Payments (contributions in relation to actuarially covered payroll)

**SEWERAGE COMMISSION - OROVILLE REGION**
**SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY**
**JUNE 30, 2021**

Last 10 Fiscal Years*:

| Measurement date | June 30, 2014 | June 30, 2015 | June 30, 2016 | June 30, 2017 | June 30, 2018 |
|---|---|---|---|---|---|
| Proportion of the collective net pension liability | 0.01969% | 0.05447% | 0.04979% | 0.04902% | 0.05002% |
| Proportionate share of the net pension liability | $ 1,225,137 | $ 1,357,329 | $ 1,729,515 | $ 1,932,214 | $ 1,885,217 |
| Covered employee payroll | $ 572,157 | $ 597,910 | $ 646,734 | $ 589,435 | $ 693,706 |
| Proportionate share of the net pension liability as a percentage of its covered-employee payroll | 214.13% | 227.01% | 267.42% | 327.81% | 271.76% |
| Plan Fiduciary net position | $ 3,885,566 | $ 3,259,440 | $ 3,256,288 | $ 3,617,520 | $ 3,888,179 |
| Plan Fiduciary net position as a percentage of the total pension liability | 76.03% | 68.56% | 65.31% | 65.18% | 70.06% |
| Valuation date | June 30, 2013 | June 30, 2014 | June 30, 2015 | June 30, 2016 | June 30, 2017 |

| Measurement date | June 30, 2019 | June 30, 2020 |
|---|---|---|
| Proportion of the collective net pension liability | 0.04949% | 0.05002% |
| Proportionate share of the net pension liability | $ 1,981,952 | $ 2,067,986 |
| Covered employee payroll | $ 615,293 | $ 681,315 |
| Proportionate share of the net pension liability as a percentage of its covered-employee payroll | 322.12% | 303.53% |
| Plan Fiduciary net position | $ 3,999,589 | $ 4,319,554 |
| Plan Fiduciary net position as a percentage of the total pension liability | 66.87% | 67.62% |
| Valuation date | June 30, 2018 | June 30, 2017 |

**Benefit changes**. Above amounts do not include any liability impact that may have resulted from plan changes which occurred after June 30, 2013, as they have a minimal cost impact. This applies to voluntary benefit changes as well as any offers of Two Year Additional Service Credit (aka Golden Handshakes).

**Changes in assumptions.** None

* Fiscal year ended June 30, 2015, was the first year of implementation. Additional years will be presented as they become available.

Ideally, LAFCO will continue to monitor this metric to consider long-term fiscal trends as a larger time series of data becomes available.

### *5.8.8: Rates*

SC-OR charges fees for wastewater treatment and disposal. The fees must also cover permitting and general administration/management costs. Since SC-OR is an enterprise district, rates cover the costs of service provision, with very few exceptions. For example, expanding wastewater systems in response to growth in the community is typically paid by developer fees. Information regarding wastewater rates is provided on the SC-OR's website at: <*https://www.SC-OR* >. In March 2019, SC-OR received a rate study completed by Provost & Pritchard Consulting Group from Chico. This study noted that SC-OR faces two upcoming issues that will affect rates as follows:

1) The regulatory discharge requirements for the NPDES permit from the RWQCB may get more restrictive in the future, and
2) Operations costs will likely rise in future years (Provost & Pritchard, 2019).

The physical improvements needed to upgrade the wastewater treatment plant were studied and described in a Schematic Design Report from Jacobs Engineering in November 2018. This report describes geotechnical conditions, the proposed facilities, process control strategies, and regulatory compliance.

SC-OR's fees include a Regional Facilities Charge, a connection fee, and an inflow/infiltration surcharge. SC-OR's charges and fees are currently being studied in a rate study that Bartles Wells Associates are preparing. This study is expected to be completed later in 2023. This new rate study is being prepared in compliance with the requirements of Proposition 218.

SC-OR's wastewater fees are passed along to its three-member entities, which in turn pass the fees along to their residential and business customers. For example, Table 5-30 shows the rates that LOAPUD charges to its customers and passes along to SC-OR.

Table 5-30: SC-OR fees Passed onto LOAPUD

| **Fiscal Year** | **SC-OR Treatment Fee per EDU (monthly)** |
|---|---|
| 2021/2022 | $17.85 |
| 2022/2023 | $19.85 |
| 2023/2024 | $23.85 |

Data Source: https://www.loapud.com/notice-of-sewer-rate-increase

Surcharge for Inflow and Infiltration

High inflow and infiltration create costs for SC-OR to treat because flows can sometimes approach the physical capacity of infrastructure and because additional chemicals, energy, and labor are needed to treat the extra flow. Therefore, operating policies adopted by SC-OR include a surcharge fee to the member entities for times when their peak flows exceed 1,040 gpd/EDU and for times when their average monthly flow exceeds 260 gpd/EDU. Recently these surcharge fees have been increased in order to: 1) better recover the costs of treating this excess flow, and 2)

provide more incentive to the member entities to address their I/I contribution to SC-OR (SC-OR, 2019a). The current surcharge fees are based on the following:

- The surcharge fee for exceeding the peak flow of 1,040 gpd/EDU is expensive and charged on a per mgd basis (per SC-OR's SSMP, 2019a).
- The surcharge for exceeding the average monthly flow is calculated using the cost per million gallons (MG) for chlorine, sulfur dioxide, sodium hydroxide, power, and labor associated with high flow events over and above the normal hours for operation and maintenance of the plant and interceptors. This surcharge is calculated on a monthly basis and applied at the close of the fiscal year (SC-OR, 2019a).

In summary, SC-OR staff and the Board of Commissioners review the rates and the financial position of the wastewater system to determine if the rates require adjustment. If future rate increases are considered, they will continue to be subject to the procedural and substantive requirements of Proposition 218.

### *5.8.9 Determinations: Finance*

Table 5- 31: MSR DETERMINATIONS: Financial Ability to Provide Public Services (SC-OR)

| Number | Financial Policies & Transparency Indicator | Determinations |
|---|---|---|
| FIN-1 | Summary financial information presented in a standard format and simple language. | SC-OR's Annual Financial Statement and the Annual Budget are prepared for a timeframe of one fiscal year. The financial statements and budgets clearly and transparently present financial information. |
| FIN-2 | Agency has a published policy for reserve funds, including the size and purpose of reserves and how they are invested. | Although SC-OR does not seem to have a specific reserve policy, its financial reserves are listed within its Annual Financial Statements. SC-OR has a policy called "Investment in Local Agency Investment Fund Policy" adopted by the Board of Commissioners and is available on its website at <*https://www.sc-or.org/board-policies*>. SC-OR Policy #3130 was originally adopted on December 18, 1985, and subsequently updated on August 22, 2007. SC-OR's "Reimbursement Policy: SC-OR policy #5200 establishes Agency policy on travel expenditure reimbursements. |

| | | |
|---|---|---|
| FIN-3 | Other financing policies are clearly articulated. | SC-OR's Annual Financial Statement contains a list of its accounting policies. For example, the SC-OR's Financial Statement describes its Investment Policy with specific procedures and practices. However, some of SC-OR's financial policies do not seem to be codified. |
| FIN-4 | Compensation reports and financial transaction reports that are required to be submitted to the State Controller's Office are posted on the district website. | Employee wage reports are sent to the California State Controller for Government Compensation, and a link to this report is provided from SC-OR's website. |

| | **Indicators Revenues, Expenditures, and Net Position** | **Determinations** |
|---|---|---|
| FIN-5 | Revenues exceed expenditures in 50% of studied fiscal years | Total revenue exceeded total expenditures in each of the three study years, FY 2019, FY2020, and FY2021. All revenues for this JPA come from wastewater fees for service and are considered business-type activities. The reliance on the sale of wastewater service furthers the importance of ensuring reliable service and keeping rates at a sustainable level for the JPA member agencies. |
| FIN-6 | Increases or decreases in net position | Changes to the Net Position are shown in Table 5-25, to be variable with moderate increases in Net Position seen each year. |
| FIN-7 | Tax Revenues/Connection Ratio | LAFCO requested that the performance measure "Tax Revenues/Connection Ratio" be studied in this MSR. Since SC-OR is a JPA and does not receive property tax revenue, the Tax Revenues/Connection Ratio is zero (0). |
| | **Rate Indicator (SC-OR)** | **Determinations** |
| FIN-8 | Rates were adopted by the Board of Directors | SC-OR Board of Directors adopted the rate structure during a public meeting. |
| FIN-9 | The process for adopting rates is consistent with Proposition 218 | SC-OR's staff and their consultants prepare rate studies prior to the adoption of changes to the rate structure. These rate studies are considered during public meetings. The |

| | | |
|---|---|---|
| | | process for adopting rates is consistent with Proposition 218. |
| FIN-10 | Rates are readily available to constituents | Rates are provided to the JPA's three-member entities. It is recommended that SC-OR consider displaying its rates on its website to promote financial transparency. |

### *5.8.10 Risk Management*

SC-OR maintains several types of insurance, and these insurance policies are a tool SC-OR utilizes to help manage risks. Property and liability insurance is through Special District Risk Management Authority (SDRMA), a public agency formed under California Government Code Section 6500 et seq. to provide a risk management program for California's local governments. SDRMA has provided members with comprehensive insurance coverage for over three decades. SC-OR's 22/23 budget shows an increase of 16.4 percent in rates from SDRMA. This increase is attributed to inflation and to all the natural disasters that have occurred over the past several years. Medical insurance for SC-OR's employees is pooled with the City of Oroville (SC-OR, 2021b).

Since SC-OR is a JPA, it did not participate in Butte County's Local Hazard Mitigation Plan (LHMP). Butte County collaborated with five incorporated communities and ten special districts to prepare the November 2019 Local Hazard Mitigation Plan as described in Chapter 2, Introduction. The City of Oroville, TWSD, and LOAPUD each have a chapter of the LHMP dedicated to them. However, SC-OR does have facilities that are potentially at risk if future hazards arise. SC-OR's risk level is similar to that of TWSD and LOAPUD. For example, flooding and stormwater could potentially negatively impact SC-OR's facilities. Therefore, it may be beneficial for SC-OR to participate in the next update to the LHMP. SC-OR staff is encouraged to explore participation options.

## 5.9: Cost Avoidance & Facilities Sharing

This section highlights cost avoidance practices given necessary service requirements and expectations. Ideally, the proposed methods to reduce costs would not adversely affect service levels. Municipal wastewater systems generally have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, SC-OR pursues an array of cost avoidance techniques that contribute incrementally towards keeping costs reasonable. Specifically, SC-OR carefully utilizes its budgeting processes to serve as a means to avoid unnecessary costs. The report entitled "Growth Within Bounds:

Planning California Governance for the 21st Century" (Report of the Commission on Local Governance for the 21st Century) states the following:

> "Although some JPAs are formed solely to take advantage of a financing mechanism not otherwise available, most are true collaborations of governments that promote greater cooperation and coordination of services, even if only for specific purposes."

Facilities Sharing: SC-OR actively shares facilities and equipment with neighboring service providers. For example, the WWTP is a shared facility among the members of SC-OR. In addition, specific pieces of equipment related to the sewage system are occasionally shared by the SC-OR, LOAPUD, and TWSD. The three-member entities all purchase compatible components of the same type of shoring in case of emergency to allow the employees to be familiar with the equipment's function.

Equipment Sharing: Equipment and/or parts to maintain and repair SC-OR's collection system are sometimes borrowed from the three-member entities that form the JPA. Loaning and sharing equipment is a useful operational strategy since SC-OR has a relatively small sanitary sewer collection system compared to the other JPA member agencies with larger collection systems and larger spare parts inventories (SC-OR, 2019a). SC-OR has approximately three miles of sewer collection system with two lift stations. Since SC-OR focuses on wastewater treatment (rather than conveyance), SC-OR relies on the member entities to help maintain its small collection system since SC-OR does not have the equipment necessary to service all of it (SC-OR, 2021b). Sharing equipment and information occur on an as-needed basis, and there is a mutual understanding that we are all on the same team (SC-OR, 2021b). SC-OR does not participate in a formal mutual aid program (SC-OR, 2021b).

Cost Saving: The solar array on SC-OR's site is an example of a cost-saving measure (SC-OR, 2021b).

Reduce overhead: SC-OR aims to reduce overhead expenses. For example, the Commission recently refurbished its solar facility to increase energy production and help offset electricity costs. This allowed SC-OR to offset its energy use by about 40 percent. SC-OR also saves money by conducting its own maintenance on plant equipment. In addition, SC-OR contracts out its major equipment repairs and engineering services. In the future, to improve cost efficiency, SC-OR may consider expanding its laboratory to provide laboratory services to smaller jurisdictions in the area. A water recycling program (i.e., a purple pipe system) and a biosolids program could also improve cost efficiencies (SC-OR, 2021b).

Goals and Challenges

California's water and wastewater districts face future challenges and issues due to changing conditions. SC-OR's staff was invited to note specific goals and challenges for the future. Identified issues include:

- Maintaining existing plant;

- Financing for the upgrade project;
- Maintaining and upgrading lift stations;
- Planning to reduce inflow and infiltration;
- Planning for future growth and understanding the timing of when growth will occur, and additional capacity will be needed
- Source: (SC-OR, 2021b).

Even though SC-OR's staff and commissioners actively work to reduce unnecessary costs, the SC-OR faces the same financial challenges as all local agencies regarding rising costs. For example, recently, inflation, due to the global pandemic and rising energy costs, has been an issue across the Country. SC—OR specifically may face other increasing costs due to changes in NPDES permit requirements and due to an increase in the frequency of lab testing requirements (SC-OR, RFI Response, 2021b).

JPA Coordination Meetings: The SC-OR staff regularly meets with the three-member entities' managers, with meetings occurring quarterly or more frequently as needed. These meetings are used to focus on and coordinate projects between the districts. In addition, any problems or concerns the member entities face are brought to light and discussed openly (SC-OR, 2021b).

Reorganization: It is sometimes beneficial for an agency to pursue structural and/or jurisdictional reorganizations to save money and avoid future overhead costs. SC-OR staff has indicated that, at this time, there are no functional or structural reorganizations that the Commission is evaluating to benefit recipients of the Commission's services or improve the provision of wastewater collection services. To date, SC-OR has not considered merging with another agency (SC-OR, 2021b).

While the current organization of sewer services between three collection agencies and the wastewater treatment plant (SC-OR) effectively delivers sewer services to the Oroville region, this duplication of services should be evaluated to determine if a reorganization of service providers and/or boundaries would result in a more transparent and cost-effective provision of sewer services. Given the SC-OR JPA expires in 2030, it is an appropriate time for SC-OR to evaluate its role in the overall sewage collection configuration for the Oroville Region. At present, SC-OR is in a reactive mode as it responds to collection demands of its JPA members, it may be beneficial to improved accountability and efficiency if the wastewater treatment plant and the collection system were operated under a single agency with one set of comprehensive policies and procedures umbrella. Appendix C in this MSR outlines several conceptual re-organization and SOI options for all the water and wastewater service providers described in this document.

California Water Environment Association (CWEA): CWEA is a state-wide non-profit association that empowers wastewater professionals as they protect California's most critical resource: water. CWEA represents 10,000+ professionals working in all facets of wastewater management and resource recovery, from operators to lab techs to engineers. Founded in 1928, CWEA delivers cutting-edge training, raises awareness of the profession, and shapes the future of wastewater

services. SC-OR's employees have won several awards from CWEA over the past several years, as follows:

- Outstanding Young Professional of the Year: Josh Sorenson, Sewerage Commission – Oroville Region (2021)
- Operator of the Year: Mitchell Maxwell, Sewerage Commission – Oroville Region (2021)
- Outstanding Service Award: Mikah Salsi, Sewerage Commission – Oroville Region (2021)
- Lifetime Achievement Award: Scott Koch, Sewerage Commission – Oroville Region (2020)
- Supervisor of the Year: Scott Koch, Sewerage Commission – Oroville Region (2018)
- Administrative Professional of the Year: Lauri Pittman, Sewerage Commission – Oroville Region (2018)
- Hosting Training Plaque SC-OR, (2018).

Table 5-32: MSR DETERMINATION: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES

| Number | Indicator | Determination |
|---|---|---|
| SC-OR -SHA-1 | The Agency collaborates with multiple other agencies for the delivery of services within its boundary. | SC-OR collaborates with several other agencies to deliver services within its Service Area by implementing the following practices: sharing the wastewater treatment plant as a JPA, information sharing, and cost reduction. |
| SC-OR -SHA-2 | Agreements for mutual aid or any other appropriate agreement (i.e., Tax Sharing Agreement) are periodically reviewed to ensure fiscal neutrality. | SC-OR does not currently participate in any formal Mutual Aid Agreement. However, SC-OR does informally cooperate with its three-member entities. As a JPA, the agreement with the three-member entities expires in 2030. |
| SC-OR -SHA-3 | Other practices and opportunities that may help to reduce or eliminate unnecessary costs are examined by the District periodically. Ideally, there is a balance between cost efficiency and risk reduction strategies. | Municipal wastewater systems generally have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, SC-OR pursues several cost avoidance techniques that each contribute incrementally towards keeping costs at a reasonable level. Specifically, SC-OR carefully utilizes its budgeting processes to serve as one means to avoid unnecessary costs. |

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##

# Chapter 6: South Feather Water and Power Agency


*(Image courtesy of Google Maps)*

This chapter presents a municipal service review for the South Feather Water and Power Agency (SFWPA) with details of the Agency formation, boundary, government structure, population and land use, disadvantaged communities, and the provision of water services and facilities. Based on the information included in this report, written determinations that make statements involving each service factor that the Commission must consider as part of a municipal service review are presented. The determinations are based upon data presented in this Chapter for the South Feather Water and Power Agency and are recommended to the Commission for consideration. The Commission's final Municipal Service Review (MSR) determinations will be part of a Resolution which the Commission formally adopts during a public meeting.

Table of Contents

# 6.1 Agency Profile & Overview

### *6.1.1 Agency Profile*

| | |
|---|---|
| **Type of Agency:** | Irrigation District |
| **Principal Act:** | California Water Code, Division 11, §20500 et seq. |
| **Functions/Services:** | • Raw untreated water for agricultural irrigation;<br>• Water treatment and distribution for municipal purposes (residential and commercial);<br>• Recreation;<br>• Hydropower. |
| **Main Office:** | 2310 Oro Quincy Highway, Oroville, CA 95966 |
| **Mailing Address:** | Same |
| **Phone No.:** | (530) 533-4578 |
| **Fax No.:** | (530) 533-9700 |
| **Web Site:** | https://southfeather.com/ |
| **General Manager**: | Rath Moseley Email: rmoseley@southfeather.com |
| **Alternate Contact**: | Jaymie Perrin Email: jperrin@southfeather.com |
| **Meeting Schedule:** | Fourth Tuesday of every month, starting at 2:00 PM PST |
| **Meeting Location:** | 2310 Oro Quincy Highway, Oroville, California 95966. |
| **Date of Formation:** | November 1919 |
| **Area Served:** | 33,718 acres (52.68 square miles) |
| **Population:** | Existing population ranges from 16,770 to 24,300 |
| **Number of water connections:** | Miners Ranch Treatment Plant serves 6,909 connections.<br>Bangor Treatment Plant serves 22 connections |
| **Annual Total Revenue:** | Approximately $17.4 million in FY2020 |
| **Annual Expenditures** | $21 million in FY2020 |

### 6.1.2 Agency Overview

The South Feather Water and Power Agency (SFWPA) is a local government agency structured as an Irrigation District consistent with its Principal Act: California Water Code, Division 11, Section 20500 et seq[1]. SFWPA provides the following services to its customers located within the Feather River/Lower Honcut Watershed in Butte County:

- Raw untreated water for agricultural irrigation;
- Water treatment and distribution for municipal purposes (residential and commercial);
- Recreation; and
- Hydropower.

## 6.2 Agency Formation and Boundary

### 6.2.1 Formation

The South Feather Water and Power Agency (formally known as the Oroville-Wyandotte Irrigation District) was organized on November 17, 1919. The impetus to organize the District began during the California gold rush when miners constructed a ditch to move water from the South Fork of the Feather River to the mining sites at Forbestown, Wyandotte, Honcut, Ophir, and Bangor. Later the mining ditch network was modified and expanded to divert water from tributaries of the Feather River. The old water rights from the South Feather Land and Water Company and the Palermo Land and Water Company were assumed by the Oroville-Wyandotte Irrigation District and, subsequently, the South Feather Water and Power Agency (SFWPA, UWMP 2021g).

### 6.2.2 District Boundary

The South Feather Water and Power Agency geographic boundary currently encompasses 33,718 acres or 52.68 square miles, as seen in Figure 6-1. The SFWPA is located within the west side of the County of Butte and generally encompasses the areas south of Lake Oroville and east of downtown Oroville. The City of Oroville and California Water Service (Cal Water) are adjacent to the western boundary of SFWPA. Lake Oroville is located to the north of SFWPA. Unincorporated parcels that rely upon groundwater wells, subject to the approval of the Butte County Environmental Health Department, are located to the east and south of SFWPA. The boundary area has an irregular shape and also includes 19 non-contiguous parcels, as well as isolated boundary pockets located east of the District Sphere of Influence. The boundary includes 11,127 assessor parcels (LAFCO GIS, 2020). The District has annexed seven parcels since 2008, adding 26.7 acres into its boundary area, as listed in Table 6-1 below.

[1] There are 92 irrigation districts in California. The CA Water Code authorizes irrigation districts to provide the following services: sell and lease water; operate sewage collection and disposal system; deliver water for fire protection; dispose and salvage sewage water; protect against damage from flood or overflow; provide drainage made necessary by the irrigation provided; maintain recreational facilities in connection with any dams, reservoirs, etc.; and operate and sell electrical power.

| Table 6-1: Annexations into SFWPA Boundary | | | |
|---|---|---|---|
| **Agency** | **Year** | **Acres** | **Assessor's Parcel Number** |
| SFWPA | 2021 | n/a | Bonite Street (Rodriquez) Annexation No. 2-21 |
| SFWPA | 2019 | 7.1 | 026-250-008 |
| SFWPA | 2015 | 6.6 | 079-270-076 |
| SFWPA | 2015 | 1.2 | 026-090-006 |
| SFWPA | 2008 | 1.3 | 033-035-003 and -004 |
| SFWPA | 2009 | 10.5 | 027-070-069 and -070 |
| Data Source: Butte LAFCo, Ms. Costa, August 2021 | | | |

In addition to the recent annexations listed above, LAFCO approved the annexation of the unincorporated community of Palermo in September 2022. The Palmero annexation consists of approximately 550 parcels added to the South Feather Water and Power Agency. The annexation facilitates the Palermo Clean Water Consolidation Project, a partnership between the County of Butte and South Feather Water and Power Agency, to provide safe, clean drinking water to the residents of Palermo who have historically depended on private wells for domestic water.

SFWPA has received several newly proposed annexations, as listed below in Table 6-2.

| Table 6-2: Proposed Annexations | | | | |
|---|---|---|---|---|
| **Agency** | **Year** | **Acres** | **Assessor's Parcel Number** | **Name of Project** |
| SFWPA | 2021 | n/a | 033-023-002 and 033-023-003 | Resolution No. 21-22-02 |
| SFWPA | 2021 | n/a | 033-022-006 | Resolution No. 21-23-02 |
| SFWPA | 2021 | n/a | n/a | Wulbern/Starr Resolution No. 21-26b was considered on October 26, 2021 |
| Data Source: SFWPA Meeting Agendas, 2021<br>Note: Acreage and APNs were not readily available | | | | |

California Water Service (a private water company serving the City of Oroville) has extended its service area into a small portion of the northeast corner of the SFWPA service area. It provides domestic water service at that location (LAFCO/Kleinschmidt MSR, 2006).

### *6.2.3 Sphere of Influence*

This section briefly describes the existing Sphere of Influence (SOI) for the South Feather Water and Power Agency. Additional details can be found in Appendix K, SOI Options, in this document. Butte LAFCO adopted the original SOI for the SFWPA in 2006 via Resolution No. 55-M 2005/2006. The Agency's SOI is almost twice the size of its boundary and encompasses 64,125 acres. The SOI includes 11,853 parcels, which is slightly more parcels than within the boundary (11,127), and this indicates that the average parcel size is larger in the SOI. Table 6-3 below, contains additional details regarding the size of the boundary and SOI.

As part of this MSR preparation process, Agency staff indicated that the Sphere of Influence boundary is adequate for projected future needs (SFWPA, 2021a). However, in the 2006/07 MSR, SFWPA noted that their Sphere of Influence boundary should be co-terminus with their "place-of-use" boundary as designated by the State Water Resources Control Board to best accommodate future needs regarding the approved area for distribution of water per existing water rights.

Table 6-3: Geographic Summary (2021) of Water Services for SFWPA

| | **Boundary Area (All Services)** | **SOI (All Services)** | **Total Boundary & SOI** |
|---|---|---|---|
| Total Acres | 33,718 | 64,125 | 97,843 |
| Square Miles | 52.68 | 100.19 | 152.87 |
| Number of Assessor Parcels | 11,127 | 11,853 | 22,980 |

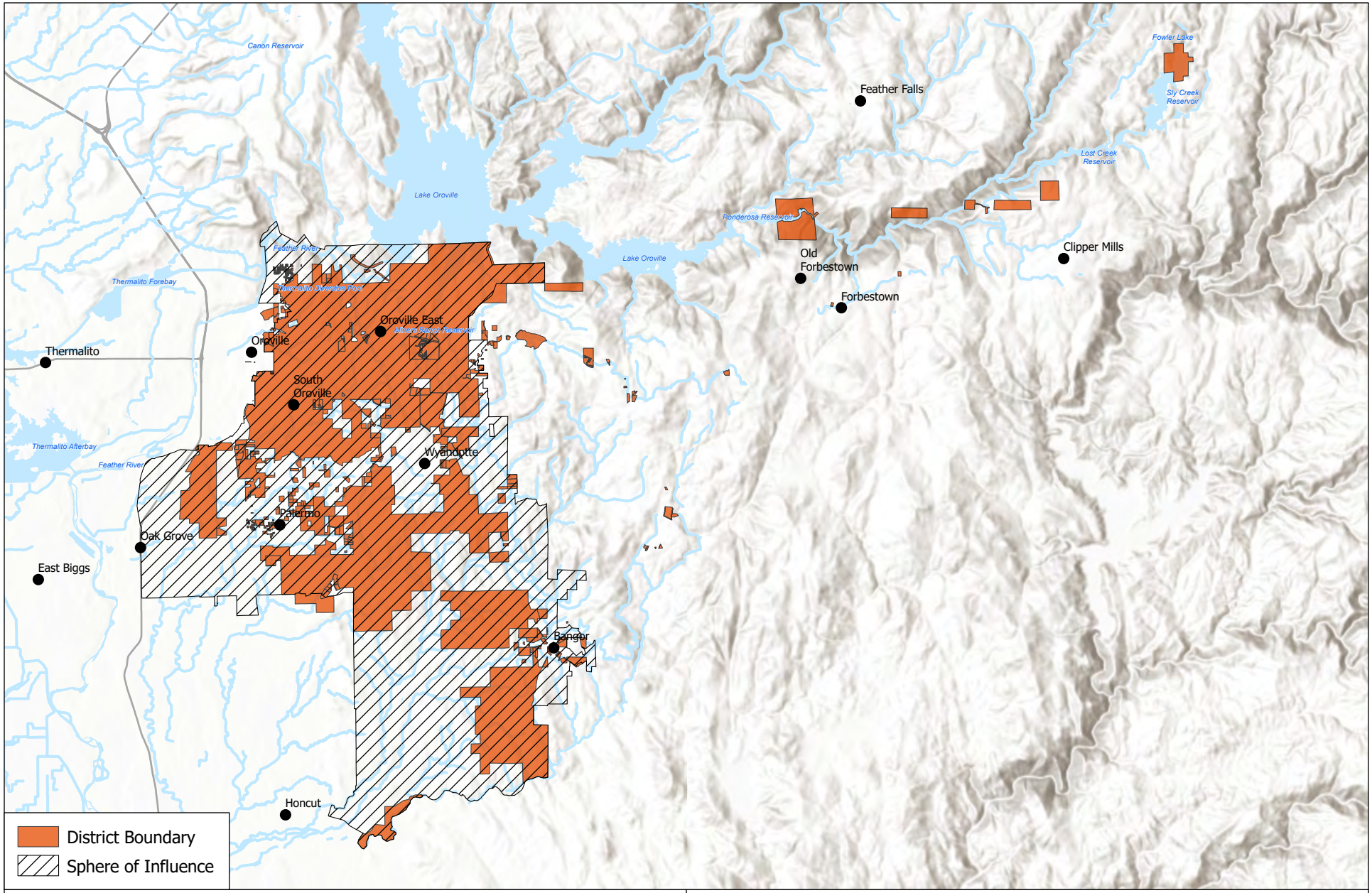
*Source: Butte County GIS Data, 2020*

There is a geographic overlap in water service with an adjacent water services provider, the California Water Company, as shown in Figure 6-2 below. The area shown for the SFWPA is the "place of use" per the CA Water Board. Figure 1-2 shows a different perspective of the geographic overlap which consists of 343 parcels (APNs) and 228.5 acres (assessor's acreage).

### *6.2.4 Extra-Territorial Services*

LAFCO's 2006 MSR (by Kleinschmidt) noted that SFWPA served water to six customers outside its boundaries via surplus water agreements that were considered for renewal annually. These six customers received irrigation water (not potable). However, there are no current surplus water agreements for these six customers (personal communication, R. Mosley 7/11/2022). Otherwise, the SFWPA has not provided extra-territorial services outside its District boundary due to its formal policies that require annexation to the District prior to service (SFWPA, 2021a). However, during recent drought conditions, local property owners have had wells go dry. County officials issued a Local Emergency[2] on July 20, 2021, and are working to secure more resources and assistance for well owners experiencing difficulties. In the Oroville area, the South Feather Water and Power Agency provides three locations with potable (drinking) water available to well owners, as listed in Table 6-4 below.

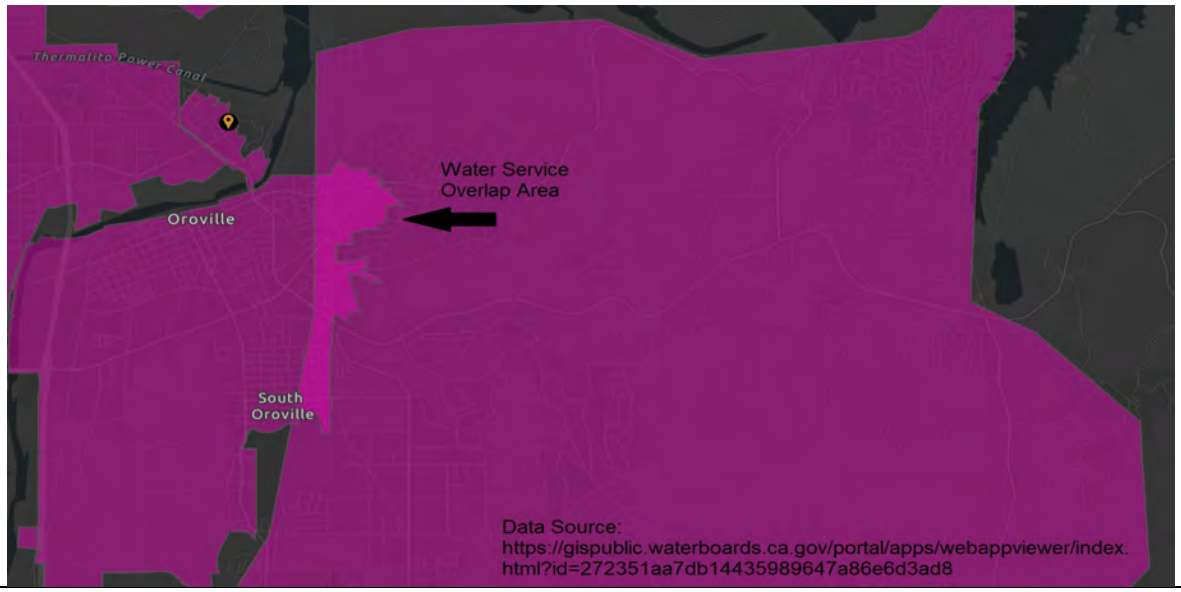
[2] 55 private well owners in Butte County have wells that have run dry during the years 2014 to 2021 as they reported to CA DWR at: *https://data.cnra.ca.gov/dataset/household-water-supply-shortage-reporting-system-data*. Nine of those well owners were located in the Oroville area. There may be more "unreported" wells that have run dry during the drought.




# Figure 6-1
# Boundary and SOI South Feather Water and Power Agency

*Map Date: 09/29/2021*
*Data Source: Butte LAFCO*

Figure 6-2: Overlapping Service Areas Between SFWPA and Cal Water




| Table 6-4: Potable Water Locations for Well Users During Drought | |
|---|---|
| Address | Water Detail |
| 7540 Oro Bangor Hwy | This location will accommodate containers up to 5 gallons. Public access is unlimited. No limit on daily use. |
| 2310 Oro Quincy Hwy. | This location will accommodate containers up to 5 gallons. Public access is unlimited. No limit on daily use |
| 234 Kelly Ridge Road. | This location will accommodate containers up to 5 gallons. Public access is unlimited. No limit on daily use. |
| Data Source: *https://fox40.com/news/local-news/butte-county-residents-whose-wells-have-gone-dry-can-get-water-at-several-locations/* | |

### *6.2.5 Other Overlapping Service Providers*

One small water supplier is located within the SFWPA boundary: the Pleasant Grove Mobile Home Park, as listed in Table 6-5 below.

Table 6- 5: PLEASANT GROVE MHP – Water Service Detail

| Boundary Type | Water Service Area |
|---|---|
| Water System Number | CA0400020 |
| Water System Name | Pleasant Grove Mhp |
| County | Butte |
| Population | 327 |
| Regulating Agency | LPA34 - Butte County |
| State Classification | Community |
| Address Line 1 | 6986 Lincoln Blvd |
| City | Oroville |
| State | CA |
| Zip Code | 95965 |
| Service Connections | 88 |
| Contact Phone Number | 530-667-5190 |
| *Data Source: https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=272351aa7db14435989647a86e6d3ad8* | |

## 6.3 District Governance and Accountability

This section describes how performance, accountability, transparency, and public engagement relate to the public's trust in local government. LAFCO is required by the CKH Act to make specific determinations regarding a local agency's government structure and accountability.

### *6.3.1 Government Structure*

The SFWPA is a local government agency structured as an Irrigation District consistent with its Principal Act: Irrigation District Law, Division 11, of the Water Code (Section 20500 et seq.) of the State of California. The Agency was originally established in November 1919. Today, the Agency is governed by an elected five-member Board of Directors, which serves as the decision-making authority for SFWPA. The General Manager is appointed by the Board of Directors (SFWPA, 2021). The General Manager appoints department heads.

### *6.3.2 District Board*

The Agency operates under the direction of the elected District Board. SFWPA's territory is organized into five divisions, and one Board Member is elected from each division. Each elected Board Member must be a registered voter, a landowner in the SFWPA, and a resident of the division that he or she represents at the time of their nomination or appointment and through their entire term consistent with California Water Code section 21100. Directors are elected by registered voters who are residents of the District.

Board members serve a four-year term, with two Board Member seats running two years apart from the remaining three seats. A new Board Chair and Vice-Chair are selected by the Board Members each year. Information about the Agency's active committees was not readily available. The current Board of Directors members and the expiration dates of their terms are shown in Table 6-6 below.

Table 6-6: South Feather Water and Power Agency Board of Directors

| Name | Title | Term End | Division |
|---|---|---|---|
| Rick Wulbern | Board President, | Term expires 12/2024 | 2 |
| Ruth Duncan | Board Vice President | Term Expires 12/2024 | 4 |
| Brad Hemstalk | Director | Term expires 12/2026 | 1 |
| Mark Grover | Director | Term expires 12/2026 | 3 |
| John Starr | Director | Term expires 12/2026 | 5 |

*Source: Agency/City website at: https://southfeather.com/about/board/*

Board members received an annual stipend of $7,200 for attendance at regular and special Board meetings and committee meetings during the year 2020 (CA Auditor, 2021).

The District Board holds regular public meetings on the fourth Tuesday of every month, beginning at 2:00 PM PST and continuing until the agenda is completed (SFWPA, 2021). The location for Board meetings is 2310 Oro Quincy Highway, Oroville, California 95966. All meetings of the District Board and other advisory boards are open to the public in accordance with the Brown Act. The agenda for each District Board meeting includes a public comment period for items not on

the agenda. Additionally, the Board meeting minutes reflect that the public is invited to speak on all items included on the agenda. All meeting agendas are publicly posted on the SFWPA website at: https://southfeather.com/. Agendas are also distributed in hard-copy (bound packets) to Board Members (SFWPA, 2021a).

In California, elected members of special district boards are required to comply with three laws regarding accountability and ethics, including: 1) the Political Reform Act; 2); Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training. A description of these three state laws is provided in Chapter 3, Introduction. An assessment regarding compliance with these three ethics and accountability laws by elected board members of each of the subject water or wastewater-related agencies was made as part of this MSR process.

- Political Reform Act: Each district is required to have conflict of interest code/policies. SFWPA has adopted a conflict of interest policy known as Policy #120. Ideally, SFWPA's conflict of interest policies would be made available to the public on their website; however, since the Agency website does not yet provide information on this topic, it is an item that needs improvement. The Political Reform Act requires special district board members to disclose all personal economic interests by filing a "Statement of Economic Interests" with Agency or County staff. SFWPA board members file this statement with the SFWPA Finance Dept. An indication of compliance with this law was assessed by querying the Fair Political Practices Commission (FPPC) Complaint and Case Information Portal at: <https://www.fppc.ca.gov/enforcement/complaint-and-case-information-portal.html>. Query results for the SFWPA found no complaints or cases, which indicates good compliance with the Political Reform Act.
- Assembly Bill 1234 (Salinas, 2005): Local government officials are required to take ethics training every two years. The consultants' review of the SFWPA website indicates that Board members do not submit required forms and receive updated required trainings as prescribed by the state laws regarding ethics training. Therefore, SFWPA's Board is not currently in compliance with AB 1234. Compliance with this law was assessed for each water or wastewater agency studied in this MSR by asking the Agency Clerk of the Board for the dates and other documentation of training events. SFWPA expects to provide this training to Board members in August 2022 (personal communication, R. Mosley, 7/11/22).
- Government Code 53237 et. seq.: Special district board members must receive the required sexual harassment prevention two-hour training every two years. Compliance with this law was assessed for each of the water and wastewater agencies studied in this MSR by searching for the information on the Agency's website and asking the Agency Clerk of the Board for the dates and other documentation of training events. SFWPA's website does not document whether SFWPA elected Board members have submit required forms or receive trainings as required by the state laws regarding mandated sexual harassment prevention training. SFWPA expects to provide this training to Board members in August 2022 (personal communication, R. Mosley, 7/11/22). It is recommended that the SFWPA website be updated to include this information.

### *6.3.3 Accountability and Transparency*

Brown Act

The Brown Act is described in Chapter 3, Introduction, of this MSR. All meetings of the District Board and committees are open to the public in accordance with the Brown Act. The agenda for each meeting includes a public comment period, and agendas are made available 72 hours before meetings. Any written document that relates to an agenda item is available for public inspection at the same time the document is distributed to the members of the Board of Directors. Written documents are available at the Agency Office and on the Agency website at: https://southfeather.com/. Agendas are also distributed via email upon request.

The State Legislature updated the Brown Act in 2016 as codified in Government Code §54954.2 (Assembly Bill 2257). These new Brown Act requirements prescribe the methods and location by which an agenda must be accessible on an agency's website for all meetings as detailed in the Introduction, Chapter 2[or Chapter 3]. New requirements state that meeting agendas be retrievable, downloadable, searchable, and indexable. As part of this MSR, the website for each water and wastewater agency was evaluated to determine if meeting agendas are made available to the public in a manner compliant with AB2257. SFWPA makes its agenda available on its website, under a tab entitled "Publications" under its "Board Agenda Information" section, at the following URL: https://southfeather.com/publications/agenda/. It is also found directly on its homepage at the bottom. This webpage contains meeting minutes and agendas for the current year. This information is easily found on the homepage and provides the necessary agenda information, with the most current agenda located at the top. Board packets for both regular and special meetings are provided. Therefore, the Agency website agenda distribution does comply with the requirements of the Brown Act 2016 Updates described in AB2257.

On March 4, 2020, Governor Newsom signed Executive Order No. N-29-20, declaring a state of emergency due to the threat of COVID-19 and suspending the general Brown Act requirements for teleconferencing. AB 361 (Chapter 165, Statutes of 2021) allows[3] public agencies to continue to meet remotely during a proclaimed state of emergency through January 1, 2024, while mandating that such meetings continue to be publicly accessible.

[3] *AB 361 allows a public agency to hold a remote meeting if a proclaimed state of emergency is in effect and: (1) state or local officials have imposed or recommended measures to promote social distancing; (2) the public agency holds a meeting for the purpose of determining, by majority vote, whether as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees; or (3) the public agency holds a meeting and has previously determined by majority vote that as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees. A public agency that holds a meeting using teleconferencing must give notice of the meeting and post agendas in compliance with the Brown Act, allow the public to access the meeting by phone or video, and provide an opportunity for the public to address the legislative body directly during the meeting. In the event that the public's ability to access the meeting or provide public comment is disrupted, the agency cannot take any action on items appearing on the agenda until public access to the meeting is restored. Additionally, depending on how the public agency provides for public comment, AB 361 contains various requirements to ensure public comment periods are not concluded prematurely. Finally, AB 361 requires that local agencies reconsider the need for remote meetings, at least every thirty days, while a state of emergency remains active. In order to continue to utilize remote meetings, the local agency must find, by majority vote, that (1) the state of emergency continues to directly impact the agency's ability to meet safely in person or (2) state or local officials continue to impose/recommend measures to promote social distancing.*

In response to these events and consistent with Executive Order N-29-20, N-25-20, and N-35-20 from the Executive Department of the State of California, the Agency implemented Teleconference/Electronic Meeting Protocols effective April 2020, which allow for public participation through video conferencing (Zoom) and by telephone. During the Covid-19 pandemic, SFWPA limited in-person attendance for its Board meetings. All meetings are streamed live via Zoom, a video conferencing platform accessible by the public for free. Instructions for telephone and video conference participation are listed on the meeting agenda. Additionally, public comments for Directors can be submitted anytime via e-mail. However, in order to be read into the record during the meeting, it must be submitted to PublicRelations@southfeather.com prior to the Tuesday before the meeting date. Individuals will be given an opportunity to address the Board regarding matters within the Agency's jurisdiction that are not scheduled on the agenda. However, the Board cannot take action on any matter not on the agenda. Public comments are limited to 5 minutes per speaker. An opportunity for public comment on agenda items is provided at the time they are discussed by the Board.

Under the Brown Act, closed sessions of Board meetings are not encouraged; however, the Act does provide guidance about exceptions when closed sessions can be held under special circumstances. Commonly, LAFCO utilizes the number of closed sessions a Board holds during a year as an indicator of transparency since fewer closed sessions indicate better transparency levels. As an indicator, LAFCo would like to see fewer than 50 percent of a District's meetings list a closed session. The number of closed sessions listed on Board meeting agendas was evaluated. In the year 2020, the SFWPA Board held a total of 13 meetings which included 13 closed sessions (SFWPA Agendas, 2020). This calculates to 100 percent of SFWPA's Board meetings having closed sessions, exceeding LAFCO's indicator, indicating a potential lack of transparency or another management problem. This is an item that needs improvement. The closed sessions primarily dealt with litigation, as described in the following paragraph.

Litigation is expensive for public agencies due to the costs associated with preparing an administrative record, retaining attorneys, and preparing briefs. Avoidance of litigation is an indicator of management's effectiveness in utilizing alternative dispute resolution mechanisms. To assess the status of litigation, the MSR Authors reviewed SFWPA Board Agendas for the year 2020 and counted the number of legal cases. SFWPA was involved in eight litigation cases in the year 2020, including seven active cases and one anticipated case, as listed below in Table 6-7 (Source: SFWPA Agendas, 2020). The SFWPA is currently being sued by the North Yuba Water District, asserting a number of legal issues such as "breach of contract and breach of fiduciary duty." (NYWD, 2021). The recently hired SFWPA staff (Mr. R. Moseley) is working to reduce the number of concurrent litigation cases which involve the Agency.

| Table 6-7: Litigation Discussed in 2020 - SFWPA |
|---|
| **Existing Litigation** |
| ● Existing Litigation- - George Foster and Georgia Perry v. South Feather Water and Power Agency, Daniel Love, Nike Hall, Butte County Superior Court Case No. 19CV03069<br>● Existing Litigation-Sierra Mountain Construction, Inc. v. South Feather Water and Power Agency, Butte County Superior Court Case No. 18CV00896<br>● Existing Litigation-Final Compensation Calculation of Michael C. Glaze, Respondent, and South Feather Water and Power Agency, Respondent OAH Case No. 2018041142<br>● Existing Litigation-(Gov. Code Section 54956.9) Glaze v. South Feather Water & Power Agency, Butte County Superior Court Case No. 20CV01283.<br>● Existing Litigation-(Government Code §54956.9(d)(1)) Bay-Delta proceedings, including the California WaterFix, and the associated environmental documentation.<br>● Existing Litigation- (Gov. Code §54956.9(d)(1).) Pacific Gas & Electric Co. Bankruptcy Proceedings, Case Nos. 19-3088 and 19-30089.<br>● Existing Litigation-(Gov. Code §54956.9(d)(1).) Sharp v. North Yuba Water District et al., (Yuba County Superior Court) Case No. CVPT20-00386. |
| **Anticipated Litigation** |
| ● Anticipated Litigation- (Government Code §54956.9b) One potential case. |

As listed in the above table, in 2020, SFWPA was involved with seven existing lawsuits plus one potential future lawsuit. However, the legal status of the above cases has been resolved as of July 2022, with the exception of the North Yuba Water District (personal communication, R. Mosley, 7/11/2022). Therefore, the number of closed sessions on meeting agendas is expected to decline significantly. It is recommended that the SFWPA Board and management continue to work towards reducing the number of closed sessions listed on Board agendas by reducing the number of concurrent lawsuits the Agency is involved with by utilizing legal and management skills along with other legal options such as settling court cases, mediation, and dispute resolution. It is also recommended that LAFCo study this issue when the next MSR or SOI analysis is written on the SFWPA.

## Website

The Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8) requires that special districts have a functional website that lists contact information and contains financial statements, compensation reports, and other relevant public information. Compliance with the Special District Transparency Act is used by LAFCO as one indicator to determine the accountability and transparency of a District.

The Agency's website is kept updated and is easily navigable, with current and past agenda packets and financial reports available for download. The "Newsroom" tab (webpage) is updated regularly. Contact information, financial statements, consumer confidence reports, and other publications are available for viewing and download on the Agency's website. Additionally, the homepage provides a phone number for emergency services. The Agency also does not seem to have a policy requiring that the SFWPA website be user-friendly and contain accurate and up-to-

date information. Although the SFWPA District website mostly complies with the requirements of the Special District Transparency Act, there is always room for improvement, and it is recommended that the Agency consider adding the following features associated with its website and other public communication:

- Adopt a policy requiring that the SFWPA website be user-friendly and contain accurate and up-to-date information; and
- Create a web page where community members can sign up for a free electronic subscription service that will send automatic email notifications when selected website information is updated.

General Accountability

The SFWPA demonstrated accountability and transparency in its disclosure of information and cooperation with Butte LAFCO. The Agency cooperated with LAFCO's requests for information and participated in an interview with the MSR consultants. Drinking water regulations are described in Appendix D. The Agency generally works towards compliance with these regulations.

Butte County is required by state law to impanel a grand jury. The major functions of a grand jury are divided into criminal indictments and civil investigations, and the civil investigation portion requires the majority of the time. The civil or "watchdog" responsibilities of the grand jury include examining all aspects of local government, including cities and special districts, to ensure the county is being governed honestly and efficiently and public monies are being handled appropriately. If an agency is subject to any grand jury inquiries, this can indicate poor performance or a high number of complaints about an agency. SFWPA was not investigated by the Butte County grand jury in 2020. Its most recent investigation by the Butte County grand jury was in 2011 to ensure SFWPA's continued compliance with the ethics training requirements of AB 1234 (SFWPA, 2011).

### *6.3.4 Management Efficiencies*

The General Manager is appointed by and reports to the Board of Directors. Specifically, the General Manager serves as the Executive Officer and is responsible for all functions of agency staff. Additionally, the General Manager is responsible for ensuring Agency compliance with the Brown Act with support from the Agency's legal counsel. The Agency's Environmental and Safety Compliance Officer ensures compliance with rules and regulations regarding environmental and safety issues. The Agency's Water Division Manager is responsible for rules and regulations regarding water distribution. An important part of management effectiveness includes the Agency adopting an Agency-wide mission and vision statement. Based on the information assessed in this MSR, it appears that the SFWPA achieves its Mission.

| SFWPA Mission Statement |
| --- |
| *The mission of South Feather Water and Power Agency (SFWPA) is both to deliver a dependable supply of safe, quality drinking water to its customers, and a dependable supply of water for agricultural users, in an economical, efficient and publicly responsible manner.*<br><br>*Hydroelectric generation facilities shall be utilized to optimize revenue from power generation, consistent with providing adequate and dependable water supplies to customers.*<br><br>*SFWPA is also committed to providing its employees a safe work environment and encouraging personal growth and attainment of goals.* |

Listening to and addressing feedback from customer suggestions and complaints is an important administrative function for local governments because it demonstrates concern for the constituents. SFWPA offers customers several ways to communicate suggestions or complaints, including:

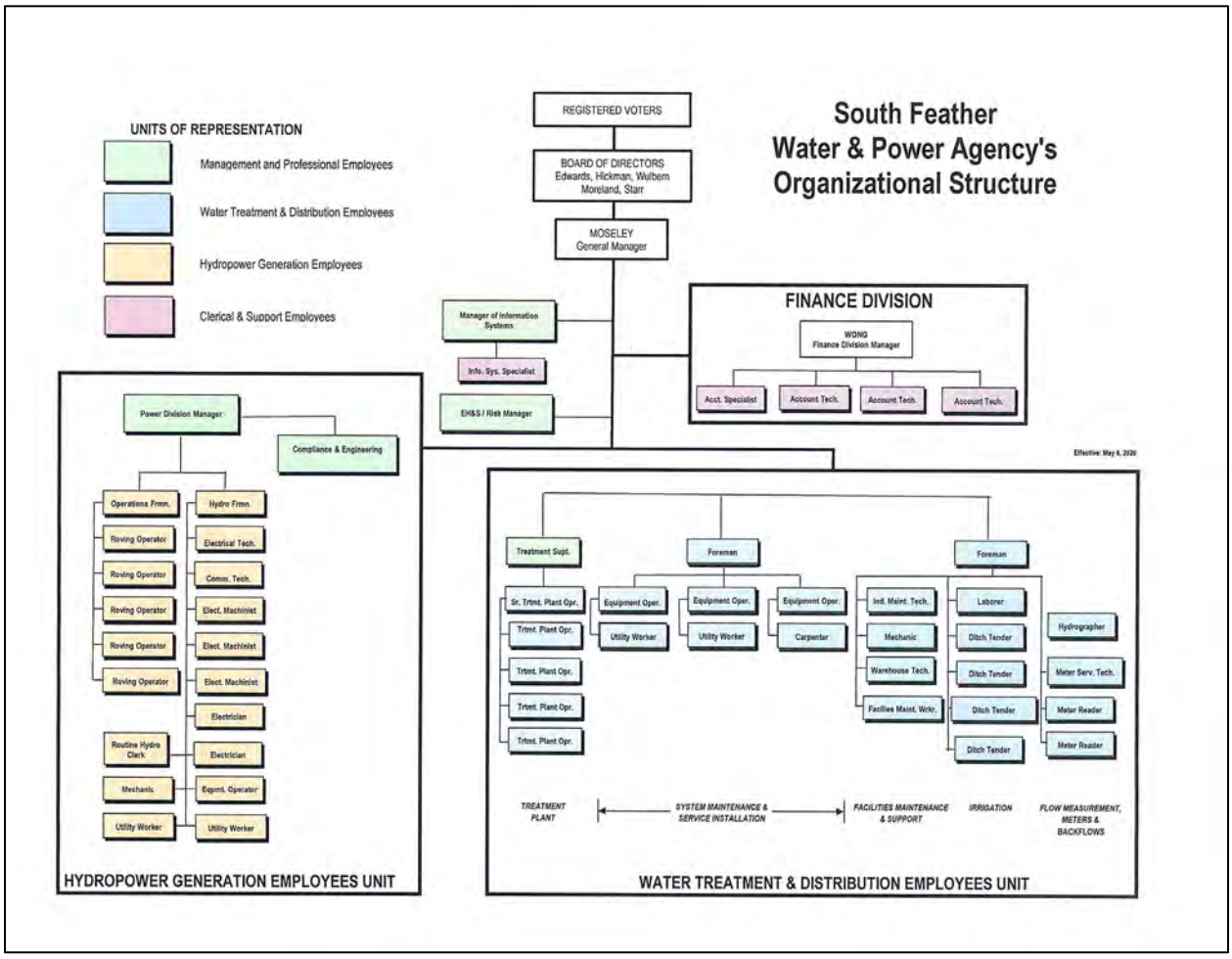
- Phone at (530) 533-4578
- Web Site Contact Form: https://southfeather.com/necontact/
- U.S. postal mail to: 2310 Oro Quincy Highway, Oroville, CA 95966
- Directly to the General Manager: Email: rmoseley@southfeather.com

### *6.3.5 Staffing and Training*

SFWPA's staff is organized into four divisions/units: Management, Finance, Water Treatment and Distribution, and Hydropower Generation. The reporting structure and the number of staff positions in each unit are depicted in the organization chart shown in Figure 6-3 below. As of June 2021, SFWPA had a total of 58 regular full-time employees. Seventeen employees worked in the administrative and overhead sector, and 27 worked in the Water Transmission and Distribution Unit (SFWPA, 2021a).

Employees receive a compensation package that could include the following, depending on the specific position: regular pay, overtime, lump sum, other pay, defined benefit, health-dental-vision insurance, and a retirement contribution. The compensation data for the year 2020 for the 58 regular full-time employees and the five non-regular or part-time employees is reported by SFWPA to the California Auditor.

Figure 6-3: SFWPA Organization Chart




### *6.3.6 Determinations for Governance and Accountability*

Based on the information included in Sections 6.1 through 6.3 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 6-8 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

| Table 6-8: MSR DETERMINATIONS: ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENT STRUCTURE AND OPERATIONAL EFFICIENCIES | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| SFWPA-Acc-1 | Number of closed sessions during the year 2020 (ideally fewer than 50%). | 100 percent (i.e., 13) of the meetings of the SFWPA Board of Directors included closed sessions during the year 2020. This number exceeds the 50 percent accountability indicator and is, therefore, an item that needs improvement. Therefore, it is recommended that the Board and staff reduce the number of closed sessions held each year by reducing the number of concurrent lawsuits. |
| SFWPA-Acc-2 | Does the agency's Website comply with the 2016 updates to the Brown Act described in Government Code §54954.2 and enacted by Assembly Bill 2257? | Compliance with the 2016 updates to the Brown Act described in Government Code §54954.2 was evaluated in this MSR. The Agency's website agenda distribution does comply with the requirements of the Brown Act 2016 Updates described in AB2257, in that meeting agendas are retrievable, downloadable, searchable, and indexable. SFWPA makes its agenda and minutes available in .pdf format on its website, under a tab entitled "Publications" under its "Board Agenda Information" section, at the following URL: https://southfeather.com/publications/agenda/. Agendas are also found directly on its homepage at the bottom. Board packets for both regular and special meetings are listed. |
| SFWPA-Acc-3 | Compliance with the Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8) requires special districts to have a functional website that lists contact information and contains financial statements, compensation reports, and other relevant public information. | Compliance with the Special District Transparency Act (Gov. Code, §6270.6 and 53087.8) was evaluated in this MSR. The SFWPA does currently maintain a website that lists contact information for staff and the Board. Financial reports are also available at: https://southfeather.com/publications/financial-reports/. Compensation reports were not found on the SFWPA website; however, the data is available from the CA Auditor's website. Therefore, the SFWPA mostly complies with the Special District Transparency Act. It is recommended that the SFWPA website be updated to include a link from the home page to the CA Auditor's website for access to compensation data. |
| SFWPA-Acc-4 | Terms of office and next election date are disclosed for District Board members, and committee appointments are online. | Terms of office for each Board member are listed on the Agency's website. The next election date is disclosed for Board members by year, but not by the specific month and day, and this item could be improved by updating the website. In addition, board committee appointments are not online. It is recommended that the website be updated to list Board committee appointments. |

| | | |
|---|---|---|
| SFWPA-Acc-5 | Do elected Board members submit required forms and receive required trainings as prescribed by the three state laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training? | Compliance by SFWPA Board members in submitting required forms and receiving required trainings as prescribed by the three state laws regarding accountability and ethics was assessed in this MSR.<br>1) SFWPA Board members comply with the Political Reform Act by submitting required economic interest forms to the SFWPA Finance Dept.<br>2) Assembly Bill 1234 (Salinas, 2005) requires ethics training, and compliance with this law is currently in-progress. SFWPA Board members will receive this training in August 2022. It is recommended that the SFWPA website be updated to share certification of training, and<br>3) Government Code 53237 et. seq. mandates sexual harassment prevention training, and compliance with this law is currently in-progress. SFWPA Board members will receive this training in August 2022. It is recommended that the SFWPA website be updated to share certification of training. |
| SFWPA-Acc-7 | Current litigation and/or grand jury inquiry | The Butte County grand jury has not investigated SFWPA since 2011, which was regarding ensuring SFWPA's continued compliance with the ethics training requirements of AB 1234.<br><br>SFWPA was involved in eight litigation cases in the year 2020, including seven active cases and one anticipated case. For example, the SFWPA is currently being sued by the North Yuba Water District, asserting a number of legal issues such as "breach of contract and breach of fiduciary duty." Therefore, it is recommended that new SFWPA managerial staff continue their work to reduce the number of concurrent lawsuits. |

## 6.4 Growth & Population Forecasts

The growth and population projections for the affected area is a determination that LAFCO is required to describe, consistent with the MSR Guidelines from the Office of Planning & Research (OPR) as set forth in the CKH Act. This section provides information on the existing population and future growth projections for the South Feather Water and Power Agency. Historical and anticipated population growth is a factor that affects service demand. Appendix A at the end of this MSR/SOI Update provides detailed demographic and socio-economic information for The County of Butte. Economic data, including forecasts for The County of Butte, are provided in Appendix H.

### *6.4.1 Existing Population*

Since census tracts do not directly correspond with Agency boundaries, data is inputted into calculations to provide a close approximation to the existing population for the Agency. Table 6-9 below provides current population estimates for the SFWPA boundary and SOI. A lower population estimate is provided from SFWPA's Urban Water Management Plan (2020), which calculates 16,770 persons residing within the boundary and 21,400 persons within the SOI. A higher estimate was calculated using newer data from the California Department of Finance (DOF) and Butte County Association of Governments (BCAG) Geographic Information Systems (GIS) data estimating 24,300 persons within the boundary and 25,245 persons within the SOI. The provision of both the lower and the higher population estimates is useful for better understanding the possible range of population dynamics, which change periodically depending on local conditions. For example, Butte County's population declined by three percent in 2021 to 202,669 from the 2020 estimate of 208,951. This decline could be due to numerous factors such as age or economics. However, continuing ramifications from the Camp Fire in the Town of Paradise could also be a contributing factor in the decline.

Table 6-9: Existing Permanent Population, SFWPA, 2020

| Name of District / Type | Population Boundary | # Registered Voters in Boundary | Population in SOI only |
|---|---|---|---|
| SFWPA Lower Estimate | 16,770* | 13,316** | 21,400*** |
| SFWPA Higher Estimate | 24,300**** | 13,316** | 25,245 |

Data Source:
*SFWPA, UWMP, 2021g, calculated based on 2.45 persons per connection.
**Registered Voter data provided by Butte County Elections Office, Denlay, Keaton, August 9, 2021.
****SFWPA, UWMP, 2021g, based on 2010 U.S. Census data
****Calculated based on 2.13 persons per parcel average in unincorporated Butte County and 2.4 persons per parcel average within the City of Oroville. Calculated using 2020 CA DOF population data and 2021 GIS data.

Since census tracts do not spatially align with the Agency's boundaries, it is difficult to calculate an exact level of the population within SFWPA. However, the "low" and the "high" estimates presented in Table 6-9 above give a range. The actual population level is probably somewhere in the middle of this range. As new data from the 2020 census is released, it may be possible to calculate a more precise estimate.

### *6.4.2 Existing Population in SOI*

The SFWPA's SOI population (outside the Agency's boundary) is estimated to range from a low of 21,400 persons to a high of 25,245 persons, as listed in Table 6-9 above.

### *6.4.3 Projected Population Growth*

Projecting the future population of a District is complicated due to varying annexation rates and census tracts that do not match District boundaries. For purposes of this MSR, data from the California Department of Finance (DOF) was used to project population growth, as shown in Table 6-10 below. The DOF provides population projections at the County level, and the growth rate for the County of Butte is utilized to extrapolate population growth rates for the South Feather Water and Power Agency.

Two growth scenarios are shown in Table 6-10 below. The "Low Start" scenario begins with the lower population estimate of 16,770 provided in the SFWPA's UWMP of 2020 and increases by an average annual growth rate (AAGR) of 0.88 percent to reach a projected population of 20,887 by the year 2045 (an increase of 4,117 persons). Although the "Low Start" scenario begins with a smaller population estimate, it has a slightly higher growth rate than the "High Start" scenario. The "High Start" scenario begins with a population of 24,300 in the year 2020 and projects a numeric increase to 29,375 by the year 2045 (an increase of 5,075 persons.

The projected growth rate for the County of Butte anticipates development throughout the entire County. The addition of 4,117 to 5,075 more people to the SFWPA boundary area by 2045 is possible as the area contains under-developed areas that could potentially be annexed to the City of Oroville or made available for more intensive residential development. Areas located near the City of Oroville have a moderate probability of developing over the next twenty years since the City continues to grow and expand.

### *6.4.4 Existing Land Use*

Land use is a factor that affects population growth and, therefore, demand for public services. However, the SFWPA is not a land-use authority. The Agency's boundary area is bordered on the west by the City of Oroville, to the north by Lake Oroville, and to the east by the Thermalito Diversion Canal. Most of the Agency's boundary area is located within unincorporated Butte County and includes the small communities of Palermo, Kelly Ridge, Wyandotte, and Bangor. Land uses in the unincorporated area surrounding the City of Oroville immediately to the east are largely urbanized. However, further east, the topography gains elevation, and rural and forest uses predominate. Within the SFWPA boundary, single-family residences are the predominant land use type. Oro Dam Blvd. and Foothill Blvd contain several businesses and churches. Land-uses in areas to the north and south are primarily agricultural, with citrus and olives being some

Table 6-10: Total Estimated and Projected Population (2020 – 2045)

| | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | Percent Increase 2020 to 2045 | Numeric Increase 2020 to 2045 | AAGR 2020 to 2045 |
|---|---|---|---|---|---|---|---|---|---|
| Low Start Scenario SFWPA UWMP 2020* | 16,770 | 17,521 | 18,306 | 19,125 | 19,882 | 20,887 | 24.6 | 4,117 | 0.88% |
| High Start Scenario | 24,300 | 27,165 | 27,895 | 28,525 | 29,020 | 29,375 | 20.9 | 5,075 | 0.76% |

*Data Sources:*
**In their 2020 UWMP, the SFWPA utilized long-range population projections from the CA Dept. of Finance dated January 2018 for the period 2018 to 2040. This information was used to establish the control total for BCAG's high forecast scenario for housing at 0.88 percent.*
*** Population projection for SFWPA calculated as a percentage of The County of Butte future growth as projected by the California Department of Finance. Demographic Research Unit. January 2021. Table P-1: Total Estimated and Projected Population for California and Counties: July 1, 2010 to July 1, 2060 in 1-year Increments.*

of the most common crops. Approximately 10,000 acres within the Agency's boundaries produce agricultural crops (personal communication, R. Mosley, 7/11/2022). The predominant land uses in the City of Oroville, and its immediate surroundings include single-family residences, mobile home parks, and schools. Please refer to Chapter 3 for additional detail on land-use within the City of Oroville. In addition, there are several other independent local government agencies that operate within or near the SFWPA boundaries, including five schools (Ishi Hills Middle School, Oroville Union High School, Oroville Elementary School, Palermo Elementary School, and Bangor Elementary School), the Butte County Mosquito, and Vector Control District; Lake Oroville Area Public Utility District, Feather River Recreation and Park District, and the City of Oroville (SFWPA, UWMP, 2021g).

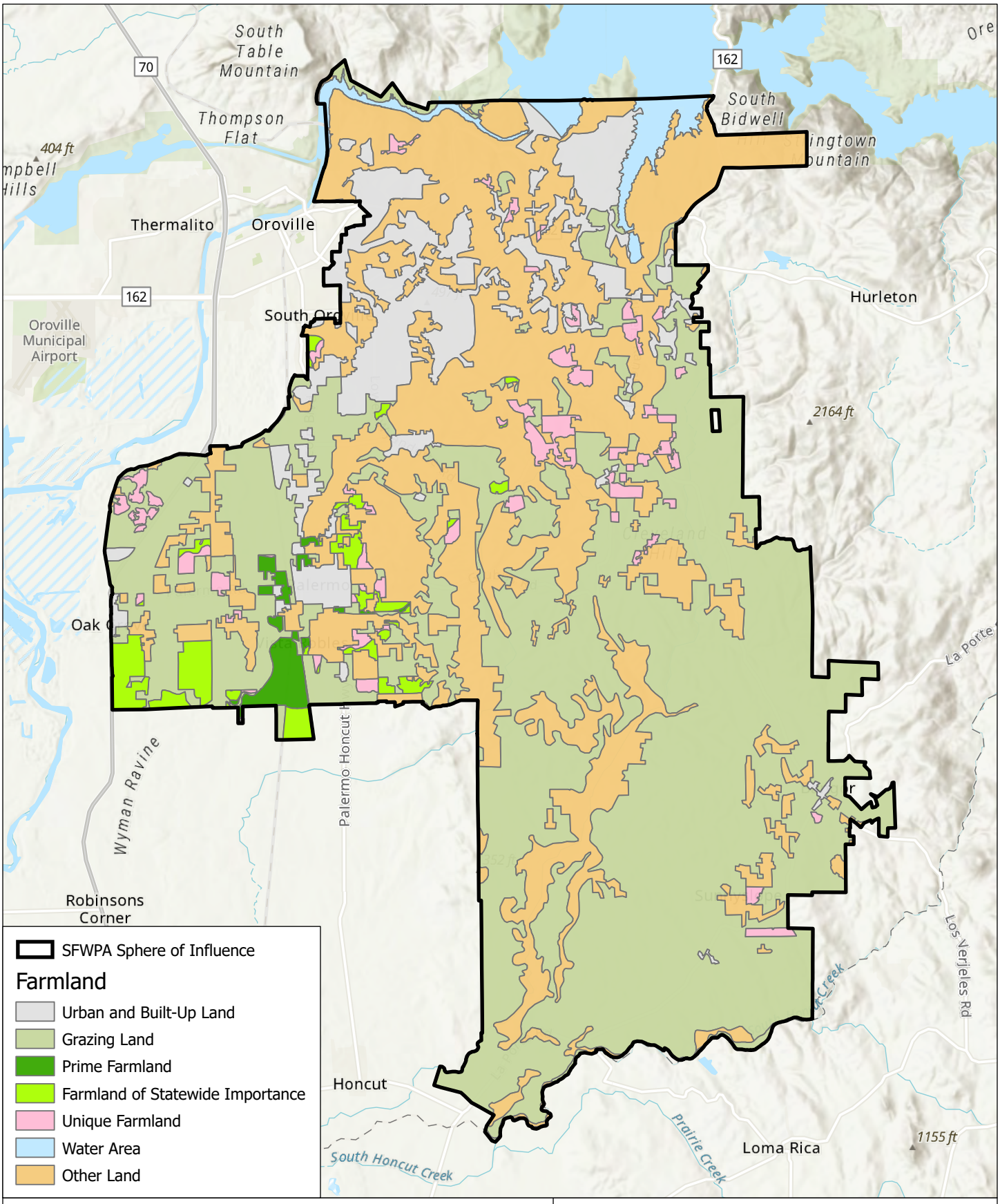
Within the Agency's SOI, there are two tribal reserves, and casinos anchor both reserves. The Tyme Maidu Tribe of Berry-Creek Rancheria holds a 90-acre reserve located off Olive Highway, and it contains the Gold Country Casino. The Concow Maidu Tribe holds the Mooretown Rancheria tribal reserve with lands occupying over 300 acres off Ophir Road, which includes the Feather Falls Casino. Both tribal reserves are within the Agency's Sphere of Influence.

## Open Space & Agriculture

Butte LAFCO aims to protect open space and agriculture. For purposes of this MSR analysis, the spatial distribution of agricultural land was derived from the California Department of Conservation. The types of farmlands within the SFWPA boundary and SOI include grazing land, prime farmland, farmland of statewide importance, and unique farmland, as depicted in Figure 6-4 below. SFWPA does provide raw (untreated) irrigation water to approximately 67 customers. The Agency occasionally provides water services to other open space areas (i.e., non-structural) within its boundaries. However, natural areas and parks may be unconnected to the SFWPA system and, therefore, are rainfall or groundwater-dependent. LAFCO has an interest in documenting the conversion of agricultural and open space lands to other land use types, such as residential use. The SFWPA water services do not play a role in these types of land-use conversions.

## Butte County General Plan 2030

The Agency's boundaries and Sphere of Influence area are mostly unincorporated and subject to the land-use policies and regulations of Butte County. Most land-use decisions in unincorporated areas are initiated by private property owners and are secured via entitlements and land-use permits from Butte County and other agencies. In addition, the County plans for its future growth through its General Plan, which is a long-term comprehensive framework to guide physical, social, and economic development within the community's planning area. The General Plan contains a land-use map and associated policies that identify the types and intensities of permissible uses in relation to different land-use designations. The Butte County General Plan 2030 was updated and adopted on October 26, 2010 (County Resolution No. 10-152) and




# Figure 6-4
# SFWPA Farmland

*Map Date: 09/29/2021*
*Data Source: Butte LAFCO;*
*Farmland Mapping and Monitoring Program (FMMP)*

Amended on November 6, 2012 (County Resolution No. 12-124). The Oroville Area Land Use Plan of the Butte County General Plan designates a large portion of the SFWPA boundary and SOI as Agricultural-Residential. This Agricultural-Residential designation allows agricultural uses and single-family dwellings at rural densities. Farms and ranches in this area receive water from various sources, including SFWPA raw irrigation water, rainfall, or groundwater, depending on the specific location. Farms and ranches in the SFWPA boundary and SOI contribute to the agricultural sector's economic prosperity in Butte County by producing a wide variety of farm products.

The County's General Plan Housing Element was subsequently updated on August 26, 2014, through County Resolution No. 14-112. Butte County has opted to update its housing elements every eight years. The 2022 update to the Housing Element will aim to align with their Regional Transportation Plans (which are updated every four years) and the housing plans in the Regional Sustainable Communities Strategy (See BCAG). The County General Plan and associated Housing Element influence both the type and the rate of growth within the unincorporated areas, such as most of the Agency's boundary and SOI.

Figure 6-5 below provides a map that merges the County's General Plan Land Use Map with the City's General Plan Land Use Map through the use of crosswalks to graphically show the spatial relationships in land use designations. In the adjacent area, outside the Agency boundaries, land is primarily characterized by agriculture and open space with limited rural residential uses.

Oroville General Plan 2030

The Oroville 2030 General Plan was adopted in 2009 and updated in March 2015. The General Plan serves as a comprehensive guide for making decisions about land use, community character, circulation, open space, the environment, and public health and safety. The City General Plan contains guiding principles related to livability, enhanced mobility, a vibrant local economy, natural resources, environment, recreation, community infrastructure, health and safety, and an involved citizenry (COOR, 2015). The General Plan provides the legal foundation for the zoning ordinance and other ordinances. The General Plan recognizes the water and wastewater services provided to City residents by other service providers, including Thermalito Water and Sewer District (TWSD), Lake Oroville Area Public Utility District (LOAPUD), South Feather Water & Power Agency (SFWPA), and California Water Service (Cal Water). The City's General Plan contains numerous policies regarding the provision of water and wastewater municipal services.

### *6.4.5 Potential Future Development*

Future population growth within the local community served by SFWPA is dependent upon zoning and general plan policies and land use designations by the City of Oroville and Butte County. The hilly topography to the east somewhat restricts residential growth in that direction, partially due to the increased cost of installing infrastructure in hilly areas. Because of this topographic constraint, most of the residential growth expected to be serviced by the Agency will likely occur in the areas immediately surrounding the City of Oroville and to the south. An extensive amount of land is designated as low-density residential, as shown in Figure 6-5 below. Butte County is embarking on an update of its current General Plan, which may refine development requirements.

Additionally, new state laws encouraging the construction of accessory dwelling units may promote infill development in some neighborhoods. For purposes of this MSR Analysis, it is assumed that the average annual future growth rate (AAGR) within the Agency boundaries will range from 0.76 percent to 0.88 percent, as listed in Table 6-10 above.

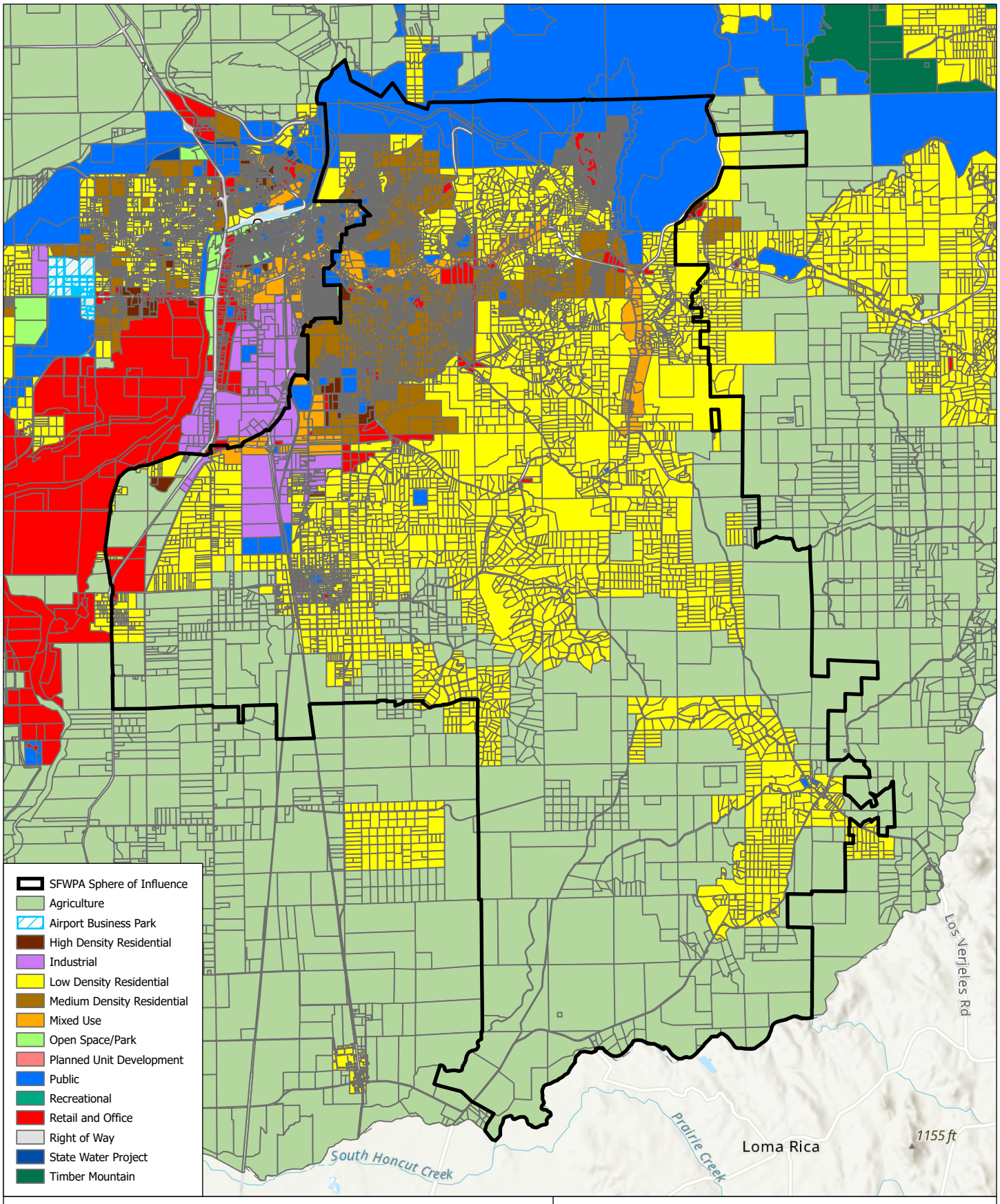
When a private property owner proposes a new development, SFWPA will coordinate with the respective City and County Planning Departments by providing information on the adequacy of its water supply, distribution system, and water rates to meet the area's current and future growth needs. Generally, the Lead Agency (such as the Planning Department for the City/County) will process applications for subdivisions and commercial developments and invite SFWPA to comment on any service-related issues or associated environmental issues. The Agency participates and provides information as requested. (SFWPA, UWMP, 2021g). Several new developments have requested water service from SFWPA over recent years; however, many of these developments have not yet been constructed or approved, including:

- Whisper Ridge;
- Lake Oroville Resort;
- Lake Wyandotte Campus;
- Rio D' Oro, and
- Las Plumas.

### *6.4.6 Local Hazard Mitigation Plan*

The Butte County General Plan's Safety Element [which includes the Local Hazard Mitigation Plan (LHMP)] was adopted by the County Board of Supervisors on November 5, 2019 (Butte OEM, 2019). Butte County, along with five incorporated communities and ten special districts, prepared the 2019 LHMP in order to make the County and its residents less vulnerable to future hazard events. The SFWPA is the subject of a dedicated Appendix (N) in the LHMP, and it lists the following potential local hazards:

- Climate Change;
- Dam Failure;
- Drought and Water Shortage;
- Earthquake and Liquefaction;




*Map Date: 09/29/2021*
*Data Source: Butte LAFCO;*
*Butte County Association of Governments (2021)*

# Figure 6-5
# SFWPA
# City/County General Plan

- Flood: 100-/500-year;
- Floods: Localized Stormwater;
- Stream Bank Erosion; and
- Wildfire.

It is important to note that the SFWPA has both formal and informal emergency response plans and practices. During past emergencies, the Agency has assisted neighboring districts and other government agencies through mutual aid and other informal practices, as described in the following pages.

Climate Change

Climate change is projected to impact the Northern Central Valley (including Butte County) via the following: temperature increases, reduced precipitation, flooding, reduced agricultural productivity, reduced water supply, wildfire, public health, and heat (Butte Co. OEM, LHMP, 2019). The SFWPA Power Division assets could potentially be at the most risk of climate change impacts, primarily due to future increased wildfires as a result of temperature increase, drying soils, and increased wind. SFWPA power assets are located in thick conifer forests and are generally isolated along the South Fork of the Feather River. Reduced precipitation could lead to reduced water storage which fuels the hydro-power project and could affect local water supply. Both of these could potentially have future economic repercussions for the Agency (Butte Co. OEM, LHMP, 2019).

Dam Failure

During periods of prolonged rainfall and flooding, dam failures can sometimes occur. The primary risk associated with dam failure is high-velocity flooding of properties located downstream of the dam. Additionally, secondary losses could include the loss of the multi-use functions of the facility and associated revenues. SFWPA believes that the requirements set forth with the Federal Energy Regulatory Commission (FERC) and CA DWR Division of Safety of Dams (DSOD) effectively reduce vulnerability to dam failure events. Additionally, SFWPA is well-versed in monitoring, documenting, and maintaining their dam and spillway structures to recognize any conditions of weakness (Butte Co, OEM, 2019). The Lake Oroville dam structure managed by CA DWR also bears risk, as evidenced by the Spillway Emergency in 2017, which caused severe flooding of the Kelly Ridge Power House along with impacting the daily operations at the Miners Ranch Reservoir that feeds the Miners Ranch Treatment Plant. Throughout the event, treatment plant operators monitored the reservoir elevation and treated turbidity issues to ensure that the domestic water service was within water quality requirements (Butte Co, OEM, 2019).

Drought

A lack of rain and snow over an extended period (usually a season or more) can result in drought conditions creating water shortages for some human activities and the environment. A drought's impacts result from the interplay between the natural event (less precipitation than expected) and the demand people place on the water supply. Since SFWPA's water supply is wholly made up of surface water, it is a rain and snow-dependent system. However, SFWPA's reservoirs and other infrastructure create storage and add resiliency to the system. Historically, SFWPA operational infrastructure and water supply have recovered from drought during the intervening wetter years (Butte Co, OEM, 2019). The vulnerability of the SFWPA to drought is Agency-wide.

However, impacts may vary, including a reduction in the water supply available for drinking water, irrigation water, fire suppression, and hydroelectric power generation. Also, drought conditions dry out local vegetation, creating dry fuels and increasing fire danger. As a result, voluntary conservation measures are typically implemented during extended droughts (Butte Co, OEM, 2019).

Earthquake and Liquefaction

The Cleveland Hills fault is the only known active fault in Butte County and is the August 1975 Oroville earthquake site. Due to the proximity of the SFWPA to the Cleveland Hills Fault, the Agency is at risk of an earthquake. These earthquakes can also cause liquefaction within the Agency's service area. Liquefaction is a process whereby soil is temporarily transformed into a fluid formed during intense and prolonged ground shaking. Since earthquakes are regional events, the whole of the Agency, including its water distribution system and its power generation facilities, is at risk of an earthquake (Butte Co. OEM, 2019 and SFWPA UWMP, 2021g).

Flooding

The SFWPA boundary and SOI are traversed by several stream systems, which are at risk to the 1 percent and the 2 percent annual chance floods. The General Plan Safety Element noted that the Oroville area has historically been subject to flooding from various rivers and streams, including the Feather River and its tributaries. Flooding was much more prevalent prior to the construction of the Oroville Dam. The Palermo area is prone to flooding; however, Agency staff do not believe this to be an operational challenge at this point. Storm floodwaters are kept within defined areas by various storm drainage and flood control measures. Localized flooding can cause road closures, pavement deterioration, washouts, landslides/mudslides, debris areas, and downed trees. Heavy rains may produce puddles and ponding around storm drains and low-lying areas; however, these events are short in duration and do not typically cause property damage. Localized flooding can also affect the roads that Agency staff drive to reach Agency facilities. Mudslides in watershed areas scarred by past fires are also a concern. SFWPA staff noted that no Agency facilities are at risk of flooding; however, the slight possibility that SFWPA infrastructure could experience impacts remains (Butte Co. OEM, 2019).

Streambank Erosion

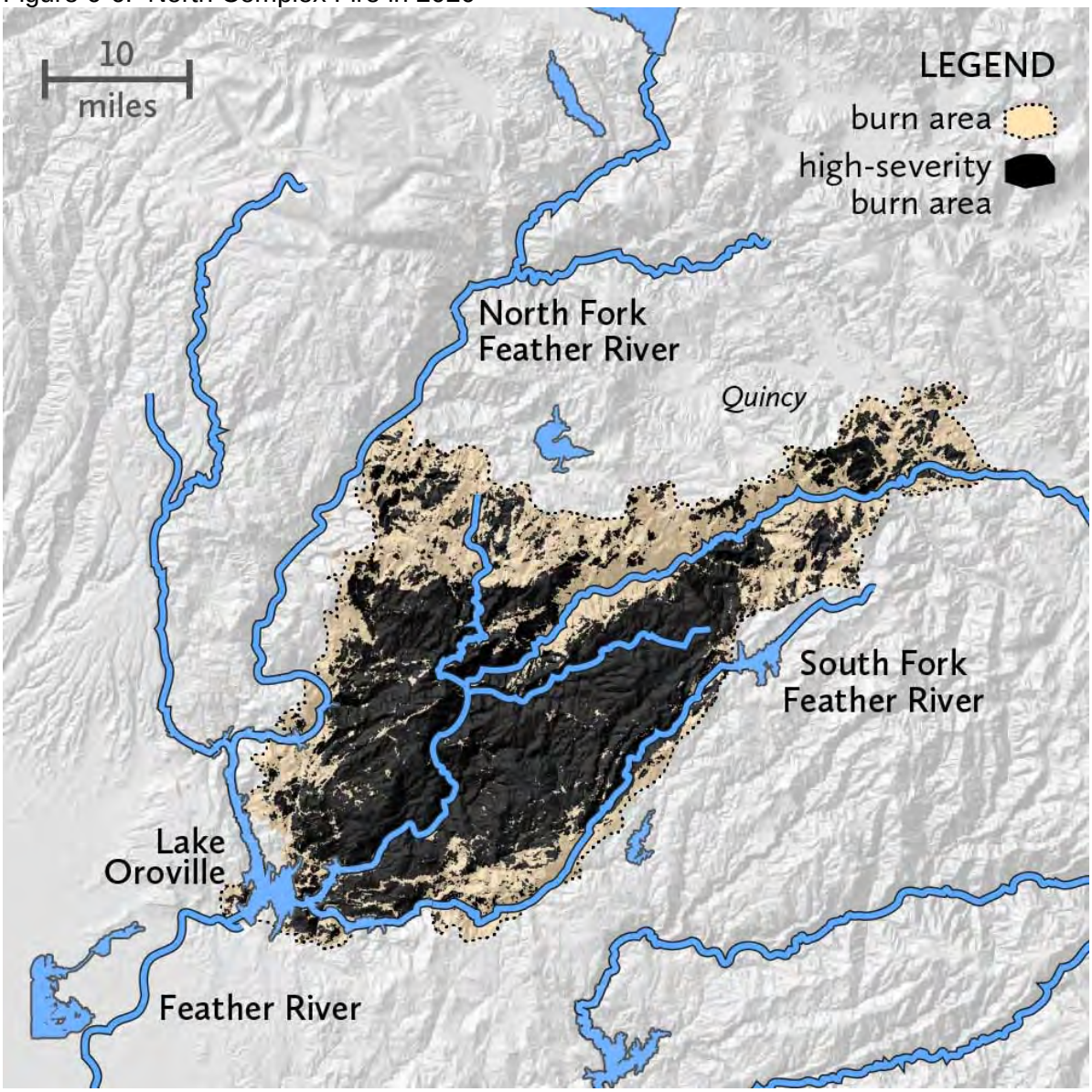
Stream bank erosion occurs on rivers, streams, and other moving waterways, including leveed areas in Butte County. The Oroville Dam and Thermalito Afterbay effectively trap sediment loads. Therefore, the Feather River (the portion located below the dam) has reduced suspended sediment, and this causes the River to become more erosive, transporting mining debris and older alluvium downstream. Erosion is a slow process, taking place over periods of years. However, more significant erosion occurs during periods of high stream flow and during storm and wind events when wave action contributes to the extent and speed of streambank erosion. Erosion has occurred in areas of concern by the SFWPA in recent years. For example, in 2017 and 2019, winter storms exacerbated streambank erosion along the Miners Ranch Canal and the Canal Access Road. (Butte Co, OEM, 2019). Additionally, wildfires can leave local hillsides prone to burn scars. Subsequent heavy winter storms can result in hillside erosion and debris flow issues. SFWPA's canals and water conveyance system are at risk to streambank erosion (Butte Co, OEM, 2019).

Wildfire Risk

The vast distance and topography of Agency asset locations have resulted in severe threats due to wildfire events (Ponderosa, Wall, Bangor, and Lumpkin Fires). CAL FIRE has defined areas of greater wildfire risk through Fire Hazard Severity Zones (FHSZ). The Agency lies in multiple zones, from Non-wildland/Non-Urban to Very High FHSZ. With the exception of the Kelly Powerhouse, the Power Division's hydro assets are located in the very high-hazard zone. Additionally, the hillsides surrounding the Miners Ranch Canal are also highly vulnerable to wildfire risks, which then cause soil erosion issues during the winter months. In the past, damage to SFWPA assets from wildfire has been limited to melted communications equipment during the Ponderosa Fire. Although the Agency was not directly impacted by the Camp Fire, it did engage in Mutual Aid MOU specified assistance with the Paradise Irrigation District by providing equipment and personnel during the initial recovery efforts (Butte Co, OEM, 2019). During the September 2020 North Complex Fire, several residents in the SFWPA boundary area were evacuated (SFWPA, WSCP, 2021d).

Wildfires can have devastating effects on watersheds through loss of vegetation and soil erosion, which may impact the County and Agency by changing runoff patterns, increasing sedimentation, reducing natural and reservoir water storage capacity, and degrading water quality. Fires may result in casualties and can destroy buildings and infrastructure. All Agency assets are either at High or Very High risk from the wildland fire hazard. Agency efforts to reduce the likelihood of a wildland event include daily ditch-tending along with canal infrastructure, contracting fuel reduction work with the Butte County Sheriff Work Program, and environmental companies that offer goat grazing (Butte Co, OEM, 2019).

Figure 6-6: North Complex Fire in 2020




*The North Complex Fire in 2020 burned around the Feather River and Lake Oroville, the largest contributor to the State Water Project. Map provided courtesy of:*
*https://sierranevada.ca.gov/2020-megafires-create-risks-for-californias-water-supply/*

### *6.4.7 Determinations for Growth and Population*

Based on the information included in Sections 6.4 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 6-11 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

Table 6-11: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA

| Number | Indicator | Determination |
|---|---|---|
| SFWPA-Pop-1 | Existing Boundary | SFWPA's 33,718-acre boundary area is located mainly in the unincorporated County of Butte. A small portion of the City of Oroville is within the SFWPA boundary. The boundary area has an irregular shape, and 19 non-contiguous and isolated boundary pockets are located east of the sphere of influence. The boundary includes 11,127 assessor parcels. |
| SFWPA-Pop-2 | Existing Sphere of Influence | The Agency's SOI was last affirmed in the 2011 MSR/SOI for the Agency. The Agency's SOI encompasses 64,125 acres and includes 11,853 parcels. Agency staff believes the Sphere of Influence boundary is adequate for projected future needs. However, in its 2006/07 MSR, SFWPA noted that their Sphere of Influence boundary should be co-terminus with their "place-of-use" boundary as designated by the State Water Resources Control Board to best accommodate future needs regarding the approved area for distribution of water per existing water rights. |
| SFWPA-Pop-3 | Extra-territorial Services | LAFCO's 2006 MSR (by Kleinschmidt) noted that SFWPA served water to six customers outside its boundaries via surplus water agreements that were considered for renewal annually. These six customers received irrigation water (not potable). However, there are no current surplus water agreements for these six customers. Otherwise, the SFWPA has not provided extra-territorial services outside its District boundary. |

| Table 6-11: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| SFWPA-Pop-4 | Projected population in years 2020 to 2045. | The addition of 4,117 to 5,075 more people to the SFWPA boundary area by the year 2045 is projected as the area contains under-developed areas that could potentially be annexed to the City and/or made available for more intensive residential development. Areas located near the City of Oroville have a moderate probability of developing over the next twenty years since the City continues to grow and expand. This represents an average annual growth rate of less than one percent per year. This could bring the total population within the Agency's service area to approximately 29,375 persons by the year 2045. |
| SFWPA-Pop-5 | District boundaries contain a sufficient land area to accommodate projected growth. | Currently, the Agency's boundary area supports an average of 0.72 persons per acre, which is considered low population density. The County General Plan suggests that growth may occur within the SFWPA boundary. SFWPA boundaries contain a sufficient land area to accommodate projected growth. |
| SFWPA-Pop-6 | Effect that the District's service provision will have on open space and agricultural lands. | SFWPA's boundary and SOI include grazing land, prime farmland, farmland of statewide importance, and unique farmland. SFWPA provides raw (untreated) irrigation water to approximately 67 customers, thereby supporting agriculture in the community. The Agency occasionally provides water services to other open space areas (i.e., non-structural) within its boundaries. However, natural areas and parks may be unconnected to the SFWPA system and therefore be rainfall or groundwater-dependent. Therefore, water service generally has minimal effect on agricultural land and open space. |

## 6.5 Disadvantaged Unincorporated Communities

Disadvantage Unincorporated Communities (DUCs) are the topic of a mandated LAFCO MSR determination. DUCs are a census "block" where the annual median household income (MHI) is less than 80 percent of the statewide MHI. California's annual median household income (MHI) in 2019 was $75,235 (U.S. Census, 2021). Eighty percent of the statewide MHI (2019) equals $60,188.00, the threshold used to determine which geographic areas qualify for classification as disadvantaged communities. The year 2019 is utilized as the baseline year because it corresponds to the CALAFCO map. Please note that since Oroville is an incorporated City, there are no DUCs within its boundaries.

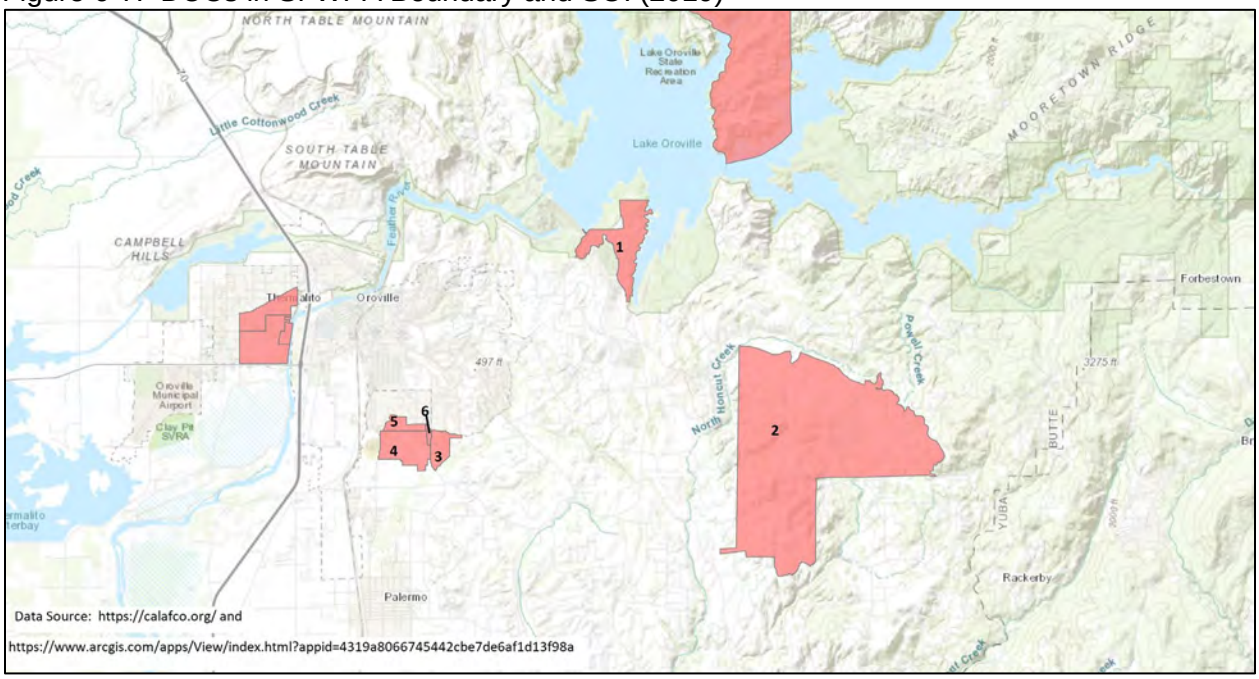
DUCs are defined as areas with the following features:

- Inhabited with ten or more homes adjacent or in close proximity to one another; and

- Either within a city's SOI, islands within a city boundary, or geographically isolated and have existed for more than 50 years; and
- The median household income is 80 percent or less than the statewide median household income.

As shown in Figure 6-7, there are six census "blocks" with median household income below the state threshold within the SFWPA boundary and SOI. These areas are classified as DUC's.

Figure 6-7: DUCs in SFWPA Boundary and SOI (2019)




The six census blocks are marked with numbers 1-6 in Figure 6-7 above, and these numbers correspond to those listed in Table 6-12 below. Table 6-12 provides data for the year 2019 because that relates to the data CALFCO utilized to create the above map.

Table 6-12: DUCs in Census Blocks (2019)

| # on Map | Census Block # | 2019 MHI Threshold | Block MHI (2019) |
|---|---|---|---|
| 1 | Block Group 2, Census Tract 26.02 | $60,188 | $47,426 |
| 2 | Block Group 3, Census Tract 24 | $60,188 | $45,850 |
| 3 | Block Group 4, Census Tract 31 | $60,188 | $47,961 |
| 4 | Block Group 2, Census Tract 30.02 | $60,188 | $46,964 |
| 5 | Block Group 3, Census Tract 30.02 | $60,188 | $47,500 |
| 6 | Block Group 1, Census Tract 30.01 | $60,188 | $29,792 |

*Data Source: 2019 data from CALAFCO Statewide DUC Map using American Community Survey 5-Year Data (2015-19) Updated Mar 2022.*

Please note that newer data based on the 2020 U.S. Census is slowly being released. The statewide annual median household income (MHI) in California for 2022 is $88,930 (ESRI, 2022). Eighty percent of the statewide MHI (2022) equals $71,144.00. The 2020 U.S. Census also created spatial changes such that the geographic layout of census tracts and census blocks may have significantly expanded or contracted. Based on preliminary information from ESRI, it appears that a much larger area of the Oroville region will soon be classified as DUCs or DACs. GIS layers for newly shaped census tracts and census blocks are not yet readily available in a useful format from ESRI.

Within the SFWPA boundary, water service is provided to the DUCs by the Agency. For example, LAFCO approved the annexation of the unincorporated community of Palermo in September 2022. The Palmero annexation consists of approximately 550 parcels added to the SFWPA. The annexation facilitates the Palermo Clean Water Consolidation Project, a partnership between the County of Butte and South Feather Water and Power Agency, to provide safe, clean drinking water to the residents of Palermo who have historically depended on private wells for domestic water.

Outside the SFWPA boundary, individual privately-owned wells provide groundwater as needed. Currently, the Agency is not involved in any new potential consolidation efforts with existing small water systems that supply water in disadvantaged communities within its service area (personal communication, R. Mosley, 7/11/22).

Wastewater collection services are available from the Lake Oroville Area Public Utility District (LOAPUD) to areas within its service area. The Sewerage Commission – Oroville Area (SC-OR) provides wastewater treatment to LOAPUD customers. Outlying areas rely on septic tanks for wastewater service. Fire protection services are provided by the City of Oroville, only to those parcels located within the City. Most of the parcels within the SFWPA boundary and SOI to the north, west, and east (to some extent) are provided fire protection by the Butte County Fire Department (BCFD)/CALFIRE. Butte County Fire/CALFIRE Department provides services to approximately 1,550 square miles of Butte County and approximately 102,000 unincorporated residents from 42 fire stations. CALFIRE also contracts with the COOR[4] to provide fire protection services to the community. Additionally, CAL Fire is the lead fire protection agency for wildland fires in the SOI within State Responsibility Areas (SRAs).

All SFWPA boundary and SOI areas receive essential municipal services of water, wastewater, and structural fire protection (or acceptable private alternatives). Therefore, no DUCs within the existing SFWPA boundary or SOI lack essential public services, and no public health or safety issues have been identified.

[4] In the past, the El Medio Fire Protection District (EMFPD) provided services to the mostly urbanized unincorporated territory immediately south of and adjacent to the City of Oroville. EMFPD closed in December 2020. Since that time, Oroville Fire Department and CAL FIRE have taken over coverage for their respective territory within the bounds of the district.

Disadvantaged Tracts for Grant Applications

Grant funds are sometimes available from state and federal sources for water infrastructure projects. Typically, these potential grant funders consider service to disadvantaged areas based on U.S. Census Tracts. Therefore, Census Tracts are described herein, based on data collected from the 2019 American Community Survey 5-Year Estimates. A census tract is a geographic area defined by the United States Census Bureau. The geographic size of census tracts varies widely depending on the population density; a census tract typically has around 4,000 residents but can range from 1,200 to 8,000. There are twelve (12) census tracts within the SFWPA sphere of influence, as shown in Figure 6-8. Eleven of these Census Tracts have MHIs below the $60,188 threshold, as listed in Table 6-13 below. Census Tract 26.01 has a MHI that exceeds the threshold ($66,750).

**Table 6-13: Median Household Income by Census Tract**

| Census Tract | Population (2019) | Square Miles | Median Household Income |
|---|---|---|---|
| 24.02 | 3,555 | n/a | $40,071 |
| 25 | 5,353 | 54.94 | $37,054 |
| 26.01 | 2,508 | 7.78 | $66,750 |
| 26.02 | 3,661 | 9.93 | $48,090 |
| 27 | 5,965 | 5.14 | $49,029 |
| 29 | 3,310 | 2.42 | $48,897 |
| 30.01 | 3,375 | 0.89 | $29,235 |
| 30.02 | 3,587 | 6.62 | $41,377 |
| 31 | 4,671 | 4.75 | $52,258 |
| 32 | 4,261 | 15.31 | $40,318 |
| 33 | 5,246 | 119.58 | $47,411 |
| 37 | 4,884 | 48.42 | $32,401 |

Source: US Census, 2019 American Community Survey 5-Year Estimates and *https://tigerweb.geo.census.gov/tigerweb/*

The eleven disadvantaged census tracts are provided public services from numerous local and state agencies.

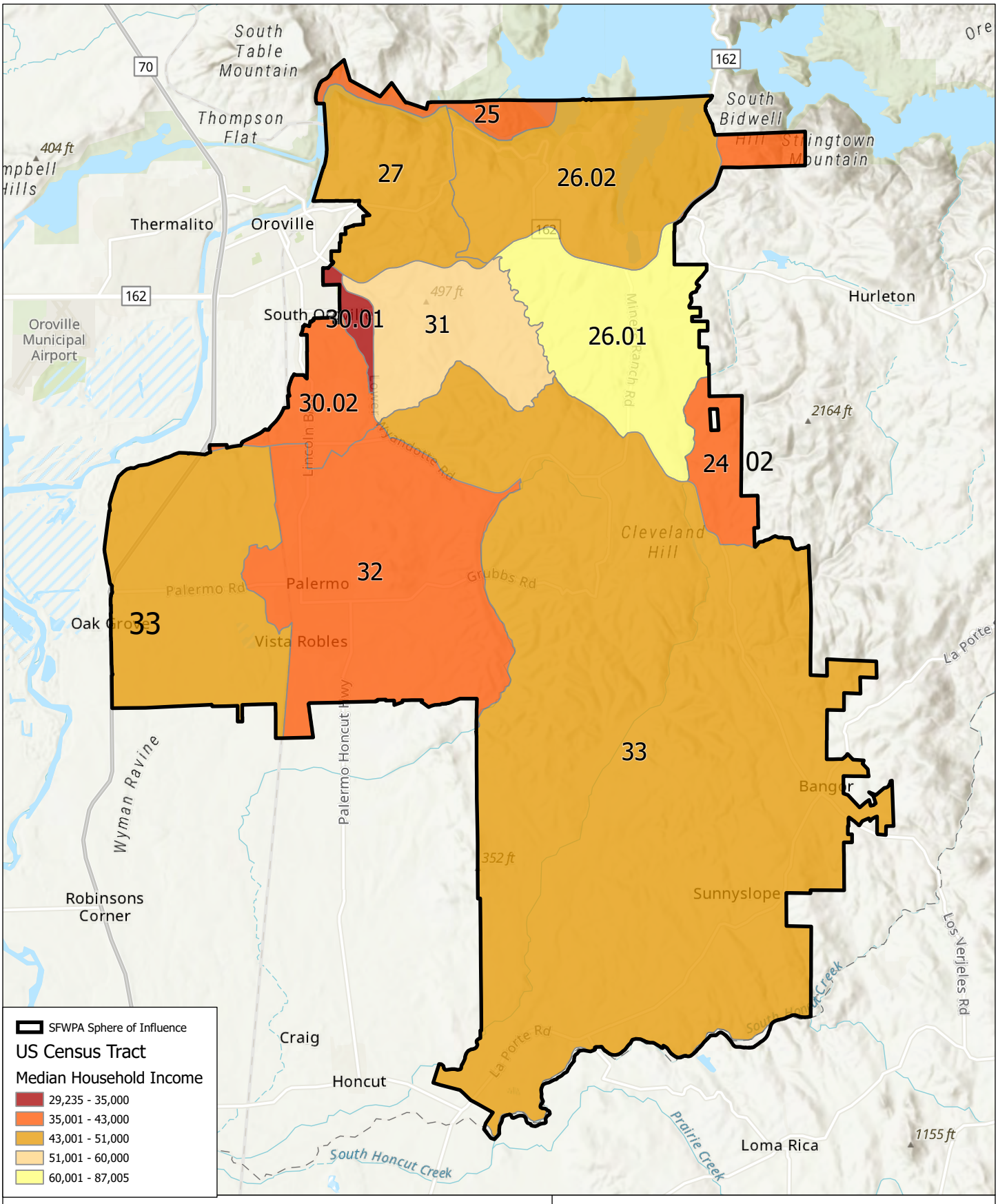



**Figure 6-8**
**SFWPA Census Tracts**

*Map Date: 09/29/2021*
*Data Source: Butte LAFCO; US Census Bureau*
*American Community Survey (ACS)*

### *6.5.1 Determinations for Disadvantaged Unincorporated Communities*

Based on the information in Section 6.5 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 6-14 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution the Commission formally adopts during a public meeting.

Table 6-14: MSR DETERMINATION: LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE

| Number | Indicator | Determination |
|---|---|---|
| SFWPA-DUC-1 | The median household income is identified. The DUC threshold MHI (80 percent of the statewide MHI) is clearly stated. The MHI in the Agency's boundary is described. | There are six census "blocks" with median household income below the state threshold ($60,188.00) for 2019 within the SFWPA boundary and SOI. These areas are classified as DUC's. |
| SFWPA-DUC-2 | Potential DUCs are considered. The provision of adequate water, wastewater, and structural fire protection services to DUCs is considered. | Due to the identified DUCs receiving essential services of water, wastewater, and structural fire protection, there are not any communities within the existing SFWPA boundary or SOI that lack public services (or a private alternative), and no health or safety issues have been identified. |

## 6.6 Public Services

### 6.6.1 Service Overview

This Section evaluates the efficiencies of services the South Feather Water and Power Agency provides and the associated infrastructure needs, especially as they relate to current and future users. Infrastructure needs and deficiencies are evaluated in terms of supply, capacity, condition of facilities, and service quality with correlations to operational, capital improvement, and finance plans. In addition, this section addresses the provision of the public services provided directly by the SFWPA to residents within its boundaries as follows:

- Water Supply, Conservation, Treatment, and Distribution;
- Hydro-electric Power Generation; and
- Recreation.

Information was derived from the SFWPA's Urban Water Management Plan (UWMP) 2020, which was written to satisfy the requirements of the California Urban Water Management Planning Act and to inform the public, and local and state agencies of the Agency's water supply availability,

exposure to drought, conservation efforts, and plans for future water supply (SFWPA, UWMP, 2021g). Other information sources, such as GIS data, the State Water Board, and Butte County, were also utilized.

South Feather Water and Power Agency provides the communities of Palermo, Bangor, and eastern Oroville with quality treated drinking water for domestic customers, serving a total of 6,900 households. Additionally, SFWPA provides raw (untreated) water to 500 irrigation customers, who likely utilize it for agricultural purposes (SFWPA, UWMP, 2021g). Additionally, SFWPA provides hydroelectric power and recreation services, as summarized in Table 6-15 below.

Table 6-15: Number of Customers for Key Municipal Services

| **Service** | **Number of Customers in 2021** |
|---|---|
| Domestic Water | Miners Ranch Treatment Plant: 6,909 connections[1]<br>Bangor Water Treatment Plant: 21 customers (average in 2018)[2]. |
| Raw Water | 500 connections |
| Hydroelectric | One (1) wholesale customer |
| Recreation | Open to the general public |

Data Sources:
[1]:*https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=272351aa7db14435989647a86e6d3ad8*

[2:] Butte Co. OEM, LHMP, 2019

## 6.6.2 Water Service

### *6.6.2.1 Existing Water Supply, Conservation, and Treatment,*

The SFWPA provides both treated domestic water and untreated irrigation water. The existing water supply is derived from surface water diverted from the upper watershed of the South Fork of the Feather River and the upper portion of the Slate Creek watershed. These watersheds are described in detail in Appendix I. This water is transported through a series of dams, canals, and tunnels.

Watershed

SFWPA's water supplies depend on precipitation that falls into the forested watershed and flows into creeks and the Feather River. This process is intimately connected to the water cycle described in Chapter 2, Introduction, and Appendix I. The upper watershed is ruggedly mountainous and bisected by deep canyons in the eastern third of the watershed. The watershed from which SFWPA's supply originates is owned or managed by several governmental and private entities. The United States Forest Service (USFS) manages the Plumas National Forest and is the single largest land owner within the watershed. Private land owners of the forested watershed include the Sierra Pacific Industries, Chy Corporation, and Sillar Brothers (SFWPA, UWMP, 2021g). This watershed falls within the jurisdictions of four adjacent counties: Plumas County, Butte County, Sierra County, and Yuba County. Almost half (49,580 acres or 49.2%) of the watershed is located within the unincorporated boundaries of Plumas County. Approximately

28,440 acres of the watershed (28.2%) are located within the unincorporated boundaries of Butte County. 19 percent (19,160 acres) of the watershed is located within Sierra County. A small portion of the watershed (3,560 acres or 3.5 percent) is located within Yuba County (SFWA, UWMP, 2021g). SFWPA's South Fork Feather River/Slate Creek watershed covers 100,814 acres or 158 square miles of the Sierra Nevada Mountain Range. Principal tributaries include:

- Lost Creek (a tributary of the South Fork Feather River) is a sub-watershed approximately 19,200 acres (30.0 square miles) in size, which represents 19.0 percent of the total South Fork Feather River/Slate Creek watershed area (SFWA, UWMP, 2021g).
- Upper portion of Slate Creek (a tributary of the North Fork Yuba River) is a sub-watershed, approximately 31,600 acres (49.4 square miles), or 31.4 percent of the combined South Fork Feather River/Slate Creek watershed area.

Treated Domestic Water Services

SFWPA serves treated domestic water to 6,900 households located in the communities of Palermo, Bangor, and eastern Oroville. Surface water from the South Fork Feather River and Slate Creek is transported to Miner's Ranch Reservoir, the system's terminal reservoir. SFWPA maintains two water treatment plants that use a combination of filtration and chlorination to remove/mitigate contaminants. After the treatment process, water is distributed through pipelines to one of the four water storage facilities and then for consumption by SFWPA's customers. A total of 141 miles of pipelines transport the water, as shown in Figure 6-9, along the process from water collection, treatment to consumption (SFWPA, UWMP, 2021g). Miners Ranch Water Treatment Plant is water system No. CA0410006, located at 234 Kelly Ridge Road, Oroville, CA 95965, and serves 6,909 connections. This treatment plant started activities on 03-22-1979. It serves 6,714 residential accounts and 194 commercial accounts (State Water Board, 2021). The Bangor Water Treatment plant is water system No. CA0410012, located at 7454 Oro-Bangor Highway. Oroville, CA, 95965, and serves one commercial account and 21 rural residential accounts (State Water Board, 2021). The number of customers accessing the Bangor Water Treatment Plant can sometimes vary. For example, it served a high of 26 customers in July 2016 (Data Source: Butte Co. OEM, LHMP, 2019).

Irrigation Customers

SFWPA provides raw (untreated) water to over 500 customers for irrigation purposes. Much of this water is utilized for local farms and ranches. Raw water is transported to customers through 110 miles of primarily open earthen canals/ditches organized into four lines, as listed in Table 6-16 below. Most of the demand for this water occurs during the dry months of summer and fall.

| Table 6-16: Irrigation Water Customers | | |
|---|---|---|
| **Name of SFWPA Water Line** | **Peak Number of Customers** | **Average Number of Customers in 2018** |
| Community Line | 78 Customers in September 2015 | 70 |
| Forbestown Ditch | 68 Customers in August 2016 | 36 |
| Bangor Canal | 279 Customers in July 2018 | 252 |
| Palermo Canal | 235 Customers in August 2017 | 157 |
| Source: Butte Co. OEM, LHMP, 2019 | | |

#### *6.6.2.2 Water Supply Planning*

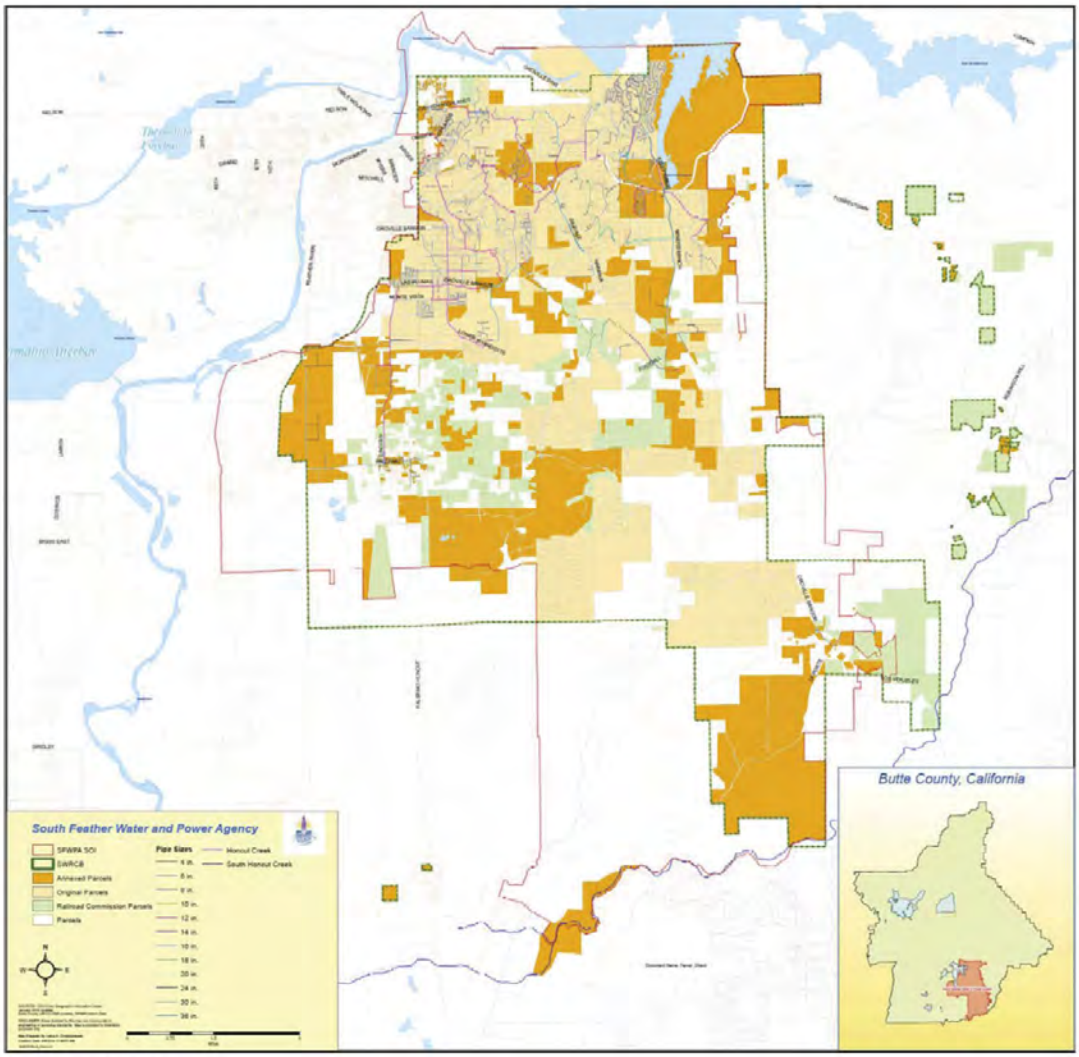
Protecting water quality and maintaining an adequate water supply are critical for the future customers of the SFWPA. Given this importance, the SFWPA and other regional and statewide agencies prepare a range of water resource management plans as described in the following paragraphs.

***Urban Water Management Plan***. Urban Water Management Plans (UWMPs) are prepared by California's urban water suppliers to support their long-term resource planning and ensure adequate water supplies are available to meet existing and future water demands. The Urban Water Management Planning Act (CWC §10610 – 10656 supplemented by CWC §10608 et seq) specifies the requirements for UWMPs. The SFWPA submitted its 2020 UWMP to the California Department of Water Resources (CA DWR) on July 21, 2021. This UWMP describes SFWPA's existing water facilities, system water use, baselines, water system supplies, contingency plan, and water demand management measures. (SFWPA, UWMP, 2021g).

***Northern Sacramento Valley Integrated Regional Water Management Plan.*** The SFWPA has participated in developing the Northern Sacramento Valley Integrated Regional Water Management Plan (NSV-IRWMP) (SFWPA, 2021a). Six counties (Butte, Colusa, Glenn, Shasta, Sutter, and Tehama) along with associated water districts worked together for many years to lay the foundation for an integrated regional water management plan to address water-related issues such as economic health and vitality; water supply reliability; flood, stormwater, and flood management; water quality improvements; and ecosystem protection and enhancement. The NSV-IRWMP aims to address water-related issues and offer solutions that can provide multiple benefits to the region. The Northern Sacramento Valley IRMWP was originally approved by the California Department of Water Resources on July 24, 2014. The Plan was subsequently updated on March 2, 2020, to comply with new DWR requirements as detailed on their website at: *https://nsvwaterplan.org/.* It is recommended that SFWPA continue to monitor and participate in future efforts to update the Integrated Regional Water Management Plan and, when appropriate, seek funding opportunities for conjunctive use and water management improvements. The intent of this recommendation is to improve regional water management through enhanced coordination and cooperation among agencies, local entities, and other stakeholders. This coordination and communication will foster the development of consistent local policies and objectives while protecting local uses and the regional environment.

Figure 6-9: SFWPA Distribution of Water Pipes
From Local Hazard Mitigation Plan, Annex N

*Figure N-1 South Feather Water and Power Agency*




Source: SFWPA

Source (Butte OEM, 2019).

**2020 Water Shortage Contingency Plan**. SFWPA adopted its 2020 Water Shortage Contingency Plan (WSCP) on June 22, 2021, through Resolution No. 21-06-02 to comply with California Water Code Section 10632, which requires that every urban water supplier prepare and adopt a WSCP as part of its UWMP (SFWPA, WSCP, 2021d). The section below on Water Supply Storage & Treatment describes the WSCP in more detail.

**Sustainable Groundwater Management Act.** The Sustainable Groundwater Management Act (SGMA) is a state law that authorizes local Groundwater Sustainability Agencies to manage groundwater at the local level through the development and implementation of Groundwater Sustainability Plans. Decisions about groundwater sustainability are made locally through public involvement. The Wyandotte Creek Subbasin is a portion of the larger Sacramento Valley Groundwater Basin covering approximately 59,382 acres. An SFWPA staff member was appointed to the Wyandotte Creek Advisory Committee in October 2020 and is actively participating in the groundwater sustainability plan development. Additional information is available at: wyandottecreekgsa.com. Please note that SFWPA does not utilize groundwater. However, within the SFWPA SOI, some residents may utilize private wells to access groundwater. Therefore, the SFWPA supports collaborative decision-making efforts for local groundwater resources.

Regulatory Compliance

The State Water Resources Control Board – Division of Drinking (SWRCB-DODW) has several regulations (detailed in Appendix H) which the SFWPA routinely complies with as follows:

- SFWPA has an Environmental Laboratory Accreditation Program Certificate No. 1545, which was updated on 7-1-2019 (SFWPA, 2021a). SFWPA's Environmental Laboratory Accreditation inspection was last conducted in 2015.
- SFWPA submits annual reports to the SWRCB-DODW.
- The SWRCB-DODW conducts inspections every 1-3 years, depending on their availability. (SFWPA, 2021a).

Permits: Adopted Decisions and Orders from the State Water Board

The State Water Resources Board has issued several orders related to the South Feather Water and Power Agency, Miners Ranch Water Treatment Plant, as listed below:

- Order No. R5-2018-0055, Rescission of Waste Discharge Requirements R5-2010-0059 and Time Schedule Order R5-2010-0060-01, Adopted on 31 May 2018
- Order No. R5-2010-0060-01, Time Schedule Order as amended by Order R5-2015-0099, Amended on 31 July 2015 - Rescinded by R5-2018-0055
- Order No. R5-2015-0099, Amending Time Schedule Order/NPDES Permit No. CA0083143, Adopted on 31 July 2015
- Order No. R5-2010-0060, Time Schedule Order/NPDES Permit No. CA0083143, Adopted on 27 May 2010 - Amended by R5-2010-0060-01
- Order No. R5-2010-0059, Waste Discharge Requirements/Monitoring & Reporting Program/NPDES Permit No. CA0083143, Adopted on 27 May 2010 - Rescinded by R5-2018-0055

- Order No. R5-2005-0011, Waste Discharge Requirements/Monitoring & Reporting Program/NPDES Permit No. CA0083143, Adopted on 27 January 2005
  Data Source:
  *https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/*

Water Rights In California, there are several different types water rights, consistent with the basic principles of California Water Law. Appendix F provides a basic primer on California Water Law, the relationship between certain water rights, and the ability and procedures for making water transfers. A water district, such as SFWPA, must have a valid water right in order to divert, use, and/or transfer water.

The water rights that SFWPA holds today began in the past with water diverted by the South Feather Land and Water Company and the Palermo Land and Water Company during the gold rush and post-gold rush periods. These historic water rights were developed before 1914, a seminal year in water rights law. The Companies' water rights were assumed by the Oroville-Wyandotte Irrigation District and subsequently by the South Feather Water and Power Agency (SFWPA, UWMP 2021g). Table 6-17 summarizes the water rights and associated storage available to the SFWPA. Four of the permits were issued in the 1920s, and two permits were issued in 1950.

The water sources originate in Butte, Plumas, and Yuba counties. SFWPA's appropriated water rights on the South Fork of the Feather River and its tributaries (291,312 acre-feet) exceed the actual yield of said watershed. Although the yield from the watershed declines in dry years, these water rights do not change.

In summary, the SFWPA has pre-1914 water rights derived from the South Feather Land and Water Company. Its post-1914 water rights are from the Palermo Land and Water Company, including the right to appropriate available water from the South Fork Feather River and its tributaries (Stiffel, 2016). The California Railroad Commission issued an order in 1923 regarding the provision of water to customers previously served by the private water companies (SFLWC and PLWC) and others who applied for water between the years 1923 and 1933 (Stiffel, 2016). It is these so-called "Railroad Commission" parcels that are scattered in the eastern foothills primarily and are islands of service territory.

# Table 6-17: SFWPA Water Rights

| Permit # | Application # | Uses (only fill in data for ea use permitted) | Place of Use | Source Water | Storage Facility | Storage Amount | Storage Period | Diversion Point | Diversion Amount | Time of Use | Priority Date | Gage ID No.* (Hydrographer) | Reservoir Spill Info (Hydrographer) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1267 | A001651 | Domestic | MRTP | SFFR | LGV | **109,012 af** | Oct 1 to Jul 1 | | | | 2/2/1920 | M020257 Little Grass, SF 2 Flow meter model FST020 | LGV, SC, Lost |
| | | Irrigation | Bangor Canal | SFFR | | | | SFDD, Fbs Dch, Wdlf Pen | 200 cfs **36,036 af** total | Apr 1 to Jul 1 | | | |
| | | Recreation | LGV, Sly, Lost, Pond | SFFR | | | | LCD, Fbs Dch, Wdlf Pen | | | | | |
| 1268 | A002142 | Domestic | MRTP | Lost Creek | Lost Creek | **5,000 af** | Oct 1 to Jul 1 | | | | 12/17/1920 | M020258, Lost Creek Res, SF 12 | Lost |
| | | Irrigation | Bangor Canal | | | | | | | | | | |
| | | Recreation | Lost, Pond | | | | | | | | | | |
| 2492 | A002778 | Domestic | MRTP | Lost Creek | Sly | **25,000 af** | Oct 1 to Jun 1 | | | | 3/6/1922 | M02056, SF11 | Sly, Lost |
| | | Irrigation | Palermo Canal | Sucker Run | | | | Sly | 50 cfs **6,039 af** total | Apr 1 to Jun 1 | | | |
| | | Recreation | Sly, Lost, Pond | Lost Creek | | | | | | | | | |
| 1271 | A002979 | Domestic | MRTP | Lost Creek | | | | LCD | 185 cfs | Jan 1 to Dec 31 | 8/12/1922 | M024371, MRTP, SF25 | N/A |
| | | Irrigation | Bangor Canal | Lost Creek | | | | Fbs Ditch | excess of allowed under Permit 1268 | Apr 1 to Oct 15 | | | |

| License # | Application # | Uses | Place of Use | Source Water | Storage Facility | Storage Amount | Time of Use | Diversion Point | Diversion Amount | Time of Use | Priority Date | Gage ID No. | Reservoir Spill Info for Storage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10939 | A013676 - 11514 | Power | | SFFR | LGV | 77,300 | Nov 1 to Jul 1 | | 200 cfs | Jan 1 to Dec 31 | 4/7/1950 | M020257 Little Grass, SF 2 Flow meter model FST020 | LGV, SC, Lost |
| 10939 | A013676 - 11514 | Power | | Lost Creek | LGV, Sly, Lost | 40,000 | Nov 1 to Jul 1 | | 100 cfs | | 4/7/1950 | | |
| 10940 | A013956 - 11515 | Power | | Slate Creek | Sly, Slate | 35,000 | Jan 1 to Jul 1 | | 300 cfs | Jan 1 to Dec 31 | 9/20/1950 | M020260, SC Res, SF11 | Sly |
| 10941 | A014112 - 11517 | Power | | SFFR | | | | | 100 cfs | Jan 1 to Dec 31 | 12/28/1950 | M020258, Lost Creek Res, SF 12 | N/A |
| 10941 | A014112 - 11517 | Power | | Lost Creek | | | | | 200 cfs | Jan 1 to Dec 31 | 12/28/1950 | | |
| S022067 | Pre-1914 | Irrigation/Stock | Lower Fbs Ditch | Lost Creek | | | | | 75 cfs | Jan 1 to Dec 31 | Pre-1914 | M020258, Lost Cr | N/A |
| S022068 | Pre-1914 | Irrigation/Stock | Lower Fbs Ditch | Pinkard Creek | | | | | 275 cfs | Jan 1 to Dec 31 | Pre-1914 | M024368, SF15, | N/A |

Water Supply, Storage & Treatment

The water source for the SFWPA is surface water[5], specifically, the South Feather River and the North Fork Yuba River and several associated tributaries, as listed in Table 6-17 above. In the upper part of the watershed, runoff from rain and snow fills the SFWPA's reservoirs. Water supply data is gathered from the gaging stations throughout the watershed, which is audited by the United States Geological Survey (USGS) annually. The data is published in real-time for regulatory agencies and public review. The Agency retains a hydrographer trained and experienced in water measurement (SFWPA, UWMP, 2021g).

Water supply reliability calculations for the Agency's surface water sources are shown in Table 6-18 below. These are the raw water supplies currently available to SFWPA for the given water year scenario types. Based on the Agency's average annual watershed production of 254,015 acre-feet (81,968 to 82,783 Million Gallons (MG)) and its ability to store 165,016 acre-feet (53,779 MG), SFWPA believes that its sources of developed water supply will continue to more than adequately meet the current and the foreseeable demand through 2045 (SFWPA, UWMP, 2021g).

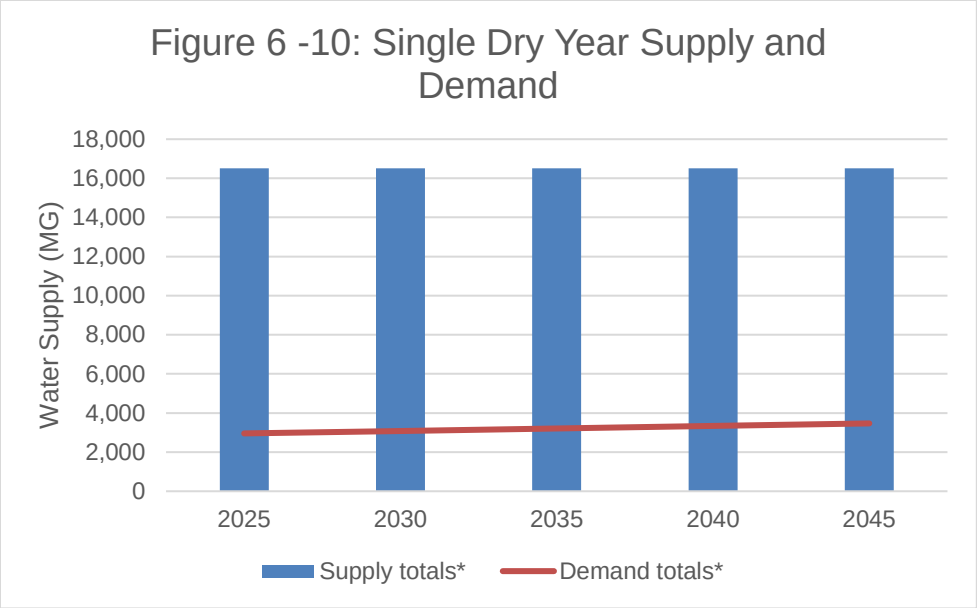
Table 6-18: Basis of Water Year Data (Reliability Assessment)

| Year Type | Base Year | Volume Available (MG) | Percent of Average Supply |
|---|---|---|---|
| Average Year | 1966 | 81,968 | 100% |
| Single Dry Year | 1977 | 16,516 | 20% |
| Consecutive Dry Years 1st Year | 1931 | 19,896 | 24% |
| Consecutive Dry Years 2nd Year | 1932 | 66,375 | 81% |
| Consecutive Dry Years 3rd Year | 1933 | 32,239 | 39% |
| Consecutive Dry Years 4th Year | 1934 | 36,402 | 44% |
| Consecutive Dry Years 5th Year | 1935 | 77,069 | 94% |

*Data Source: SFWPA, UWMP, 2021g*

During a Single Dry Year type of water year, SFWPA estimates that it will have 16,516 MG of water supply available that year. However, total water demand is projected to be much less, at 3,208 MG for a Single Dry Year (SFWPA UWMP, 2021g). This indicates that SFWPA will have sufficient water supplies during a Single Dry Year, as shown in Figure 6-10 below.

[5] SFWPA does not utilize groundwater. The Butte County Water & Resource Conservation Department issues groundwater related reports.




Source: SFWPA UWMP, 2021g

If the SFWPA has an under-utilized water supply, it has the option to sell water. Historical water transfers originating from SFWPA have been single-year transfers to users south of the Sacramento-San Joaquin Delta; not multi-year transfers that would unduly impact the Delta long-term or create an out-of-the-region dependency on the SFWPA watershed (SFWPA, UWMP, 2021g).

Raw irrigation water and treated water are supplied to South Feather Water and Power Agency customers in Butte County and North Yuba Water District in Yuba County (SFWPA, UWMP, 2021g). The Agency does not purchase water from other agencies (SFWPA, 2021a). Factors that influence the Agency's ability to supply and deliver water to its customers include the functionality of surface water storage, canal conveyance status, and the status of the water treatment plant (SFWPA, 2021a).

Water Demand Details

In Butte County, the average per capita water demand is 252 gallons per capita per day (NSV-IRWMP, 2020). However, in SFWPA, per capita daily demand is estimated to be larger, at 323 gallons (SFWPA, UWMP, 2021g). There are several potential explanations about why daily water demand is higher in SFWPA's area:

- SFWPA provides raw water to agricultural areas, and this is included in its gross water demand;
- SFWPA's UWMP estimated its population at 16,770 persons, which may be a low estimate. However, suppose the larger population estimate listed in Table 6-18 of 24,300 persons is utilized. In that case, average per capita water demand drops to 222 gallons per capita per day, which is lower than that of Butte County as a whole.

The existing water demand to serve all SFWPA customers in the year 2020 is measured as 2,944 million gallons, as shown in Table 6-19 below.

| Table 6-19: Retail Demands for Potable and Non-Potable Water | | |
|---|---|---|
| Use Type | 2020 Actual | |
| **Drop Down List** | **Level of Treatment When Delivered** | **Volume[2]** |
| Single-Family | Drinking Water | 1,427 |
| Multi-Family | Drinking Water | 110 |
| Commercial | Drinking Water | 148 |
| Industrial | Drinking Water | 0 |
| Institutional/Governmental | Drinking Water | 51 |
| Landscape | Drinking Water | 1 |
| Agricultural irrigation | Drinking Water | 24 |
| Agricultural irrigation | Raw Water | 958 |
| Losses | Drinking Water | 225 |
| | **TOTAL** | **2,944** |
| Recycled water demands are NOT reported in this table.<br>*Data Source: SFWPA, UWMPA, 2021g. All numbers shown are Million Gallons* | | |

Table 6-19 above lists water loss at 225 million gallons per year. Water loss occurs due to natural processes in the watershed, such as evapotranspiration from the reservoirs and pipe leakage. The loss volume of 225 million gallons represents a very small percentage of the actual demand, and it is typical for a water system and hydro-electric system in the Sierra Foothill area.

To provide a slightly different perspective on existing water demand, SFWPA's Treatment Plant Superintendent indicates that annual demands throughout the year range between 1.97 million gallons per day (mgd) to 11.52 mgd. The recent maximum daily demand for total production on August 18, 2020, was 11.52 mgd. The peak hour demand occurred on September 9, 2020, at 16.56 mg. The highest production month was in August 2020 at 287.12 mg (SFWPA, 2021a).

Existing water demand calculations also include exit flows for the Agency's drinking/agricultural system, calculated monthly using flows above Kelly Ridge Power House, and power run times (SFWPA, 2021a). Regarding domestic and irrigation water service, the Agency does not anticipate any major operational changes in the near-term future (Butte Co OEM and SFWPA LHMP, 2019).

Surplus Water

If SFWPA has surplus water stored in its reservoirs, it may sometimes choose to sell that water. For example, in the past, SFWPA entered into a Purchase Agreement for Water Transfer with the State Water Project Contractors Authority buyers group to transfer 10,000 acre-feet of water from the Agency's Ponderosa Reservoir to Lake Oroville. From Lake Oroville, the water was distributed to various state water contractors in the Bay Area and/or south of the Delta. Please

note that the SFWPA does have specific policies and guidelines to discern when the transfer of any water would be appropriate.

Future Water Demand

LAFCO is interested in studying projected future water demand to understand whether there is sufficient supply to serve future needs. Several factors contribute to future water demand, including population growth, types of agricultural crops grown and associated demand, evapotranspiration rates, and several other factors. Growth of housing and other types of development will influence future water demand, and therefore the Agency keeps track of "Will Serve Letters" or promises made to supply water. SFWPA has issued will-serve letters to the following residential developments:

- Heritage Estates – Senior Apartment Complex located within the City of Oroville;
- River Ranch Estates – General Housing (130 units), located in the unincorporated area of Butte County; and
- The Ridge Phase 2 (81 units) – located in the unincorporated area of Butte County.
- One-year expiration provisions for fees [?] (SFWPA, 2021a).

After considering all these factors, the SFWPA's UWMP developed a model and predicts that in the year 2045, water demand will reach 3,664 million gallons per year. Table 6-20 below shows demand for potable and raw water in five-year increments out to 2045 by customer type.

Table 6-20: Demands for Potable and Raw Water

| Use Type | Projected Water use *Report To the Extent that Records are Available* | | | | |
|---|---|---|---|---|---|
| **Drop Down List** | **2025** | **2030** | **2035** | **2040** | **2045** |
| Single-Family | 1,491 | 1,558 | 1,627 | 1,700 | 1,776 |
| Multi-Family | 115 | 120 | 125 | 131 | 137 |
| Commercial | 155 | 162 | 169 | 176 | 184 |
| Industrial | 0 | 0 | 0 | 0 | 0 |
| Institutional/Governmental | 53 | 56 | 58 | 61 | 63 |
| Landscape | 1 | 1 | 1 | 1 | 1 |
| Agricultural irrigation | 25 | 26 | 27 | 29 | 30 |
| Agricultural irrigation | 1,001 | 1,046 | 1,093 | 1,141 | 1,193 |
| Losses | 235 | 246 | 257 | 268 | 280 |
| **Total** | **3,076** | **3,215** | **3,357** | **3,507** | **3,664** |

Note: Recycled water demands are NOT reported in this table. Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP.

*Data Source: SFWPA UWMP, 2021g. Units for all numbers shown are million gallons*

The SFWPA's most recent Urban Water Management Plan, 2020, analyzed the reliability of water sources during "average year," "single year," and "multiple-dry years" to plan for "worst-case" water supply situations. Multiple Dry Years are occurring on a more frequent basis. Table 6-21 below calculates projected future demand in the event a drought covering multiple years were to occur.

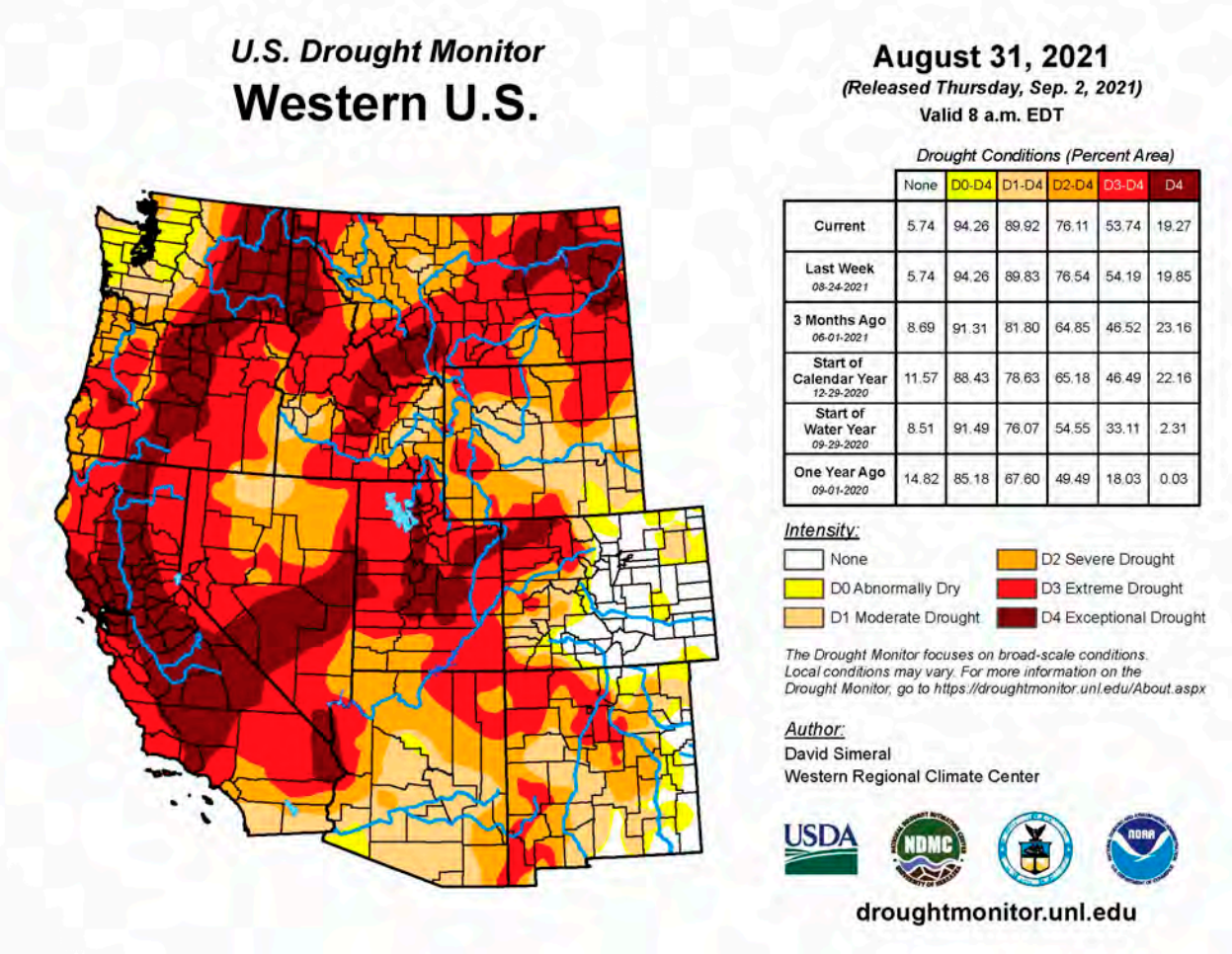
Table 6-21: - Multiple Dry Year – Supply and Demand

| Submittal Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison | | | | | | |
|---|---|---|---|---|---|---|
| | | 2025* | 2030* | 2035* | 2040* | 2045* (Opt) |
| First year | Supply totals | 19,896 | 19,896 | 19,896 | 19,896 | 19,896 |
| | Demand totals | 2,957 | 3,077 | 3,203 | 3,334 | 3,468 |
| | Difference | 16,939 | 16,819 | 16,693 | 16,562 | 16,428 |
| Second year | Supply totals | 66,375 | 66,375 | 66,375 | 66,375 | 66,375 |
| | Demand totals | 2,957 | 3,077 | 3,203 | 3,334 | 3,468 |
| | Difference | 63,418 | 63,298 | 63,172 | 63,041 | 62,907 |
| Third year | Supply totals | 32,239 | 32,239 | 32,239 | 32,239 | 32,239 |
| | Demand totals | 2,957 | 3,077 | 3,203 | 3,334 | 3,468 |
| | Difference | 29,282 | 29,162 | 29,036 | 28,905 | 28,771 |
| Fourth year | Supply totals | 36,402 | 36,402 | 36,402 | 36,402 | 36,402 |
| | Demand totals | 2,957 | 3,077 | 3,203 | 3,334 | 3,468 |
| | Difference | 33,445 | 33,325 | 33,199 | 33,068 | 32,934 |
| Fifth year | Supply totals | 77,069 | 77,069 | 77,069 | 77,069 | 77,069 |
| | Demand totals | 2,957 | 3,077 | 3,203 | 3,334 | 3,468 |
| | Difference | 74,112 | 73,992 | 73,866 | 73,735 | 73,601 |
| Sixth year *(optional)* | Supply totals | | | | | |
| | Demand totals | | | | | |
| | Difference | 0 | 0 | 0 | 0 | 0 |
| ***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.* | | | | | | |
| NOTES: Based on five driest years from historical period of record 1912-2020. | | | | | | |

*Data Source: SFWPA UWMP, 2021g. Units for all numbers shown are million gallons*

Drought Management and Water Conservation

Water is generally considered a renewable resource, replenished by annual winter precipitation. However, during times of drought and extreme drought, water can also be an exhaustible resource. Those times of water scarcity compel us to value water as a precious commodity to be conserved and carefully managed. According to the U.S. Drought Monitor, during the week of August 16, 2021, Butte County (along with roughly 47% of California) fell into the Exceptional Drought category, which is the worst in that ranking system. In addition, the Butte County Drought Task Force reported that July 2021 was the driest month, and the year 2021 is the 8th driest year over the past 127 years of record-keeping for Butte County.




The Agency has made significant reductions in its water use during the past few years through pipeline replacements, leak detection and repair, efficiency improvements in treated water production, customer leak notification, and public response to the statewide drought (SFWPA UWMP, 2021g). To continue its resource management during drought, the Agency submitted its Water Shortage Contingency Plan (WSCP) to CA DWR on July 21, 2021, as required by state law. SFWPA's WSCP describes six stages of water shortage ranging from Level 1, where water supplies are reduced up to ten percent, to Level 6, where water supplies are reduced by 50

percent or more. At each level of water shortage, the WSCP outlines strategies and actions the SFWPA will take to reduce water demand. For example, a Level 1 action is: Expand Public Information Campaign. A Level 6 action is: Prohibit vehicle washing except at facilities using recycled or recirculating water (SFWPA, WSCP, 2021d). Regardless of the severity of the water shortage, communication is a key aspect to encouraging water conservation, and SFWPA utilizes a number of strategies to communicate with customers and land use planning entities for the City of Oroville and County of Butte, as well as community partners, including:

- Supply clear, consistent, and understandable messaging to encourage increased voluntary conservation via billing inserts and on the Agency website.
- Collaborate with City and County partners to develop effective communications regarding current conditions, specifically the Agency's WSCP.
- Regularly communicate with local, state, and other elected officials in the region about the importance of achieving voluntary water conservation and encourage them to publicly promote such efforts (SFWPA, WSCP, 2021d).

A drought does have financial implications for SFWPA. Therefore, SFWPA staff is working to establish a rate structure that would be implemented by the Board of Directors during a declared water shortage emergency. Further analysis is needed to determine the financial impacts on hydropower operations and water distributions during times of emergency (SFWPA, WSCP, 2021d). Compliance and enforcement with water conservation measures are mandated by the California Water Code Sections 376 and 10632, such that a water supplier is required to penalize or charge end users for excessive water use. SFWPA plans to implement this in the future in accordance with a forthcoming Water Shortage Contingency Plan Resolution (SFWPA, WSCP, 2021d).

On average, during the past ten years, SFWPA customers have utilized 308 gallons per customer per day. In the year 2020, SFWPA customers utilized 301 gallons per customer per day. The Agency set a goal to encourage water conservation and invited customers to reduce water use to 240 gallons per customer per day; however, customers did not quite achieve this reduction goal. (SFWPA UWMP, 2021g). However, implementing the Agency's new Water Contingency Plan and other conservation measures will hopefully improve water conservation on a district-wide level.

In summary, "based on the supply and demand assessments conducted by the Agency (See UWMP Chapter 7), SFWPA believes that its sources of developed water supply will continue to more than adequately meet the current and the foreseeable demand through 2045" (SFWPA, Water contingency Plan, 2021c). Additionally, SFWPA's UWMP 2020 states that the surface water supply available to SFWPA is projected to be capable of serving all demands under all hydrologic conditions.

## Water Recycling

Under ideal circumstances, using recycled water could potentially reduce future demand for drinking and irrigation water that would otherwise be used for water landscaping. However, the sewage collection systems of the City of Oroville and LOAPUD each terminate at Sewage

Commission – Oroville Region's (SCOR) treatment facility that is west of and not within the SFWPA boundary area. SCOR's treated effluent is discharged to the Feather River below Lake Oroville. Although the SC-OR wastewater treatment plant recycles a small amount of wastewater for utilization on SC-OR's landscaped grounds, it does not currently have an off-site recycled water program, as described in Chapter 5. Therefore, SFWPA does not currently make use of recycled water, nor is there any wastewater recycled for direct reuse within the Agency's boundary area (SFWPA UWMP, 2021g). Implementing a recycled water program within the SFWPA boundary area would need to involve longer-term measures and require regional participation by other agencies (SFWPA UWMP, 2021g).

#### *6.6.2.3 Water Supply Conservation and Treatment Service to the SOI*

SFWPA's existing SOI is quite large and comprises 64,125 acres. There are several possible scenarios under which a parcel within the SFWPA might request annexation into the SFWPA boundary to receive water service. Two hypothetical examples are listed below:

- Many parcels with the SFWPA rely on privately owned wells to provide groundwater. It is possible that during a prolonged drought that, a privately owned well could run dry. In this hypothetical situation, the property owner might consider asking for annexation into the SFWPA boundary to receive water service.
- New development could also spark requests for annexation into the SFWPA boundary to receive water service. For example, as parcels within the SOI are developed and potentially annexed into the City of Oroville in the future, SFWPA may have the capacity to provide water service to these areas.

Although additional annexations of land to the SFWPA have the potential to increase water demand, the SFWPA does not anticipate any additional annexations of parcels that are not included within the City of Oroville's General Plan over the next several years. Any new annexations would be determined on a case-by-case basis with a full review of anticipated water demand, conservation measures, and updated inventories of supplies. All new development in the SFWPA must provide for its fair shares of pipes, pipelines, and reservoirs. Additionally, before considering any other future annexation proposals, environmental review, approval from LAFCO, and other planning permits may be needed.

## 6.6.3 Water Quality

This section focuses on one aspect of water quality, namely the quality of drinking water. The quality of water discharged into natural streams, rivers, and lakes is described in relation to the SC-OR wastewater treatment plant in Chapter x.

When drinking a glass of water, it is important for customers to understand whether this water is safe for consumption and free from pollution to protect their health and safety and promote overall wellness. SFWPA's water quality monitoring program includes taking samples of raw and treated water throughout the year from many locations in the Agency's service area. SFWPA's annual Consumer Confidence Report (CCR) demonstrates a consistent delivery of high-quality drinking

water. To further consider SFWPA water quality in additional detail, four online databases were queried, including the California Drinking Water Watch; the Environmental Working Group; the California Integrated Water Quality System Project; and the Human Right to Water Tool.

California Drinking Water Watch

- SFWP – Strawberry Campground (Water System No. CA0400138)
    - No violations
- SFWP – Miners Ranch (Water System No. CA00410006)
    - No violations
- SFWP – Bangor (Water System No. CA0410012)
    - No violations
- SFWP – Sly Creek Campground (Water System No. CA0400137)
    - No violations

No violations were found in the SFWPA's water systems listed on the Safe Drinking Water Information website (California Drinking Water Watch, 2021).

Environmental Working Group (EWG): South Feather Water and Power Agency – Miners Ranch

The Environmental Working Group (EWG) is a private non-profit organization that collects water quality data. EWG has no regulatory authority. EWG does not issue legal standards. EWG does have scientists who provide health guidelines in relation to water quality. Nine total contaminants are found in the SFWPA's Miners Ranch water system, with seven exceeding EWG Health Guidelines. All seven that exceed these guidelines are carcinogens and are listed below. The data available from the EWG website is from 2012 to 2017, showing a need for updated and accurate measurements for recent years.

1. Bormodiclоromethane (1.46 parts per billion (ppb))
    - Potential Effect: Cancer
    - 24 times EWG's Health Guideline (0.06 ppb)
    - No legal limit
2. Chloroform (19.8 ppb)
    - Potential Effect: Cancer
    - 49times EWG's Health Guideline (0.4 ppb)
    - No legal limit
3. Chromium (hexavalent) (0.125 ppb)
    - Potential Effect: Cancer
    - 6.2times EWG's Health Guideline (0.02 ppb)
    - No legal limit
4. Dichloroacetic Acid (10.4 ppb)
    - Potential Effect: Cancer
    - 52 times EWG's Health Guideline
    - No legal limit
5. Haloacetic acids (HAA5) (23.6 ppb)
    - Potential Effect: Cancer
    - 236times EWG's Health Guideline (0.1 ppb)
    - Legal limit: 60 ppb

6. Total trihalomethanes (TTHMS) (21.2 ppb)
    - Potential Effect: Cancer
    - 141times EWG's Health Guideline (0.15 ppb)
    - Legal limit: 80 ppb
7. Trichloroacetic acid (13.2 ppb)
    - Potential Effect: Cancer
    - 132times EWG's Health Guideline (0.1 ppb)
    - No legal limit
    - (Data Source: EWG, 2021)

The data from EWG shows that the drinking water quality of the Miners Ranch System meets all legal requirements. However, improvements in some constituents may be needed to meet the more stringent (not mandatory) health guidelines; and continued water quality monitoring, as required by State Law, is justified.

California Integrated Water Quality System (CIWQS): South Feather Water and Power Agency – Miners Ranch

The CIWQS database is available online at: *http://www.waterboards.ca.gov/ciwqs/*. This database query showed no current active violations at the SFWPA Miners Ranch Water Treatment Plant. But the Agency does have an enforcement action as recent as March 2016. The enforcement type was Oral Communication, and its enforcement ID is 405322. (CIWQS, 2021)

Human Right to Water Data Tool

The State of California Office of Environmental Health Hazard Assessment has assessed various water quality parameters for community water systems throughout the state and posted the information to the online database called the "Human Right to Water Data Tool." The database analysis utilizes a scoring system to assess and rate various water quality parameters. The scores have a possible range: 0 – 4, with zero being the best and four (4) being the worst. This database was queried, and the results for the SFWP-Miners Ranch (PWSID: CA0410006) are described below.

The SFWP-MINERS RANCH system serves 24,846 people. Miner's Ranch received a Water Accessibility Composite Score of two-and-one-half (2.50) and a Physical Vulnerability to Water Outages Score of two-and-one-half (2.50), which is "moderate" for both variables. This indicator assesses how vulnerable a water system is to a supply outage (or shortage). The physical vulnerability score considers that this water system does not purchase water and has only one source (OEHHA, 2021). The Water Quality Composite Score: 0.12, which is a very low score indicating very good water quality. The database indicates this system had no contaminants at possible high potential exposure. The Compliance with Primary Drinking Water Standards Score was zero (0), and this low (i.e., very good) score was given because this system had no contaminants. The Data Availability Score was three (3), which is medium-high, indicating that some improvement in data sharing or communication may be needed (OEHHA, 2021).

In summary, SFWPA sources its surface water from a watershed that historically provided a high-quality raw water supply (SFWPA, Water Contingency Plan, 2021c). These watersheds include South Fork Feather River, Lost Creek (a tributary of the South Fork Feather River), and Slate Creek (a tributary of the Nork Fork Yuba River). SFWPA easily meets all the current legal requirements for water quality. However, as indicated by the EWG data, several water quality constituents are not covered by legal requirements or for which legal requirements are more lenient than other health guidelines (not obligatory). Additionally, local hazards, such as wildfires, pose a potential future threat to the watershed and the associated water quality derived therefrom. This indicates that continued water quality monitoring will be an ongoing effort by the SFWPA.

Lead Service Pipe Study

Section 116885 of the California Health and Safety Code (H&S Code, Lead Service Lines in Public Water Systems – Senate Bill 1398) requires all public water systems to compile an inventory of known partial or total lead user service lines in use in its distribution system. The deadline to compile the inventory was July 1, 2018. SFWPA completed the required inventory each year for the years 2017, 2018, and 2019. Each year it was found that "No lead/no unknown materials user service lines" (SWRCB, DDW, 2021).

## 6.6.4 Storm Water Drainage

In unincorporated Butte County, stormwater generally flows overland into storm drains along roadway corridors and moves downhill (via gravity) to local creeks and streams. As new residential developments are built, they typically construct a stormwater detention basin designed to avoid increases in off-site peak flow and ensure that stormwater complies with State Water Resources Control Board standards before metered discharge into the Feather River or its tributaries. The Central Valley Regional Water Quality Control Board (CVRWQCB) requires a National Pollutant Discharge Elimination System (NPDES) Permit for storm water discharges and other substances to surface waters. The SFWPA does not have responsibility for storm water. However, new technologies are being developed that could allow storm water harvesting such that water can be stored in lagoons and put through biofiltration systems to create a means of augmenting water supply for irrigation, etc., or to replenish a groundwater basin. The SFWPA may wish to informally monitor the storm water situation to ensure clean water is discharged and to keep apprised of new technological developments.

## 6.6.5 Electric Power Services

### *6.6.5.1 Existing Hydro-electric Services*

SFWPA generates both hydroelectric power and solar-powered electricity through a photovoltaic array. Hydroelectric power is generated from the South Feather Power Project (SFPP, FERC No. 2088), a water supply/hydropower project located within Plumas, Yuba, and Butte counties in the Sierra Nevada Mountain Range in Northern California, which is owned and operated by SFWPA. SFPP is located within the Middle Fork Feather River watershed; the South Fork Feather River watershed, including Lost Creek, a tributary to the South Fork; and Slate Creek, a tributary to the North Yuba River watershed. The SFPP facilities occupy approximately 1,977 acres of federal

lands administered by the Plumas National Forest and 10.57 acres of federal lands administered by the United States Bureau of Land Management. The Project can store approximately 172,000 acre-feet (AF) of water (gross storage) and annually generates an average of about 514.1 gigawatt-hours of power (SWRCB, 2017).

The South Feather Power Project was completed in 1963 at the cost of $62 million and was financed through the sale of revenue bonds secured by the projected revenues from power generation. Those bonds were defeased (a bond that has its outstanding debt collateralized by cash equivalents or risk-free securities) in 2009. The Project reservoirs include Little Grass Valley Reservoir, Sly Creek Reservoir, Lost Creek Reservoir, Ponderosa Reservoir, and Miners Ranch Reservoir, with a total storage of 164,577 acre-feet (AF) (SFWPA, UWMP, 2021g). Traditionally, the electricity generated by the hydroelectric facilities was sold wholesale to Pacific Gas & Electric (SFWPA, 2021a). However, the Agency's contract to sell wholesale power to PG&E expired on December 18, 2021 (SFWPA, 2021a). Today, the Agency sells power to the Northern California Power Agency (personal communication, R. Mosley, 7/11/22).

Operation of the reservoirs to meet competing demands is a key skill of SFWPA staff. Typically, the Little Grass Valley and Sly Creek Reservoirs get filled with runoff from snow melt and rainfall by the end of spring. The Reservoirs are gradually drawn down during the summer to provide consumptive water supply, power generation, and instream aquatic habitat. Additionally, a water supply is retained in the Reservoirs for recreational purposes. The end-of-the-year storage (December 31) in Little Grass Valley is typically 45,000 – 50,000 AF, and the storage in Sly Creek Reservoir is 10,000 – 15,000 AF, for a combined end-of-year storage total of about 60,000 AF. (Minasian et al., 2015).

FERC Relicensing Status

The hydropower project operates under a license from the Federal Energy Regulatory Commission (FERC License No. 2088). FERC issued the original Project license on July 21, 1952, to the Oroville-Wyandotte Irrigation District. This license expired on March 31, 2009. SFWPA has utilized FERC's Traditional Licensing Process since 2003. SFWPA filed an application for a new license on March 7, 2007 (SFWPA, 2021a). FERC issued its Final Environmental Impact Statement in June 2009 and subsequently requested Endangered Species Act (ESA) consultation with the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) regarding salmon living in the River. NOAA Fisheries issued an ESA Letter of Concurrence in 2016. The State Water Resources Control Board[6] issued its Section 401 Water Quality Certification for the Project in 2018. As of July 2022, the new FERC license is under review by the official entity and is awaiting approval (personal communication, R. Moseley, 7/11/22).

[6] Additional information regarding hydro relicensing status is available at this website: *https://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/southfeather_ferc2088.html*

Kelly Ridge Powerhouse Settlement Agreement

Since the construction of the Oroville Dam by DWR, the point of discharge for the Kelly Ridge Powerhouse has become the Thermalito Diversion Pool, a feature of the State Water Project, located downstream of Oroville Dam and upstream of the Feather River Fish Hatchery. SFWPA's water discharges into the Thermalito Diversion Pool have the potential to increase the water temperature in the Feather River and affect the ability of DWR to meet specific Feather River water temperature objectives stipulated in the March 2006 Settlement Agreement for the Licensing of the Oroville Facilities Project. To address this issue, SFWPA, DWR, and State Water Contractors, Inc. executed the Kelly Ridge Powerhouse Settlement Agreement on October 23, 2012. The Settlement Agreement includes several stipulations related to the communications and operation of SFWPA facilities (SWRCB, 2017).

Future Challenges

The hydroelectric power facilities could potentially face future operational and regulatory[7] challenges. For example, communities in California are occasionally opting for a Community Choice Aggregation program. SFWPA staff believe that a Community Choice Aggregation program could potentially have a negative economic impact due to the value of hydro energy on the open market, depending on future conditions (SFWPA, 2021a). Wildfires also pose a unique risk to hydroelectric facilities. For example, PG&E plans to shut energy provision down during times of high wildfire risk. This could potentially affect the SFWPA's hydro power program through financial impact due to lost hydro production. However, PG&E shutdowns are not expected to impact public water service because generator backups are in place to deliver water (SFWPA, 2021a). Long-term or extreme drought conditions also create challenging conditions for hydropower production across the Western United States. To cope with the most recent drought, the SFWPA re-balanced pre-curtailment diversions to storage in a manner that allows for the continued operation of all of its powerhouses. Another regulatory issue is dam safety. The California Water Code entrusts dam safety regulatory power to DWR, Division of Safety of Dams (DSOD). DSOD inspections of all nine Agency dams occurred on October 2019-2021. The Agency does not have plans to expand the power plant within the near-term future (Butte Co OEM and SFWPA LHMP, 2019).

#### *6.6.5.2 Solar Power*

The Miners Ranch Treatment Plant 566-kW Solar Energy System was installed in 2005 to defray utility costs to operate the treatment facility. The system produces solar-powered electricity through a photovoltaic array. Power performance capabilities are monitored in real-time, and monthly analysis is conducted. For the Calendar Year 2020, approximately 86 percent of power demand for the treatment plant operation was provided by on-site solar (SFWPA, UWMP, 2021g).

[7] Please note that the hydro-electric facilities are regulated by FERC. SFWPA does not interact with the California Public Utilities Commission.

### 6.6.6 Recreation Service

As part of the FERC license on the hydroelectric facilities, the South Feather Water and Power Agency has some responsibilities for recreation in the upper watershed landscape. Specifically, SFWPA operates the following:

- Little Grass Valley Reservoir;
- Sly Creek Boat Launch;
- Sly Creek Campground;
- Sly Creek Road; and
- Strawberry Campground.

Little Grass Valley Reservoir

The Little Grass Valley Reservoir is a lake that is operated for the SFWPA hydroelectric power generation. Little Grass Valley Reservoir is a 1,616 surface-acre lake, sitting at a 5,040-foot elevation. The USFS manages the recreational facilities around the lake. The facilities include a public hiking trail around the lake, three boat ramps, swimming at two day-use beaches, and camping at five developed campgrounds. The U.S. Forest Service currently manages the Little Grass Valley campgrounds. The five campgrounds are handled on a first come first serve basis, including the RV Camp, Little Beaver, Black Rock, Peninsula Tent, and Wyandotte campgrounds. The five campgrounds offer over 300 campsites and three paved launch ramps. The Little Grass Valley Reservoir Recreation Facility includes an amphitheater and fishing trail access for disabled persons. Fishing, swimming, picnicking, and hiking are popular recreational activities (SWRCB, 2017).

Sly Creek Campground, Boat Launch, and Road

This facility is situated on Sly Creek Reservoir, a 562 surface-acre lake, at a 3,500-foot elevation and surrounded by a forested watershed. The Sly Creek Campground consists of 23 campsites, operating on a first come first serve basis. The SFWPA operates and maintains the campground under close coordination with the Feather River Ranger District since the campground is located in the Plumas National Forest. As of April 2, 2021, this recreation site remains closed due to a Forest Closure Order in response to dangerous conditions related to recent wildfires. The campground will be closed until March 10, 2023. Site amenities include an accessible boat ramp, tent camping, trailer camping, picnic tables, toilets, drinking water, and parking. Fees are $20 per site per night. The regular open season is [10/7/19 - 5/22/20].? This campground does experience periods of heavy usage. Restrictions on usage include a 14-day maximum stay, and Off-Highway Vehicle (OHV) use is prohibited in the campground area. Water service includes potable water availability. Restroom service consists of Vault toilets. South Feather Water & Power operates the campground with Special Use Permit from the USFS.

Strawberry Campground

The Strawberry Campground contains 17 camping spaces, which are offered on a first come first serve basis. The SFWPA operates and maintains the campground under close coordination with the Feather River Ranger District since the campground is located in the Plumas National Forest. This campground is closed for the winter season and typically re-opens for the summer season. Reservations are not accepted at this facility. Area amenities include tent camping, trailer

camping, picnic tables, toilets, drinking water, and parking. Fees charged to campers are $20 per site. The busiest season is summer. Use Restrictions include a 14-day maximum stay. OHV use is prohibited in the campground area. Potable water is available. Restrooms consist of vault toilets. South Feather Water & Power operates the campground by Special Use Permit from the USFS.

## 6.7 Infrastructure and Public Facilities

Infrastructure development and maintenance is an important part of the service that the SFWPA provides. SFWPA has infrastructure and facilities associated with its drinking water, raw agricultural water, hydroelectric, solar electric, and recreational programs. The Agency's facilities include several canals, ditches, reservoirs, water treatment plants, and various offices and warehouses. (LAFCO/Kleinschmidt, 2006). A summary of the critical infrastructure and public facilities managed by the SFWPA is provided in Table 6-22 below.

Table 6-22: Critical Facilities, Infrastructure, and Other Agency Assets - SFWPA

| Name of Asset | Facility Type | Replacement Value | Hazard Information |
|---|---|---|---|
| Power Generation and Distribution | Buildings & Equipment | $110,964,090 | Fire, Flood, Drought, Landslide, Dam Failure |
| Water Treatment & Distribution | System Components | $13,316,226 | Earthquake, Dam Failure |
| Communications | Buildings & Components | $4,189,310 | Fire |
| Water Transmission | System Components | $337,852 | Fire, Flood, Earthquake |
| Water Storage Infrastructure | Various infrastructure | $3,831,012 | Fire, Flood, Earthquake, Dam Failure |
| District Business & Compliance | Buildings & Historic Files | $9,731,468 | Fire |
| **Total** | | **$142,369,958** | |
| Source: Butte County OEM and SFWPA, LHMP, 2019 | | | |

Land

SFWPA owns 56 parcels covering 1,471 acres (SFWPA, 2021a). Additionally, SFWPA has easements and permits allowing it to occupy land in the Plumas National Forest.

Administrative Facilities

The Agency's offices are located in the City of Oroville on Oro Quincy Highway and provide room for staff and administrative functions. These facilities house a laboratory for water quality testing.

The SWRCB accredits this laboratory through Certificate No. 1545, dated June 2020. SFWPA also maintains several general maintenance facilities.

### 6.7.1 Water Facilities

Water Conveyance Facilities

The SFWPA's 2004 report entitled "Water System Conveyance Evaluation" provides details and analysis of the Agency's water conveyance system and facilities. SFWPA maintains over 112 miles of irrigation canals, ditches, and pipelines that originally were intended for mining purposes. Historically, ditches may have lost as much as 90 percent of the water in the system before reaching a paying customer. However, the Agency has taken a programmatic approach to improve the irrigation distribution system and implement prioritized canal lining projects over the past decade. Many sections of the canals have been lined with gunite to remedy more severe leakage problems (LAFCO/Kleinschmidt, 2006). Since the mid-1990s, the agency has been implementing its Capital Improvement Plan to replace aging water conveyance infrastructure.

Miners Ranch Canal

The Miners Ranch Canal is the water conveyance facility connecting the penstock to the Kelly Ridge Hydroelectric Power House. The Miners Ranch Canal also connects to the raw water storage area at the Miners Ranch Treatment Plant for treatment and distribution to municipal water customers. The Miners Ranch Canal is seven miles long and is constructed into the hillside, where concrete panels interlock at the floor and up the other side to create a flume-like structure. The Canal's concreate panels are 20 feet long, and thickness varies from 8 inches at the bottom to 4 inches at the top. The original construction was done over 100 years ago, and the structure is emptied once a year for preventative maintenance. Flow gauges located along the canal can send a notification to staff when water or environmental conditions change that may necessitate changes to the Canal's operation. In addition, an access road is used to monitor and make repairs when necessary to the Canal. This road is constructed on an easement provided by California DWR as a result of the Lake Oroville water project (Butte Co., OEM, LHMP, 2019).

Raw Water Conveyance

Three linear ditches/canals move raw water to agricultural customers for irrigation purposes, including the Forbestown Ditch, the Bangor Canal, and the Palermo Canal.

Tunnel

SFWPA maintains a tunnel through the Gibsonville Ridge to move water from the upper portion of Slate Creek (a tributary of the North Fork Yuba River) to SFWPA facilities in the South Fork Feather River watershed (SFWPA, UWMPA, 2021g).

Water Storage

SFWPA retains an extensive reservoir system that stores both raw untreated water upstream and treated water. In the upper watershed, SFWPA's hydroelectric facilities utilize dams that create reservoirs that store a raw water supply. The five raw water reservoirs located in the upper

watershed include the Little Grass Valley Reservoir, Sly Creek Reservoir, Lost Creek Reservoir, Ponderosa Reservoir, and Miners Ranch Reservoir; with a combined storage of 164,577 acre-feet (AF) as listed in Table 6-23 below (SFWPA, UWMP, 2021g).

Table 6-23: Storage Reservoirs

| Reservoir and Year Constructed | Maximum Acre Feet Storage Capacity | Height (in feet) | Type of Dam | Current Storage (Acre Feet) |
|---|---|---|---|---|
| Little Grass Valley, 1962 | 89,804 | 202 | Earth | 88,000 |
| Sly Creek, 1962 | 64,338 | 289 | Earth | 60,600 |
| Lost Creek, 1924 | 5,780 | 112 | Concrete | 4,000 |
| Ponderosa, 1962 | 4,750 | 160 | Earth | 3,540 |
| Miners Ranch, 1962 | 896 | 57 | Earth | 680 |
| *Data Source: Stiffel, 2016* | | | | |

Treated water is stored in four water tanks with a combined capacity of 5.2 MG (million gallons) LAFCO/Kleinschmidt, 2006). In 2015, a 2-million-gallon concrete Clearwell tank was built to increase treated water storage capacity near the Miners WTP.

## 6.7.2 Water Treatment Facilities

Two water treatment plants (Miners and Bangor) are part of SFWPA's physical water system. SFWPA's primary water treatment plant is located at the Miners Ranch Reservoir. The Miners Ranch Treatment Plant is designated as Water System No. CA00410006. Originally completed in 1981, with significant upgrades completed in 2018, the treatment plant has the capacity to treat 21 million gallons per day (MGD) (SFWPA, UWMP, 2021g). These upgrades also included replacing one raw water pump, installing a new jet diffusion pump mixing station, installing new absorption clarifiers, and expanding filter capacity. Miners Ranch Water Treatment Plant currently serves 6,909 water connections, and this includes 6,714 residential accounts and 194 commercial accounts (State Water Board, 2021). Miners Ranch Water Treatment Plant is located at 234 Kelly Ridge Road, Oroville, CA 95965. (Refer to Figures 6-10 and 6-11, and Table 6-24 for details.) The water treatment process utilizes a combination of filtration and chlorination to remove/mitigate contaminants. Following the treatment process, water is distributed through SFWPA's pipelines to one of its four storage facilities and from there to consumption by SFWPA's customers. Miners Ranch has a peak design capacity of 21 MGD. The plant's current maximum demand equals 55% of the peak design capacity, and the average demand is approximately 35% (SFWPA, 2021a). Since maximum demand is significantly less than peak design capacity, it indicates there is sufficient capacity remaining in the system to accommodate projected future growth. The recently completed improvements to the Miners Ranch Treatment Plant increased capacity by an additional 50% and are sized to accommodate projected increases in water demand through the year 2046 (Stiffel, 2016).

The State Water Resources Control Board conducts regular inspections of the Miners Ranch Treatment Plant and issues an Inspection Report. On July 29, 2020, James Reade of SWRCB

inspected the South Feather Water and Power Agency's Miners Ranch water system. The water system was found to be well-maintained and operated. No deficiencies were noted during the inspection process (SWRCB, 2020).

The Agency has compiled an Emergency Response Plan (ERP) for the Miners Ranch Treatment Plant in conformance with America's Water Infrastructure Act of 2018, Section 2013(b). SFWPA obtained approval and adoption by the Board of Directors and submitted the plan to the Environmental Protection Agency as required. The current ERP is an internal document containing critical infrastructure information. The Board of Directors has approved the ERP contents through the Policy and Contracts Committee, and the Agency has self-certified the contents with the Environmental Protection Agency.


Figure 6-11: SFWPA Facilities

| Table 6-24: Miners Ranch Water Treatment Plant Details | |
|---|---|
| Name: | Miners Ranch Water Treatment Plant |
| Address: | 234 Kelly Ridge Road, Oroville, CA 95966 |
| FIPS_Code: | 06007 |
| PGM_SYS_ID: | CA0083143 |
| Registry_ID: | 110000518869 |
| Data Source: | *https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110000518869* |

The Agency has operated the Bangor Water Treatment Plant since 1989. The Bangor Water Treatment Plant[8] is designated as Water System No. CA0410012. Its Waste Discharger

[8] Additional information on the Bangor Water Treatment Plant can be found here:

Identification (WDID) number is 5A040119001. The Bangor Water Treatment Plant served an average of 21 customer accounts during the year 2018 and served a total population of approximately 73 persons. The Bangor Water Treatment plant is located at 7454 Oro-Bangor Hwy. Oroville, CA 95965. The water treatment process utilizes a combination of filtration and chlorination to remove/mitigate contaminants. Following the treatment process, water is distributed for consumption by SFWPA's customers. The Bangor Water Treatment Plant is currently operating at approximately 85 percent capacity (Stiffel, 2016).

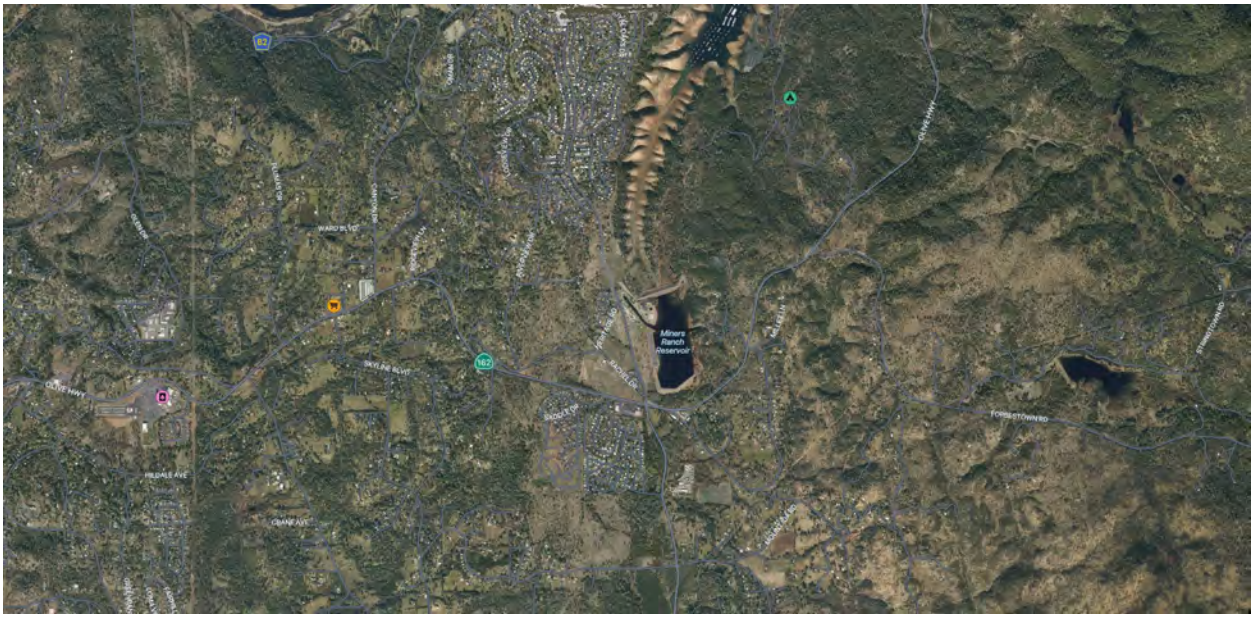



*Figure 6-12: Aerial Image of Miners Ranch Reservoir*

Infrastructure Inefficiency

The SFWPA Miners Ranch Water Treatment Plant is one of three water treatment plants that currently serve the Oroville region. Each of the three water treatment plants (SFWPA, TWSD, and Cal Water) require individualized treatment, operations, maintenance, capital improvements, and regulatory oversight. Given that Oroville (and its environs) is a small to medium city (in relation to population size), having three water treatment plants isn't the most efficient approach. If, in the future, an opportunity to reduce the number of treatment plants were to arise, it is possible that the improved efficiency could be beneficial to the community. LAFCO's 2018 Oroville Region Water Service Study recommended that the three entities openly and honestly consider the potential for treatment plant consolidation in the future. It should be noted, however, that the actual potential for this will be limited due to the very different ownership models of the entities. The Authors of this MSR concur with this recommendation of LAFCO's 2018 Oroville Region Water Service Study.

*https://sdwis.waterboards.ca.gov/PDWW/JSP/WaterSystemDetail.jsp?tinwsys_is_number=103&tinwsys_st_code=CA*

Maintenance

The Agency regularly undertakes dredging projects to remove sediment and debris from specific locations throughout the entire water conveyance infrastructure. Years of sediment and debris build-up at varying spots throughout the entire project have resulted in impaired water flow (Butte Co. OEM, LHMP, 2019). For example, if sediment were allowed to fill up the Miners Ranch Reservoir, it would reduce water storage capacity, and this capacity is necessary to ensure the treatment plant receives an adequate supply.

Another example of infrastructure improvement is the Lost Creek Dam Crest Modification Project in Strawberry Valley, CA. The construction work included increasing the dam spillway openings, raising the crest outside the spill section, reinforcing the downstream face, protecting the plunge pool area to prevent scouring of the foundation material, and replacing the dam crossing road. The rehabilitated dam is estimated to withstand potential floods and earthquakes for another century. Work began in the spring of 2017 and was completed in the fall of 2018 through a contract awarded to Granite Construction Incorporated (NYSE:GVA) for $20 million.

#### *6.7.2.3 Water Facilities to the SOI*

The SOI is currently unincorporated and located within the jurisdiction of Butte County. Parcels located in the SOI do not receive municipal (treated) water, and therefore municipal water facilities are not located in the SOI. However, should a parcel (or parcels) be annexed to the SFWPA's service area, the extension of SFWPA water service to these parcels could be under consideration to provide drinking water (or other raw water supply) and associated facilities.

## 6.7.3: Hydro-Electric Facilities

The South Feather Hydro-Electric Project consists of four hydroelectric components:

1. Sly Creek;
2. Woodleaf;
3. Forbestown; and
4. Kelly Ridge.

Collectively, the Project consists of five dams and five reservoirs (Little Grass Valley, Sly Creek, Lost Creek, Forbestown, and Ponderosa), four powerhouses (Sly Creek, Woodleaf, Forbestown, and Kelly Ridge), three diversion dams (South Fork, Forbestown, and Kelly Ridge), six conduit tunnels, and associated equipment and transmission facilities (SWRCB, 2017). An open conduit includes elevated flume and siphon sections (SFWPA, WSCP, 2021e). [Please note that SFWPA also owns two additional dams (Lake Wyandotte and Miner's Ranch), however, these two dams are not part of the power facilities]. Little Grass Valley Dam is located at about 5,050 feet above sea level, and this is the highest elevation facility. The canals and conduits total approximately 21 miles in length. There are three hydroelectric power plants (Sly Creek, Woodleaf, and Forbestown) and 21 miles of road (SFWPA, UWMP, 2021g). Kelley Ridge Powerhouse, the lowest elevation facility, is located about 225 feet above sea level. Water captured in the reservoirs and utilized by the hydroelectric facilities but not consumed by the customers of these two organizations is released to the State Water Project's Feather River facilities (FERC No.

2100) at either Lake Oroville or Thermalito Diversion Dam (SFWPA, WSCP, 2021e). Compliance with the Federal Energy Regulatory Commission (FERC) and California Division of Safety of Dams (DSOD) requirements is an ongoing endeavor for SFWPA. Annual inspections and safety practices are conducted to ensure the safety and stability of the dams.

The SFWPA's South Feather Hydroelectric Project is FERC Project No. 2088, located on the South Fork Feather River (SFFR) and Lost and Slate Creeks in Butte, Yuba, and Plumas Counties, California. The 127.2-megawatt (MW) Project includes four hydroelectric developments with associated infrastructure and facilities (SWRCB, 2017).

Sly Creek

The Little Grass Valley Dam on SFFR forms the Little Grass Valley Reservoir. South Fork Dam on SFFR has South Fork Tunnel that diverts water from SFFR into Sly Creek Reservoir. Slate Creek Dam on Slate Creek (North Yuba River) has Slate Creek Tunnel that diverts water into Sly Creek Reservoir. Sly Creek Dam on Lost Creek forms Sly Creek Reservoir, which has Sly Creek Penstock that delivers water into Sly Creek Powerhouse/Switchyard (13.2 MW). Both Reservoirs have recreation facilities.

Woodleaf

Lost Creek Dam on Lost Creek forms Lost Creek Reservoir. Woodleaf Tunnel delivers water from Lost Creek Reservoir into Woodleaf Penstock, which delivers water into Woodleaf Powerhouse/Switchyard (60 MW).

Forbestown

Forbestown Dam on SFFR forms Forbestown Impoundment. Forbestown Tunnel diverts water from Forbestown Impoundment into Forbestown Penstock and into Forbestown Powerhouse/Switchyard (41 MW).

Kelly Ridge

Ponderosa Dam on SFFR forms Ponderosa Reservoir (spills into SFFR Arm of Lake Oroville of P-2100 Project). Ponderosa Tunnel diverts water from Ponderosa Reservoir into Miners Ranch Canal. Miners Ranch Canal has siphons across McCabe and Powell Creeks of Lake Oroville, delivers water from Ponderosa Tunnel into Miners Ranch Tunnel, and delivers water into Miners Ranch Reservoir. Miners Ranch Dam on Miners Ranch Canal forms Miners Ranch Reservoir. The Kelly Ridge Tunnel diverts water from Miners Ranch Reservoir into Kelly Ridge Penstock and on into Kelly Ridge Powerhouse/Switchyard. This 13 MW powerhouse discharges just downstream of Oroville Dam (i.e., near the Thermalito Diversion Pool).

## 6.7.4: Park and Recreation Facilities

SFWPA manages several reservoirs in the upper watershed and associated recreational facilities as described above in Section 6.7.3. Some of the facilities are managed by the US Forest Service. SFWPA manages other recreational facilities under a permit from the US Forest Service. Due to the geographic isolation of the recreation facilities, the only readily available cost avoidance or facility-sharing opportunities open to the Agency is a partnership with the US Forest Service. This

partnership has been ongoing for the past few decades and is expected to continue into the future successfully.

## 6.7.5. Infrastructure Needs and Deficiencies

The American Society of Civil Engineers, Region 9 has several recommended remedies for California's aging drinking water infrastructure as outlined in Appendix K and as summarized below:

- Address Aging Infrastructure Needs.
- Continue To Make Conservation A California Way Of Life.
- Increase Regional Self Reliance And Integrated Water Management Across All Levels Of Government.
- Achieve The Co-Equal Goals For The Delta.
- Manage And Prepare For Dry Periods.

Infrastructure needs and deficiencies are a common feature of large facilities, such as a water district. To address its specific needs, ideally, a water district would prepare a capital improvement plan. SFWPA has a 5-year strategic plan which includes a capital improvement plan. The strategic plan and CIP were presented at the May 2022 SFWPA board meeting (personal communication, R. Moseley, 7/11/22).

The SFWPA does have an Equipment Maintenance Summary for the Miners Ranch Water Treatment Plant in an Excel format. This Equipment Maintenance Summary lists the tasks associated with regular maintenance of the Treatment Plant features, including the Decanter, Sludge Collection, Vertical Turbine Pumps, Vertical Inline Pumps, Polymer Dilution System, Clarifier, Tank Mixer, Progressive Cavity Pump, Metering Pump, Blower, , Troughs, Gas Scrubber, Conveyor, Manual Plug Valve, PRV, Manual Butterfly Valve, Check Valve, ARV, EMO Butterfly Valve, EMO Plug Valve, Retrofit Actuator, Electric Actuator, MCC, and Instrumentation.

Hydroelectric facilities, such as powerhouses, need continual maintenance. Therefore, SFWPA staff periodically updates the Board of Directors about maintenance activities on the hydroelectric facilities.

Infrastructure needs or deficiencies (i.e., pipelines, hydrants, tanks, reservoirs, etc.) are described by SFWPA staff as aging pipeline infrastructure and the need for additional fire hydrants (SFWPA, 2021a). SFWPA's pipelines are likely constructed from a range of materials such as metal, cement, or similar materials. Plastic pipelines are commonly used by water districts in California to transport water to customers, as described in the footnote[9] below. Data about any use of plastic pipelines by SFWPA was not readily available for this MSR.

[9] Plastic pipes are often less expensive to install than metal alternatives, which hold up against high heat but are vulnerable to corrosion. A new study has shown that pipelines constructed of plastic, including high-density polyethylene (HDPE), crosslinked polyethylene (PEX), polyvinyl chloride (PVC) and chlorinated polyvinylchloride (CPVC) experience problems during and after fires and associated high heat exposure. Specifically, fire and heat-damaged plastics can directly leach dozens of toxic chemicals, including carcinogens such as benzene, into local water systems. The Town of Paradise experienced this

#### *6.7.5.1 Determinations for Infrastructure and Public Facilities*

Based on the information included in Section 6.7 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 6-25 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution the Commission formally adopts during a public meeting.

Table 6-25: MSR DETERMINATION: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES

| Number | Indicator | Determination |
|---|---|---|
| SFWPA-PUB-1 | Has the Agency been diligent in developing plans to accommodate the infrastructure and service needs of current and future constituents? Regularly reviews and updates its service plans to help ensure that infrastructure needs and deficiencies are addressed in a timely manner. | SFWPA has a 5-year strategic plan which includes a capital improvement plan. The strategic plan and CIP were presented at the May 2022 SFWPA board meeting. Implementation of these plans in the future will help ensure that infrastructure needs and deficiencies are addressed in a timely manner. |
| SFWPA-PUB-2 | Does the District provide sufficient services to meet current and future demands with: 1) water supply in relation to water demand, 2) hydro-electric supply in relation to demand, and 3) recreation services? | SFWPA provides sufficient services to meet current and future demand as follows:<br>1) Based on the water supply and water demand assessments conducted by the Agency, SFWPA believes that its sources of developed water supply will continue to more than adequately meet the current and foreseeable demand through 2045.<br>2) SFWPA generates electricity using hydroelectric and solar electric facilities. The hydro-electric power is sold wholesale to the Northern California Power Agency. Although a prolonged drought can decrease power production, the infrastructure functions as designed, and power sales usually contribute significant funding to the SFWPA. |

issue after the 2018 Camp Fire. A community can stop water contamination from spreading if damaged pipes can be quickly isolated. Without isolation, the contaminated water may move to other parts of the water system, across town or within a building, causing further contamination. Water districts can install network isolation valves and backflow prevention devices, to prevent contaminated water moving from a damaged building into the utility pipe network (Isaacson et. al., 2021).

| | | |
|---|---|---|
| | | (continued)<br>3) SFWPA provides recreational services, including camping, hiking, boating, and fishing, along its reservoirs located in the upper watershed. |
| SFWPA-PUB-3 | Does the District have a reliable, sustainable source of water? Can the District and its partners develop additional local and regional water sources through wastewater reclamation, stormwater capture, and/or environmentally sustainable desalination projects? | SFWPA's water supply is derived from surface water diverted from the upper watershed of the South Fork of the Feather River and the upper portion of the Slate Creek watershed. SFWPA prepared an Urban Water Management Plan in 2021 and a 2020 Water Shortage Contingency Plan. Based on the data described in these plans and based on historic weather patterns, SFWPA believes the local watershed is a reliable, sustainable source of water. SFWPA has not identified a need to study the future potential for developing additional local and regional water sources (such as wastewater reclamation, stormwater capture, and/or environmentally sustainable desalination projects). However, if a need for additional sources arises in the future, these and other options could be studied. |
| SFWPA-PUB-4 | Is there duplicate infrastructure by other agencies nearby? | Several nearby agencies offer drinking water services similar to that of the SFWPA (such as TWSD and the private California Water Company). The North Yuba Water District provides raw water to agricultural customers in Yuba County. However, within the SFWPA's boundary area, the SFWPA is the only water service provider (with the small exception of a geographic overlap with the service area of the private California Water Company).<br><br>If, in the future, an opportunity to reduce the number of treatment plants were to arise, it is possible that the improved efficiency could be beneficial to the community. LAFCO's 2018 Oroville Region Water Service Study recommended that the three entities openly and honestly consider the potential for treatment plant consolidation, in the future. It should be noted however, that the actual potential for this will be limited due to the very different ownership models of the entities. The Authors of this MSR concur with this recommendation of LAFCO's 2018 Oroville Region Water Service Study. |

| | | |
|---|---|---|
| SFWPA-PUB-5 | The Agency has preventative maintenance measures and has planned for the replacement of aging infrastructure. | The Agency has conducted preventative maintenance on its infrastructure. Additionally, to guide future preventative maintenance, SFWPA has a 5-year strategic plan which includes a capital improvement plan. The strategic plan and CIP were presented at the May 2022 SFWPA board meeting.<br><br>Additionally, the Agency's General Fund Financial Projections show that it plans to spend $750,000 per year through the year 2026 on Capitol Expenses. The Agency's Joint Facilities Operating Fund Projections show that it plans to spend $3,00,000 annually through the year 2026 on Capitol Expenses. SFWPA staff have identified infrastructure needs and deficiencies as aging pipeline infrastructure and the need for additional fire hydrants. |
| SFWPA-PUB-6 | Evaluation of agency's capacity to assist with or assume services provided by other agencies. | The SFWPA has demonstrated capacity to assist with or assume services provided by other agencies. For example, the SFWPA has a solid financial basis due to the revenue generated by the hydroelectric facilities. However, this power revenue is not guaranteed every year since drought decreases generation capacity. SFWPA has retained staff engineers and other professionals necessary to serve leadership roles, and these skilled staff persons have the ability to assist with or assume services provided by other agencies. Additionally, SFWPA has close collaborative relationships with nearby independent government agencies, as demonstrated through its collaboration with the U.S. Forest Service. SFWPA successfully communicates with nearby local agencies such as the City of Oroville, Butte County, and TWSD. SFWPA's leadership capacity has recently improved by resolving outstanding litigation and developing clear capital improvement plans. |

## 6.8 Financial Ability To Provide Services

### *6.8.1 Introduction to Financial Metrics*

LAFCO is required by the CKH Act to make a determination regarding the financial ability of the South Feather Water and Power Agency to provide public services. This Section provides an overview of financial health and provides a context for LAFCO's financial determinations. The audited Comprehensive Annual Financial Reports (CAFR) from the District for the fiscal years 2018, 2019, and 2020 are the primary source of information. Based on recent recommendations from the Little Hoover Commission, this determination on the financial ability to provide services

is based upon several key financial performance indicators that LAFCO's throughout the State consider in MSRs.

In California, special districts are classified as enterprise or non-enterprise districts based on their source of revenue:

- Enterprise Districts: The funding of district operations is via fees for public service. Under this model, the customers that utilize goods or services such as drinking water, raw water, sewage disposal, or electricity pay a fee. Rates are set by a governing board, and there is a nexus (direct connection) between the costs of providing services and the rates customers pay. Sometimes an enterprise district may also receive property taxes and other revenues, which comprise a portion of its budget.
- Non-enterprise Districts: Districts that receive property taxes are typically classified as non-enterprise districts. Services that indirectly benefit the entire community, such as police or fire protection, community improvements, recreation and library services, reclamation and flood improvements, and cemetery districts, are often funded through property taxes.

SFWPA primarily functions as an enterprise district, charging fees for water supply, water treatment, and distribution services. However, there are some unique circumstances in that SFWPA does collect property taxes, and the revenue from hydroelectric power generation is utilized to subsidize the price of water for retail customers. Together, the property taxes and the hydro revenue mean that water customers do not pay the full cost of water delivery.

The District's annual financial statements describe two designated funds: the General Fund; and the Joint Facilities Operating Fund.

In April 1995, the Agency approved the formation of the Oroville-Wyandotte Irrigation District Financing Corporation (the Corporation). This Corporation is a nonprofit public benefit corporation organized under the Nonprofit Public Benefit Corporation Law (commencing at Section 5110 of the California Corporations Code). This type of relationship is commonly referred to as a blended component unit. The purpose of this Corporation is to provide assistance to the SFWPA in the financing, acquiring, constructing, rehabilitating, or financing various public facilities; and land and equipment for the use, benefit, and enjoyment of the public. Although the Agency and Corporation are legally separate entities, the Agency exercises oversight responsibility over the Corporation. The Corporation is reported as if it were part of the primary government because it shares a common Board of Directors with the Agency, and its sole purpose is to provide financing to the Agency under the debt issuance documents of the Agency. Therefore, debt issued by the Corporation is reflected as the debt of the Agency in these financial statements. The Corporation has no other transactions and does not issue separate financial statements (SFWPA, 2018). As of December 31, 2020, the outstanding principal balance due on the 2016 Certificates of Participation associated with the Miners Ranch Treatment Plant Solar Photovoltaic Project and Office Remodel/Addition Project was $25,010,000, with a final maturity of April 1, 2046. The Financing Corporation has no other debt at this time.

### *6.8.2 Financial Policies & Transparency*

The District prepares an annual budget and a schedule of fees, typically approved by the Board of Directors at their December public meeting. The Agency's budget includes both the water and hydroelectric operations and finances. The fiscal year (FY) runs concurrently with the calendar year, beginning on January 1 and ending on December 31. The current and past budgets going back to 2014 are available on the District's website at <*https://southfeather.com/publications/financial-reports/*>.

Every year the District publishes an audited Annual Financial Statement (AFS). The California Government Code requires an annual independent audit of the District's financial records by a certified public accountant who serves as an independent auditor. The current Audited Financial Statement and past financial statements to 2004 are also available to the public via the District's website. There are four types of audit opinions: unqualified, qualified, adverse, and disclaimer. An unqualified opinion is a 'clean' opinion, meaning the entity passed its audit. A qualified opinion means the entity passed the audit with notable exceptions. A disclaimer or adverse opinion essentially means the entity flunked its audit. The independent audit on FY 2020 was performed by Richardson & Company (SFWPA, 2021h). The auditors issued an "unqualified" opinion as stated: "In our opinion, the financial statements . . . present fairly, in all material respects, the financial position of the Agency, as of December 31, 2020, and 2019 and the changes in financial position and cash flows thereof for the years then ended in conformity with accounting principles generally accepted in the United States of America. . . "(SFWPA, 2021h).

A District's financial policies function as business rules that ensure an agency's transactions are recorded consistently and correctly. Therefore, it is vital for a District's financial policies to be made available to the public. SFWPA's financial policies are described in the AFS for 2019, and several financial policies are listed below:

- Basis of Presentation: The Agency's resources are allocated to and accounted for in these basic financial statements as an enterprise fund type of the proprietary fund group.
- Basis of Accounting: The accounting and financial reporting treatment applied to a fund is determined by its measurement focus. The enterprise fund type is accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets, deferred outflows, liabilities, and deferred inflows associated with the fund's operation are included in the statement of net position.
- Under the accrual basis of accounting, revenues are recognized when earned, and expenses are recorded when the liability is incurred or the economic asset is used.
- Cash and Cash Equivalents: For the purposes of the Statement of Cash Flows, the Agency's cash and cash equivalents include restricted and unrestricted cash on hand, bank deposits, and short-term investments with original maturities of three months or less from the date of acquisition, including investments in the California Local Agency Investment Fund (LAIF).
- The Agency has adopted a formal investment policy as required by Section 53600et seq., of the California Government Code. The Agency Treasurer is responsible for selecting depositories and investing idle funds according to the adopted investment policy.

- Capital Assets: Capital assets, which include property, plant, equipment, and infrastructure assets, are reported on the Statement of Net Position.
- Long-Term Liabilities: Long-term liabilities and other long-term obligations are reported on the Statement of Net Position. Initial issue bond premiums and discounts are deferred and amortized over the life of the bonds using the straight-line method.
- Interfund Transactions: Transactions between combining units of the Agency are recorded as inter-fund transfers on the Combining Schedule of Revenues, Expenses, and Changes in Net Position. The unpaid balances at year-end, as a result of such transactions, are shown as due to and due from other funds. These amounts are eliminated for reporting in the enterprise fund financial statements.
  (Data Source: SFWPA AFS, 2020).

In addition to the accounting policies listed in its AFS, the SFWPA also has an adopted set of Rules and Regulations, most recently updated in August 2021. The Rules and Regulations list rules related to charges and fees, and several are summarized below:

- Annexation Processing Fee: In addition to fees levied by the County Clerk, LAFCo, State Board of Equalization, and any other public agency having jurisdiction over the annexation approval process, SFWPA shall require payment by the applicant of a Processing Fee prior to engaging its annexation-processing consultant.
- Financial Responsibility for Cost of Extending Mains: It is the policy of the Agency to allow reasonable extensions of its facilities for a growing community, provided that such extensions do not place an unfair burden on property owners already receiving service. All costs associated with the extension of Agency facilities, together with the installation of private service lines from said facilities, shall be the responsibility of the owner(s) of the parcel(s) to be served or the developer of a project to be served.
- Inspection of Construction Fee: The Agency's engineer or their agent(s) shall inspect the construction of the project's domestic water system to assure that the works are installed in accordance with the approved plans and specifications. Said inspection shall be funded by a Plan Check Fee and Inspection Fee paid by the developer. Construction of the water system shall not commence until said fee is paid.
- Payment of Bills: Bills are due and payable on the date they are mailed and are delinquent ten (10) days thereafter. A delinquency penalty charge as determined by the Board of Directors and as shown in the schedule of Fees and Charges.
  *Data Source: SFWPA, 2021i*

The Agency has a published policy for reserve funds, and the requirements are documented in the 2005 Agreement between SFWPA and NYWD (personal communication, R. Moseley, 7/11/22).

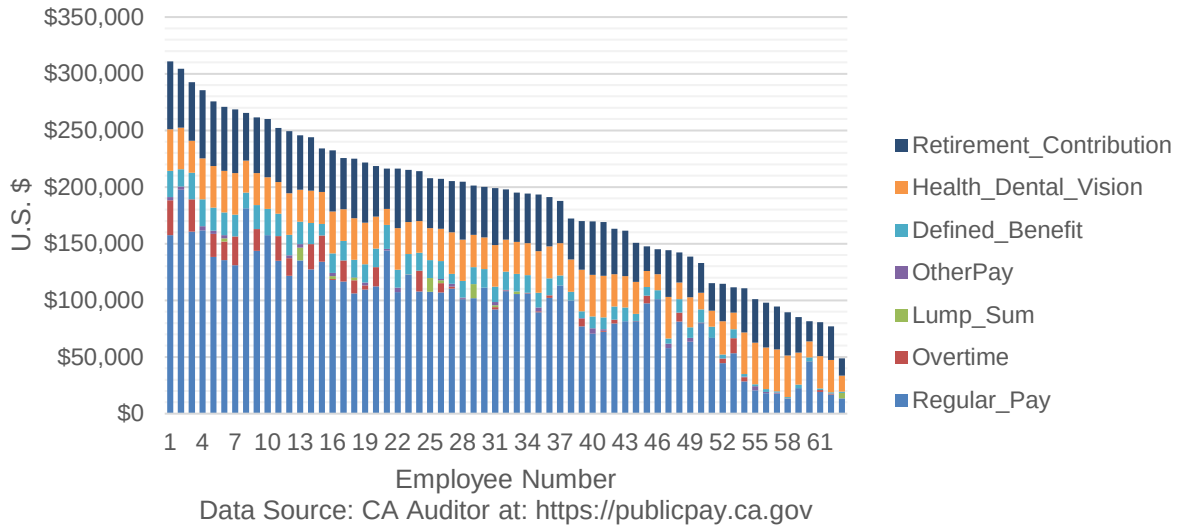
### Data Transparency

Financial data transparency promotes accountability and provides information to citizens about what their local government is doing. Transparency allows residents to stay informed and learn about local government revenue, spending, and debt. The Finance Director makes regular reports

to the Board of Directors regarding fund balance etc., and this information is available to the public via the public meeting agenda packet.

Transparency with salary data is also an important attribute for special districts in California. The South Feather Water and Power Agency provides competitive compensation and a benefits package to full-time, regular employees, as shown in Figure 6-13 below. The employee wage scale is available on the SFWPA website. Additionally, the South Feather Water and Power Agency forwards reports to the California State Controller for Government Compensation in California per Government Code Section 53891 and to the State Auditor. SFWPA has a total of 68 employees and paid Total Wages of $6,555,602 and Total Retirement & Health Contribution of $2,643,163 in the year 2020 (CA Auditor, 2021). SFWPA compensation data is reported to the California Auditor and is shown in Figure 6-13 below.

Figure 6-13: SFWPA Employee Compensation, 2020




Data Source: CA Auditor at: https://publicpay.ca.gov

The determinations for SFWPA's financial policies and fiscal transparency are listed in Table 6-33.

### *6.8.3 Revenues, Expenditures, and Net Position*

#### Revenues

SFWPA has two basic types of revenue:

- Operating revenues consisting primarily of charges for services; and
- Non-operating revenues and expenses related to financing and investing-type activities.

The District has multiple sources of revenue, including sales to customers, interdepartmental sales, standby fees, other investment income, and gain on disposition of assets. In 2020

SFWPA's total revenue[10] was $17.4 million, and most (69 percent) of this revenue resulted from the sale of electricity from the hydropower plants, as shown in Figure 6-14 below.

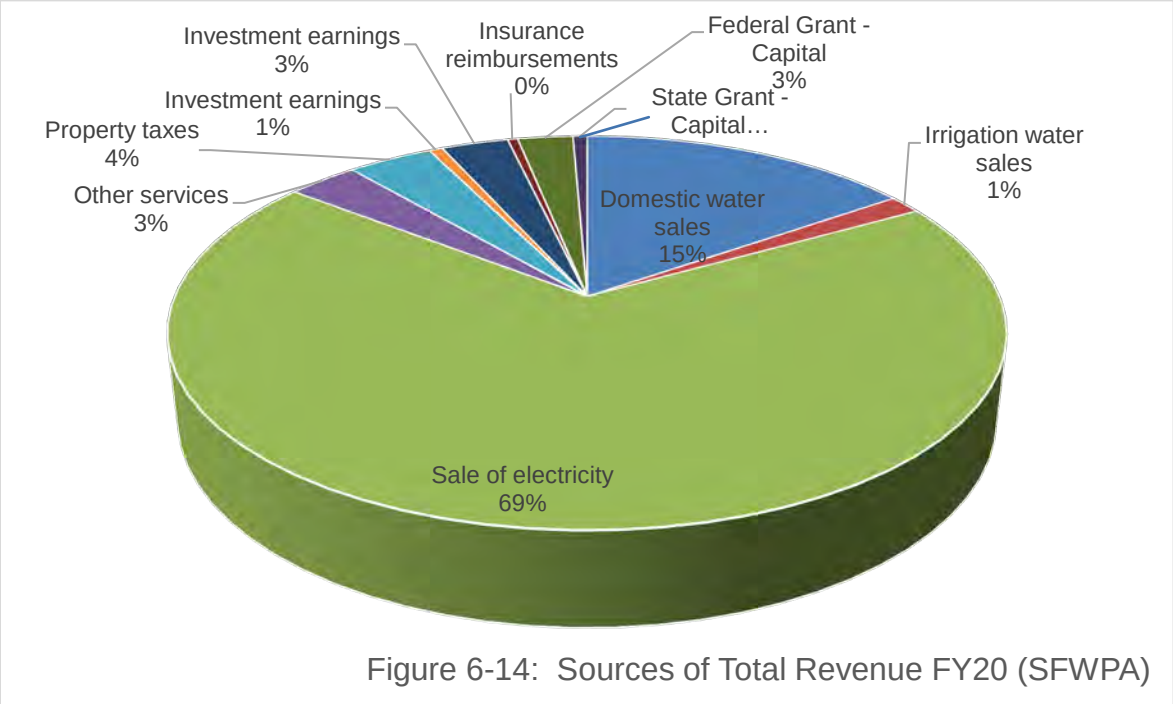



Figure 6-14: Sources of Total Revenue FY20 (SFWPA)

Operating revenues consist of domestic and irrigation water sales, generation of hydroelectric power, water transfer sales, customer services, and installations. Operating revenues were $15,466,177 in 2020 and $24,949,202 in 2019. In 2018, operating revenue was $18,088,788. Non-operating revenues come from property taxes, investment earnings, insurance refunds, and any gains or losses on the sale or disposal of an asset. Non-operating revenues account for $1,297,666 (or 7%), $2,128,205 (or 8%), and $5,100,548 (or 20%) of total revenue in 2020, 2019, and 2018 respectively. Total revenue is the sum of operating and non-operating revenue, and it declined by $9,877,830 (or 36%) between 2020 and 2019. This decline was due to less electricity sales because of the drought in 2020 (as compared with water availability in prior years). Total revenue increased by $1,260,527 (or 5%) between 2019 and 2018 due to unusual hydropower generation pricing in February and March, and wetter than average winter storms in 2019 (SFWPA, AFS, 2021h). With a total revenue of $17,391,542 in 2020 and a boundary area of 33,718 acres, the revenue generated per acre of boundary land is $516.

Property tax revenue totaled $681,269 in 2020. Since there are 69,500 water connections in SFWPA, the tax revenue per water connection ratio can be calculated as 9.8, meaning that each water connection paid an average of $9.80 in property tax for the year 2020.

[10] The 2021 annual financial statement will be presented at the July 26, 2022 SFWPA board meeting.

## Expenses

In FY 2020, total expenses (including both operating and non-operating) were $21 million. The largest expense was water plant operations and maintenance at $6.9 million (33%), and the second-largest expense was depreciation at $3.88 million (18%), as detailed in Figures 6-15 and 6-16 below.

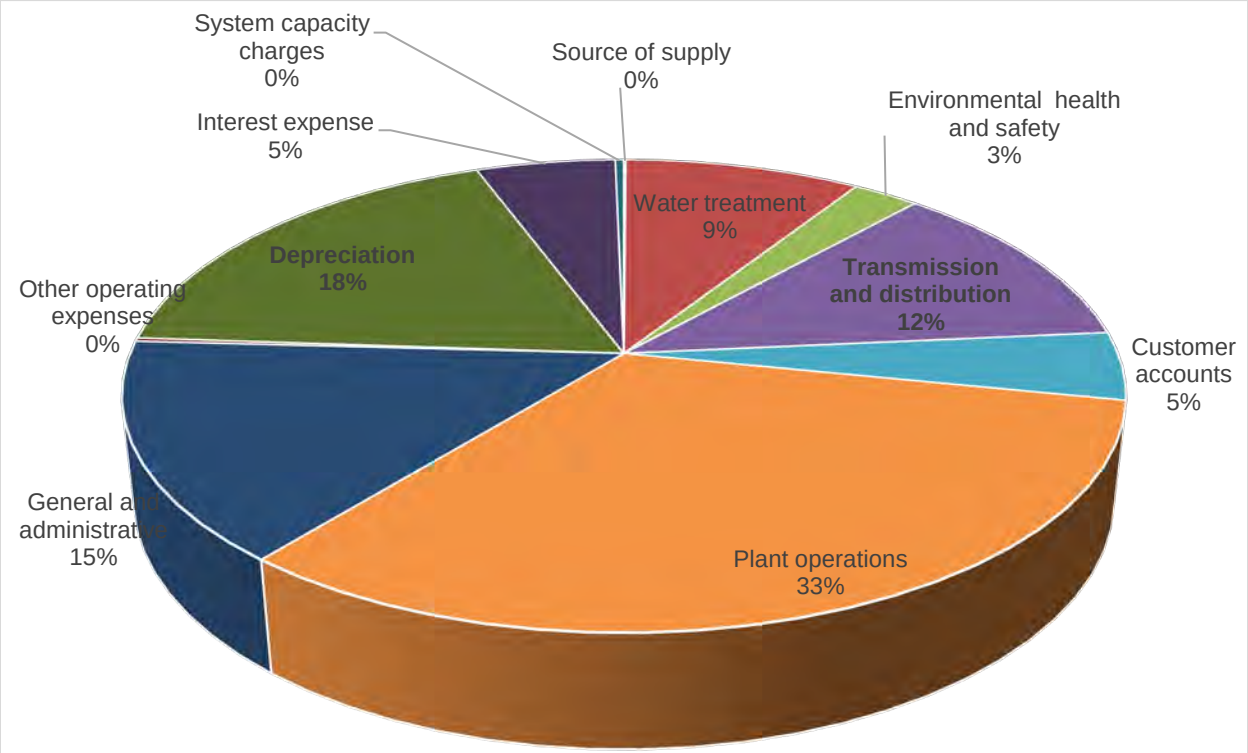



Figure 6-15: Total Expenses FY20 (SFWPA)

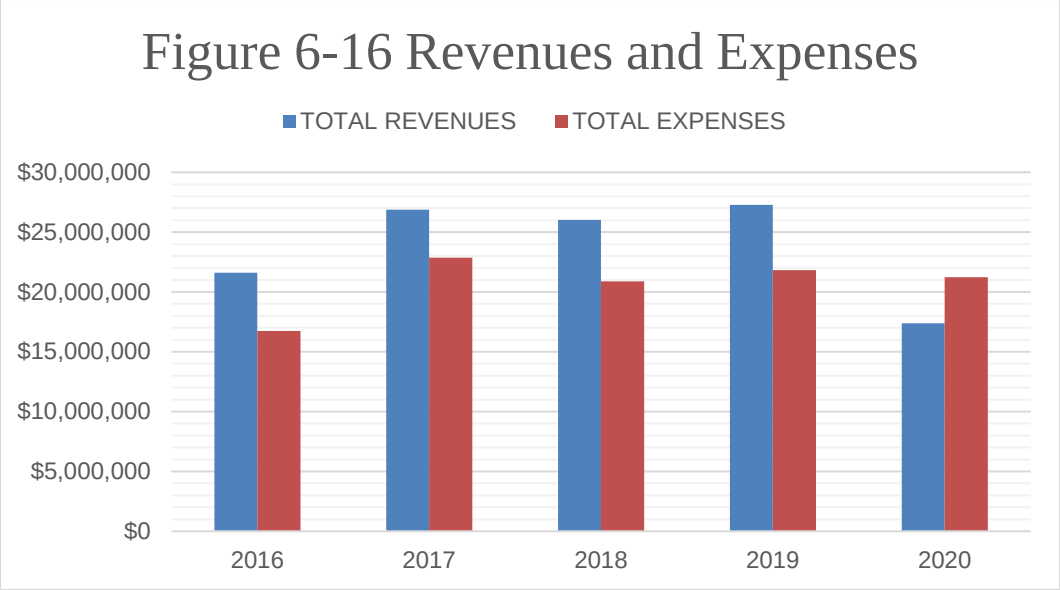
*Source: SFWPA, AFS, 2021h*

SFWPA's per capita expenditures amounted to $1,265 per permanent resident in 2020. Other significant expenses in 2020 include the following:

- The Agency's capital contributions increased by $435,734 to the 2020 amount of $627,699, which includes grants for the Miners Ranch Canal road repairs offset by a decrease in system capacity charges levied (SFWPA AFS, 2021h).
- Construction-in-Progress decreased by $311,060 from last year to $113,317. The projects in progress on December 31, 2020, included the water distribution system remote monitoring program, Community Line, Foothill Blvd/Oro Bangor Hwy-Grange domestic water project, the Oro Bangor Hwy/Red Hawk Ranch irrigation water project, replacement of the Kelly Ridge Powerhouse septic system and the California Independent System Operator (CAISO) meter installation project (SFWPA AFS, 2021h).

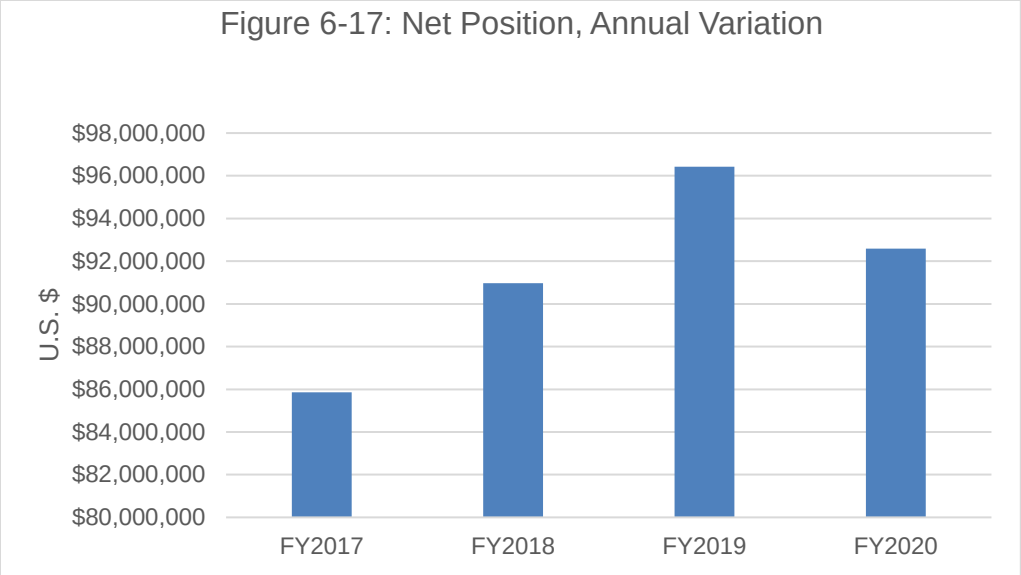
- Relicensing costs accumulated through 2012 in the amount of $5,716,306 were amortized over the life of the license, beginning when the FERC license is issued. Costs incurred after 2012 have been expensed (SFWPA AFS, 2021h).

Total Revenues were compared to Total Expenses for a five-year time period, as shown in Figure 6-16 below. Both revenues and expenses vary year-to-year. Total revenues exceeded total expenses during four years of the five-year study period. The decline in revenue in FY2020 was due to the drought, resulting in a decline in hydroelectricity production.




## Net Position

The Statement of Net Position provided in Table 6-26 (next page) includes all of the District's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, which provide information about the nature, and amounts, of investments in assets and obligations to District creditors. They also provide the basis for computing rates of return, evaluating the capital structure of the District, and assessing financial flexibility of the District. As shown in more detail in Table 6-26 below, the South Feather Water and Power Agency December 31, 2020, the net position of $92,594,339 was a decrease of $3,827,965 (3.97%) when compared with the December 31, 2019, net position of $96,422,304 (SFWPA AFS, 2021h. The Agency's net position relates to operating revenues which decreased by $9,483,025 (or 38.0 %) from the prior year. Drought conditions caused revenue from hydropower generation to be significantly less than historically received. The Agency's 2020 operating expenses decreased slightly by $491,102 (or 2.39%) from 2019 (SFWPA AFS, 2021h).




*Source: SFWPA Audited Annual Financial Statement for FY2020 (2021h)*

The Net Position of the three-year time period of December 31, 2020, December 31, 2019, and December 31, 2018, is studied in more detail in Table 6-26 below.

Table 6-26: South Feather Water & Power Agency's Changes In Net Position

| | 2020 | 2019 | 2018 |
|---|---|---|---|
| **REVENUES** | | | |
| Operating Revenues | | | |
| Domestic Water Sales | $2,674,305 | $2,138,729 | $2,151,414 |
| Irrigation Water Sales | $263,727 | $218,507 | $222,699 |
| Sales of Electricity | $11,962,972 | $21,848,149 | $14,811,825 |
| Other Services | $565,173 | $743,817 | $902,850 |
| Total Operating Revenue | $15,466,177 | $24,949,202 | $18,088,788 |
| Non-Operating Revenues: | | | |
| Property Taxes | $681,269 | $663,748 | $585,383 |
| Investment Earnings | $535,945 | $859,928 | $422,595 |
| Insurance Refund | $80,452 | $601,929 | $2,612,050 |
| Gain or Loss on Sale of Fixed Assets | | $2,600 | $(619,010) |
| Miscellaneous Non-Operating Revenue | | | $2,099,530 |
| Total Non-Operating Revenue | $1,297,666 | $2,128,205 | $5,100,548 |
| Capital Contributions | $627,699 | $191,965 | $2,819,509 |
| TOTAL REVENUES | $17,391,542 | $27,269,372 | $26,008,845 |
| **EXPENSES** | | | |
| Operating | $20,084,321 | $20,575,423 | $19,816,365 |
| Non-Operating | $1,135,186 | $1,243,331 | $1,080,524 |
| TOTAL EXPENSES | $21,219,507 | $21,818,754 | $20,896,889 |

| | | | |
|---|---|---|---|
| CHANGE IN NET POSITION | $(3,827,965) | $5,450,618 | $5,111,956 |
| NET POSITION AT BEGINNING OF YEAR | $96,422,304 | $90,971,686 | $85,859,730 |
| NET POSITION END OF YEAR | $92,594,339 | $96,422,304 | $90,971,686 |

LAFCo's determinations for SFWPA's revenues, expenditures, and net position are listed in Table 6-33.

### *6.8.4 Capital Improvement Plan*

As part of its annual budgeting process, the Agency briefly describes the proposed capital improvement projects to be funded and their estimated budget. This is based on the Agency's rolling three-year capital improvement plan reviewed each budget cycle (SFWPA, 2021a). Specifically, the 2021 Proposed Capital Budget includes the Irwin, Experanza, Williams pipeline project; replacement of 12 vehicles; several powerhouse upgrades, repairs and parts replacements; waterways dredging; SCADA upgrade; and communication upgrades to accommodate CAISO meter communications. Capital Budget appropriations account for materials, and outside service costs only. Labor charges are assigned to the operating departments allowing for more effective administrative control of these personnel costs (SFWPA Budget 2020c).

The Agency has prepared ten-year General Fund Financial Projections for the time period from 2017 to 2026. This projection estimates that $967,000 will be directed to capital improvements in 2021. During the years 2022 to 2026, it is estimated that $750,000 per year will be budgeted for capital improvements.

### *6.8.5: Reserves*

In California, many independent special districts have accumulated reserves. There are no standards guiding the size and use of reserve funds. Reserve funds are useful for SFWPA because their contribution towards capital improvement projects reduces the potential need to accumulate a high debt load. The District's investment policy and the California Government Code allow the District to invest, provided the issuers' credit ratings are acceptable to the District and approved percentages and maturities are not exceeded. SFWPA has a contingent reserve, and operating reserve accounts for potential liabilities (SFWPA, 2021a). The 2021 Adopted Budget estimates a reserve balance of $20,063,853. A reserve set aside for retiree benefits was $1,617,546 from the Facility Operating Fund and $1,977,001 from the General Fund (SFWPA, 2020c). Within the Joint Operating Facility Fund, there is a special reserve to comply with the North Yuba Water District agreement, with a 15% working capital reserve of $1,125,850 and $18,000,000 contingency reserve as required (SFWPA, 2020c).

Reserves are typically held in investment funds. SFWPA utilizes eight investment types: cash, deposits with financial institutions, money market funds, Local Agency Investment Fund (LAIF), certificates of deposit, US treasury note, US government agency securities, and the Investment Trust of California. For example, in 2020, $19.2 million was held in LAIF. The Agency is a voluntary participant in the California Local Agency Investment Fund (LAIF) that the California Government Code regulates under the oversight of the Treasurer of the State of California. LAIF is stated at amortized cost, which approximates fair value. The LAIF is a special fund of the California State Treasury through which local governments may pool investments. The State Treasurer manages LAIF. The amount invested in LAIF was 3.28% and 2.79% on December 31, 2020, and 2019 in structured notes and asset-backed instruments (SFWPA, AFS, 2021h).

Table 6-27: Agency Cash On Hand and Investments

NOTE B – CASH AND INVESTMENTS

Cash and investments were classified in the financial statements as shown below at December 31:

| | 2020 | 2019 |
|---|---|---|
| Cash and cash equivalents | $ 22,495,182 | $ 23,332,937 |
| Restricted cash and cash equivalents | 576 | 574 |
| Investments | 8,300,223 | 8,587,288 |
| Total cash and investments | $ 30,795,981 | $ 31,920,799 |

Cash and investments were comprised of the following at December 31:

| | 2020 | 2019 |
|---|---|---|
| Cash on hand | $ 950 | $ 950 |
| Deposits with financial institutions | 1,823,060 | 1,170,713 |
| Total cash | 1,824,010 | 1,171,663 |
| Money market mutual funds | 13,260 | 223,568 |
| Local Agency Investment Fund (LAIF) | 19,232,796 | 20,558,987 |
| Certificates of deposit | 6,982,758 | 7,195,825 |
| U.S. Treasury note | 251,681 | 248,599 |
| U.S. government agency securities | 1,065,784 | 1,142,864 |
| Investment Trust of California (CalTRUST) | 1,425,692 | 1,379,293 |
| Total investments | 28,971,971 | 30,749,136 |
| Total cash and investments | $ 30,795,981 | $ 31,920,799 |

(Data source for Table 6-27, above is SFWPA, AFS, 2021h)

As shown in Table 6-27 above, of December 31, 2020, and 2019, the carrying amount of the Agency's bank deposits totaled $1,823,060 and $1,170,713, and the bank balances totaled $1,901,292 and $1,272,095, respectively. The differences between the carrying amounts and the bank balances are due to the normal deposits in transit and outstanding checks. On December 31, 2020, and 2019, the uninsured balances were $1,401,292 and $841,274, respectively, which were collateralized by securities held by the pledging financial institution, but not in the name of the Agency. Negotiable certificates of deposit, which are all below the federal depository insurance limit, are excluded from the amounts above. U.S. Treasury and U.S. Government Agency securities in the amount of $1,31 7,465 and $1,391,463 as of December 31, 2020, and 2019, respectively, were held.

### *6.8.6 Outstanding Debts and Liabilities*

For local government agencies, liabilities typically include current liabilities such as accounts payable, salaries payable, bond interest payable, and long-term liabilities such as serial bonds payable, installments payable, and contracts payable. For the SFWPA, current assets exceeded current liabilities by $22,613,748. Liabilities for both pension and Other Post-Employment Benefits (OPEB) are accounted for in full compliance with current governmental accounting standards (SFWPA, AFS, 2021h). In FY 2020, the total of the Agency's long-term liabilities was almost $54 million (due after one year from FY 2020), as shown in Table 6-28, an increase of $885,696 over the previous year due to the annual calculation of the liabilities associated with pension and other post-employment benefits (SFWPA AFS, 2021h).

Table 6-28: Long-Term Liabilities

| | January 1, 2020 | Additions | Reductions | December 31, 2020 | Due Within One Year | Due After One Year |
|---|---|---|---|---|---|---|
| 2016 Certificates of Particpation | $ 25,610,000 | | $ (600,000) | $ 25,010,000 | $ 615,000 | $ 24,395,000 |
| Installment Purchase Agreement | 7,226,452 | | (1,476,612) | 5,749,840 | 1,547,584 | 4,202,256 |
| Total | 32,836,452 | | (2,076,612) | 30,759,840 | 2,162,584 | 28,597,256 |
| Unamortized premiums | 453,582 | | (16,903) | 436,679 | | 436,679 |
| Total Debt and Loans | 33,290,034 | | (2,093,515) | 31,196,519 | 2,162,584 | 29,033,935 |
| Compensated absences | 1,200,748 | $ 622,496 | (646,639) | 1,176,605 | 396,893 | 779,712 |
| Net pension liability | 5,238,532 | 701,997 | | 5,940,529 | | 5,940,529 |
| Net OPEB liability | 15,826,053 | 2,874,078 | (506,488) | 18,193,643 | | 18,193,643 |
| Total Long-Term Liabilities | $ 55,555,367 | $ 4,198,571 | $ (3,246,642) | $ 56,507,296 | $ 2,559,477 | $ 53,947,819 |

The South Feather Water and Power Agency Financing Corporation can issue debt on behalf of the District, such as the 2016 Certificates of Participation. Specifically, payments for both the 2016 Miners Ranch Water Treatment Plant Improvement Project Certificates of Participation (COP) and the 2019 Installment Payment Agreement (IPA) had a due date of April 1, 2020, and were paid the last week of March. The remaining outstanding balances are $25,010,000 for the COPs and $6,496,810 for the IPA.

The debt service coverage ratios for FY2020 and FY2019 are presented in Table 6-29 below. In 2020 the debt coverage ratio was 0.17, and this is less than the required ratio of 1.25. The ratio decline is likely due to the reduced hydroelectric revenue resulting from the drought in 2020.

Table 6-29: Debt Service Coverage Ratios

| | 2020 | 2019 |
|---|---|---|
| ACTUAL DEBT SERVICE PAYMENTS (CASH BASIS) | | |
| 2016 Certificates of Participation - principal | $600,000 | $580,000 |
| 2016 Certificates of Participation - interest | $844,675 | $862,075 |
| Installment Purchase Agreement - principal | $1,476,612 | $773,548 |
| Installment Purchase Agreement - interest | $325,928 | $127,722 |
| TOTAL ACTUAL DEBT SERVICE PAYMENTS | $3,247,215 | $2,343,345 |
| **Debt Coverage Ratio - Actual** | **0.17** | **4.36** |
| **Required Ratio** | **1.25** | **1.25** |
| DEBT SERVICE COVERAGE RATIO WITH FULL YEAR OF INSTALLMENT PURCHASE AGREEMENT PAYMENTS | | |
| Net revenues | $564,155 | $10,225,671 |
| Total 2016 Certificates of Participation debt service payments | $1,444 ,675 | $1,442 ,075 |
| Installment Purchase Agreement - principal (represent 2020 payments) * | $1,476,612 | $1,547,585 |
| Installment Purchase Agreement - interest (represent 2020 payments) * | $325,928 | $254,955 |
| Total | $ 247,215 | $3,244,615 |
| **Debt Coverage Ratio - Including Full Year of Installment Purchase Agreement Payments** | **0.17** | **3.15** |
| **Required Ratio** | **1.25** | **1.25** |

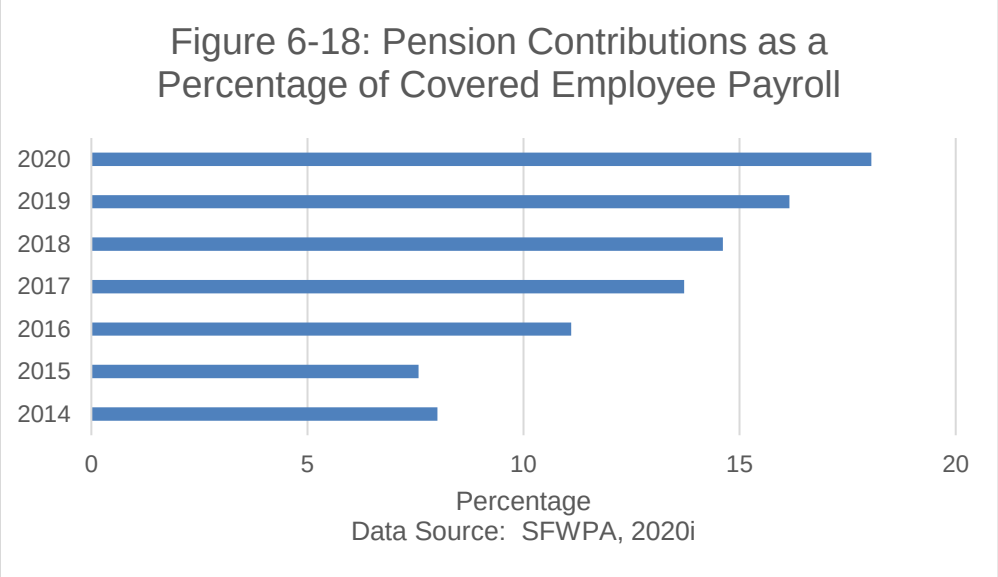
**Note:** * Payments represent calendar year 2020 payments, which is the first calendar year that both semi-annual payments will be made.

Data Source: SFWPA, AFS, 2021h

Bond Ratings: The Standard & Poor's publishes credit ratings, and they periodically review SFWPA in relation to its obligations with the 2016 Miners Ranch Treatment Plant Improvement Project Certificates of Participation. Their review concluded with no change in the "A" rating/stable outlook.

Pension Payments: On behalf of its full-time employees, SFWPA contributes the pension payments to the California Public Employees Retirement System (CalPERS), a multiple-employer public employee defined benefit pension plan. CalPERS provides retirement, disability, and death benefits to plan members and beneficiaries. CalPERS acts as a common investment and administrative agent for participating public entities within the State, including SFWPA. Copies of CalPERS' annual financial report may be obtained from its website and its executive office at 400 Q Street, Sacramento, California 95811. The pension contribution requirements of plan members and SFWPA are established and may be amended by the SFWPA Board of Directors. SFWPA also provides continued health insurance coverage for retired Agency employees, officials, and dependents who meet CalPERS eligibility requirements and have been employed by the Agency for a minimum of ten years (Stiffel, 2016). Please note that SFWPA has designated $3,660,895 in its Retiree Benefits Fund for the OPEB. However, since these funds are not held in an irrevocable trust specifically for retiree health benefits, these amounts are not considered to be plan assets. They do not offset the total OPEB liability.

Figure 6-18, below, depicts the relationship between pension contributions as a percentage of covered-employee payroll. GASB 68 revised and established new financial reporting for pensions effective for 2015. This percentage is calculated using the following formula: contributions in relation to the actuarially determined contribution divided by covered payroll.



The percentage of pension contribution is increasing each year, and the higher percentage reflects that a greater percentage of funds are dedicated to pension contributions in comparison to covered-employee payroll. SFWPA's pension contribution to payroll ratio remains less than (i.e., better than) the percentage paid by other similar water districts, such as the El Dorado Irrigation District, which was 30.8 percent in 2019. Ideally, LAFCO will continue to monitor net pension liability and the pension contribution to payroll ratio to consider long-term fiscal trends as a more extensive time series of data becomes available. Details about SFWPA's pension liabilities are provided in Table 6-30 below.

Table 6-30: Net Pension Liability

SCHEDULE OF THE PROPORTIONATE SHARE OF THE
NET PENSION LIABILITY
Last Ten Years

| | Year Ended December 31: | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 |
| Proportion of the net pension liability | 0.140835% | 0.130820% | 0.121640% | 0.120450% | 0.111181% | 0.101384% | 0.110077% |
| Proportionate share of the net pension liability | $ 5,940,529 | $ 5,238,532 | $ 4,584,129 | $ 4,748,058 | $ 3,862,276 | $ 2,781,438 | $ 2,720,542 |
| Covered payroll - measurement period | $ 5,949,907 | $ 5,867,873 | $ 5,952,396 | $ 5,627,825 | $ 5,570,519 | $ 5,746,942 | $ 5,118,332 |
| Proportionate share of the net pension liability as a percentage of covered payroll | 99.84% | 89.27% | 77.01% | 84.37% | 69.33% | 48.40% | 53.15% |
| Plan fiduciary net position as a percentage of the total pension liability | 81.64% | 82.26% | 83.29% | 81.13% | 74.06% | 78.40% | 79.82% |

Notes to Schedule:
Change in Benefit Terms: None.

Changes in assumptions: In 2017, the accounting discount rate was reduced from 7.65% to 7.15%.

**SCHEDULE OF CONTRIBUTIONS TO THE PENSION PLAN - MISCELLANEOUS PLAN**
**Last 10 Years**

| | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 |
|---|---|---|---|---|---|---|---|
| Contractually required contribution employer calendar year | $ 1,064,159 | $ 970,912 | $ 861,704 | $ 801,403 | $ 596,806 | $ 729,747 | $ 431,342 |
| Contributions in relation to the contractually required contributions | (1,064,159) | (970,912) | (861,704) | (801,403) | (596,806) | (729,747) | (431,342) |
| Contribution deficiency (excess) | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| Covered - employee payroll - calendar year | $ 5,896,357 | $ 6,012,159 | $ 5,897,229 | $ 5,843,236 | $ 5,374,903 | $ 5,527,640 | $ 5,382,338 |
| Contributions as a percentage of covered - employee payroll | 18.05% | 16.15% | 14.61% | 13.72% | 11.10% | 7.57% | 8.01% |
| Date contributions were computed: | | | | | | | |
| July 1 to December 31 | June 30, 2018 | June 30, 2017 | June 30, 2016 | June 30, 2015 | June 30, 2014 | June 30, 2013 | June 30, 2012 |
| January 1 to June 30 | June 30, 2017 | June 30, 2016 | June 30, 2015 | June 30, 2014 | June 30, 2013 | June 30, 2012 | June 30, 2011 |
| Valuation date: | June 30, 2019 | June 30, 2018 | June 30, 2017 | June 30, 2016 | June 30, 2015 | June 30, 2014 | June 30, 2013 |
| Measurement date: | June 30, 2020 | June 30, 2019 | June 30, 2018 | June 30, 2017 | June 30, 2016 | June 30, 2015 | June 30, 2014 |
| Methods and assumptions used to determine contribution rates: | | | | | | | |
| Actuarial method | Entry age normal cost method | | | | | | |
| Amortization method | Level percentage of payroll, closed | | | | | | |
| Remaining amortization period | Not stated | | | | | | |
| Asset valuation method | 5-year smoothed market | | | | | | |
| Inflation | 2.625% | 2.75% | 2.75% | 2.75% | 2.75% | 2.75% | 2.75% |
| Salary increases | Varies by entry age and service | | | | | | |
| Investment rate of return | 7.25% | 7.375% | 7.50% | 7.50% | 7.50% | 7.50% | 7.50% |
| Retirement age | 50-67 years | | | | | | |

Note: The 2017 contributions in the table above were revised in 2018 to represent accrual basis contributions.

Omitted years: GASB Statement No. 68 was implemented during the year ended December 31, 2014. No information was available prior to this date. Future years will be added prospectively as they become available.

CalPers recognizes that the scale and multi-faceted nature of climate change presents a systemic risk to retirement portfolios across the board. The risks include:

- disruption to portfolio companies' supply chains and operations,
- heightened volatility to financial markets,
- reduced economic growth,
- fixed assets (e.g., real estate), and
- impacts to the financial success of existing business models and portfolio companies

CalPers has implemented its Sustainable Investments Program in an attempt to mitigate these systemic risks (CalPers, n.d.)

### *6.8.8 Rates*

The rates charged by the three water service providers (SFWPA, TWSD, and Cal Water) in the Oroville Area were recently studied in a 2018 report entitled "Oroville Region Water Service Study "prepared by Northstar Engineering for Butte LAFCO (Northstar, 2018).

SFWPA charges fees for water supply, water treatment, distribution service, and capital improvement costs. Typically, during its December meeting, the Board of Directors approves a schedule of fees, rates, and charges for the fiscal year commencing January 1 of the following year. The District Board adopts and publishes its water rate schedule as part of its Rules and Regulations Governing Water Service document (SFWPA, 2021i). Monthly rates charged to customers for potable water have three components, including 1) monthly service charge, 2) rates of use charge, and 3) meter charge, as listed in Table 6-31 below.

Table 6-31: Potable Water Rates, 2021

***Potable Water-***

Service Charge (per month) ..... $19[74]
Multi-Family Residential Units Service Charge ..... $7.90[75]
(per occupied unit per month)
Rates-of-Use (in addition to Service Charge)[76]:
First 100 Units (10,000 cubic feet) ..... $0.42/unit
After First 100 Units (over 10,000 cubic feet) ..... $0.31/unit
Non-Beneficial Use ..... $1.85/unit[77]
Oversized Meter Charge (in addition to Service Charge; not applicable to mobile home parks, apartment complexes, duplexes, multiple commercial units, etc.[78]):

| Meter Size | Monthly Charge |
|---|---|
| 1" | $6.00 |
| 1½" | $16.00 |
| 2" | $20.50 |
| 3" | $50.00 |
| 4" | $72.50 |
| 6" | $105.00 |

*(Data Source: SFWPA, 2021i)*

Charges are also collected for non-potable water, which is raw water often used for agricultural irrigation. Non-Potable Water Charges include a monthly service fee of $21.50 and a rate-of-use charge, as listed in Table 6-32 below.

Table 6-32: Non-Potable Water Charge

***Non-Potable Water-***

Service Charge (per month) ..... $21.50[79]
Rates-of-Use (in addition to Service Charge):
Miners Inch Accounts ..... $1.95/MI[80]
Metered (unit = 100 cubic feet) ..... 8.67¢[81]
Flat Rate Accounts (per month) ..... $60.50[82]
(All non-potable rates-of-use equate to $39.00 per acre-foot.)

*(Data Source: SFWPA, 2021i)*

In addition to monthly service fees, the Agency also has standard charges for one-time, non-routine items such as a new service charge at $40.84, account transfer charge at $20.85, development plan check charge at 3 percent of the engineer's estimate, and several other similar charges. SFWPA's Rules and Regulations indicate that fees can increase on an annual basis in accordance with the Engineering News Record's National Construction Cost Index.

Based on the information included in Section 6.8 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 6-33 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

TABLE 6- 33: MSR DETERMINATIONS FINANCIAL ABILITY TO PROVIDE SERVICES

| | **Indicator** | **Determination** |
|---|---|---|
| SFWPA-FIN-1 | Summary financial information presented in a standard format and simple language. | Financial information is clearly articulated in the Annual Audited Financial Statement and budgets, which are prepared on an annual basis with a fiscal year that begins January 1st. The SFWPA annual budget and financial statement are available to the public through the District website. |
| SFWPA-FIN-2 | District has a published policy for reserve funds, including the size and purpose of reserves and how they are invested. | SFWPA's policy for reserve funds is formally described in the 2005 agreement between SFWPA and the NYWD. |
| SFWPA-FIN-3 | Other financing policies are clearly articulated. | SFWPA's Annual Financial Statement contains a list of its accounting policies. Additionally, the District's Rules and Regulations describe a list of fees and financial responsibilities. The District Rules and Regulations document is readily available on the SFWPA's website. |
| SFWPA-FIN-4 | Compensation reports and financial transaction reports that are required to be submitted to the | The Schedule of Employee Pay Ranges are approved annually by the Board of Directors and available on the SFWPA website. Required reports |

| | | |
|---|---|---|
| | State Controller's Office are posted on the district website. | are sent to the California State Controller for Government Compensation. |
| SFWPA-FIN-5 | Revenues exceed expenditures in 50% of studied fiscal years | Total revenues were greater than the total expenditures in four of the five study years. |
| SFWPA-FIN-6 | Increases or decreases in net position | Changes to the Net Position are shown to be highly variable. Although the general trend of the Net Position is to increase year over the year, 2020 saw a decline in the Net Position due to reduced sale of hydroelectric power due to the drought. |
| SFWPA-FIN-7 | Tax Revenues/Connection Ratio | Each water connection paid an average of $9.80 in property tax for the year 2020. This ratio is based on property tax revenue of $681,269 in 2020 and 69,500 water connections in SFWPA. |
| SFWPA-Fin-8 | Rates were adopted by the Board of Directors | The SFWPA Board of Directors adopts and publishes its water rate schedule as part of its Rules and Regulations Governing Water Service document. |
| SFWPA-Fin-9 | Rates are consistent with requirements of the State Water Resources Control Board, and the process for adopting rates are consistent with Proposition 218 | Monthly rates charged to customers for potable water have three components, including: 1) monthly service charge, 2) rates of use charge, and 3) meter charge. SFWPA's Rules and Regulations indicate that fees can increase on an annual basis in accordance with the Engineering News Record's National Construction Cost Index. |
| SFWPA-Fin-10 | Rates are readily available to constituents | Rates are displayed in the Rules and Regulations document on the District's website under the "publications" tab at: <*https://southfeather.com/publications/* |

### *6.8.9 Risk Management*

Managing risks helps special districts reduce unforeseen costs associated with risks. Insurance policies assist special districts in managing risks. The Agency obtains insurance through the Association of California Water Agencies' Joint Powers Insurance Authority (ACWA/JPIA) as follows:

- Property insurance up to $150 million, with up to $10,000 deductible per occurrence;
- Flood insurance applies to vehicles and mobile equipment only and has a $5 million program aggregate;
- Auto Insurance and General Liability Insurance up to $58,000,000 per occurrence with a $25,000 retrospective allocation point; and
- Worker's Compensation Insurance meets the statutory employer's liability limit of $2 million excess per accident and per disease (Stifel, 2016).
-

ACWA/JPIA is self-insured up to a certain point per occurrence and then maintains reinsurance coverage through a larger insurance company.

### *6.8.11: Financial Challenges*

Water districts sometimes face challenges that could affect their budget or financial ability to provide services. For example, SFWPA staff indicated that new changes to regulations from Federal and State agencies such as FERC, DSOD, SWRCB occur on an annual basis, and expenses associated with regulatory changes could potentially have a negative effect on each year's fiscal budget (SFWPA, 2021a).

The finances of the SFWPA are affected by its 2005 Agreement with North Yuba Water District (NYWD), which was adopted to help both agencies settle disputes about the utilization of water in the South Fork Feather River and the North Fork Yuba River. Litigation filed by NYWD against SFWPA claiming breach of contract and money owed could also impact the Agency's budget (SFWPA, 2021a).

The MSR consultants have noted that trends indicate that SFWPA may face issues in the future associated with aging water pipes, roadways, and other infrastructure. Additionally, other costs associated with being a water and hydroelectric utility may also increase in the future. Some costs may be beyond the direct control of the Agency. Therefore, the Board of Directors may wish to study various cost and funding options as future needs arise. For example, a proposition 218-notice process could facilitate adding capital infrastructure surcharges to the annual billings.

## 6.9 Joint Power Authorities

Effective January 1, 2017, Government Code §6503.6 and §6503.8 require LAFCo to be a repository for all Joint Powers Authority Agreements (JPA) within a county related to municipal service provisions. SFWPA participates in one JPA, as listed in the following paragraph.

The Agency is a member of the Association of California Water Agencies (ACWA) Joint Powers Insurance Authority (JPIA), which provides SFWPA's property, liability, auto, worker's compensation, and employee crime insurance policies. This is a pooled insurance coverage plan (SFWPA, 2021a). SFWPA staff regularly interface and have meetings with JPIA on general updates and items of specific interest to SFWPA (SFWPA, 2021a).

## 6.10 Cost Avoidance & Facilities Sharing

Cost Avoidance

This section highlights cost avoidance practices given necessary service requirements and expectations. Ideally, proposed methods to reduce costs would not adversely affect service levels. In general, water systems have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, SFWPA pursues an array of cost avoidance techniques that each contributes incrementally towards keeping costs at a reasonable level, as listed below.

- Cooperates with other municipal water purveyors and fire departments in Butte County and the City of Oroville to plan for the implementation of new fire safety regulations (SFWPA, UWMP, 2021g);
- Carefully utilizes its budgeting processes to serve as one means to avoid unnecessary costs;
- Participates in one Joint Powers Authority (ACWA JPIA), a pooled insurance program;
- Utilization of a three-party bid process; and
- Utilization of an electronic payment system.
  (Data Source: SFWPA, 2021a).

Additionally, agreements with Yuba County Water District were originally intended as cost avoidance measures. "SFWPA closely coordinates with the North Yuba Water District (NYWD) regarding water supplies and their management (NYWD shares water storage facilities with SFWPA, as well as one of SFWPA's distribution facilities)." (SFWPA, UWMP, 2021g). It is anticipated that as the recent lawsuit from NYWD gets resolved, the cost management of this agreement will improve.

SFWPA successfully reduced overhead in 2020 through a functional reorganization of its staff (SFWPA, 2021a). The new organizational structure is shown on the org chart in Figure 6-3

SFWPA communicates directly with the Butte County Office of Emergency Management (OEM) during disasters or large-scale incidents and non-emergency (regular) periods to work on disaster planning, community preparedness, mitigation, and training. Additionally, SFWPA participated in the 2019 update of the Butte County Local Hazard Mitigation Plan.

Facilities Sharing

SFWPA has successfully shared recreation facilities with the Plumas National Forest, as detailed in the Recreation Service Section 6.6.6. SFWPA and the Plumas National Forest have worked together for many years, and this partnership enables SFWPA to implement the requirements of its FERC license. Additionally, several SFWPA hydroelectric facilities are located within the Plumas National Forest. This facility sharing results in cost savings for both agencies and provides a needed public service for both local families and tourists. Outdoor recreation is an important economic sector for the Oroville Region.

Another example of facilities sharing is the contractual agreement on hydro operations and water conveyance with North Yuba Water District (SFWPA, 2021a).

LAFCO Reorganization

It is sometimes beneficial for an agency to pursue structural or jurisdictional reorganizations to save money and avoid future overhead costs. SFWPA staff has indicated that there are no functional or structural reorganizations that the Agency is evaluating to benefit recipients of services or improve the provision of water collection services at this time.

Goals and Challenges

SFWPA's primary goals are to continue fulfilling its Mission Statement and implementing its new Urban Water Management Plan, new Strategic Plan, and similar plans.

Similar to most water districts in California, SFWPA will likely face several challenges in future years. Solving challenges is tricky because the needs of each water district are unique, and solutions are not one-size-fits-all. However, considering trends and issues yields some potential future challenges that water districts may face, as listed below:

- Responding to future events or opportunities;
- Implementing innovative technology to improve the performance of water systems. For example, SFWPA may find practices to optimize its existing renewable energy program. New technologies like pumped hydro may become cheaper and more versatile in the future. As another example, in California recycled wastewater and captured stormwater are gaining in popularity;
- Regulatory constraints and associated cost concerns are a potential future challenge. Specifically, in regards to the new FERC license for SFWPA, new conditions of approval or mitigation may be challenging to achieve or may become a financial challenge (SFWPA, 2021a);
- Infrastructure resiliency and emergency preparedness are important. For example, communities in California are considering the need to make their water utility systems more resilient, especially during natural disasters and changes in weather patterns; and
- Using alternative financing techniques such as grant applications or revenue bond issuance to finance construction and infrastructure replacement.

Mutual Aid

SFWPA has four Mutual Aid agreements with the following agencies: NYWD, Lake Madrone CSD, Berry Creek CSD, and Paradise Irrigation District (SFWPA, 2021a). These mutual aid agreements allow for SFWPA to perform emergency work (labor, equipment, parts) at "cost" to the receiving entity at the time of emergency need. The agreements are periodically reviewed (personal communication, R. Moseley, 7/11/22). Typically, these types of maintain mutual aid agreements with neighboring purveyors, along with contingency water supply resources, can help an Agency address potential future emergency conditions which could result in lost water supply. This is the reason why LAFCo supports mutual aid agreements.

### *6.10.1 Determinations for Shared Facilities*

Based on the information included in Section 6.10 above, the following written determinations make statements involving each service factor which the Commission must consider as part of a municipal service review. The determinations listed below in Table 6-34 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

| Table 6-34: MSR DETERMINATION: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| SFWPA-SHA-1 | The Agency collaborates with multiple other agencies for the delivery of services within its boundary. | SFWPA collaborates with multiple other agencies for the delivery of services within its boundary. For example, SFWPA closely coordinates with the Plumas National Forest to provide recreation facilities. |
| SFWPA-SHA-2 | Agreements for mutual aid or any other appropriate agreement (i.e., Tax Sharing Agreement) are periodically reviewed to ensure fiscal neutrality. | SFWPA has Four Mutual Aid agreements with the following agencies: NYWD, Lake Madrone CSD, Berry Creek CSD, and Paradise Irrigation District. The Agreements for mutual aid periodically reviewed to ensure fiscal neutrality. |
| SFWPA-SHA-3 | Other practices and opportunities that may help to reduce or eliminate unnecessary costs are examined by the District periodically. Ideally, there is a balance between cost efficiency and risk reduction strategies. | In the recent past, SFWPA has implemented an array of cost avoidance techniques that each contributes incrementally towards keeping costs at a reasonable level, including cooperation with other municipal water purveyors and fire departments in Butte County to implement new fire safety regulations, utilizing its budgeting processes to avoid unnecessary costs, three-party bid process, and electronic payment system. No other cost-efficiency or risk-reduction strategies have been identified. |

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# Chapter 7: Thermalito Water and Sewer District


This chapter presents a Municipal Service Review (MSR) for the Thermalito Water and Sewer District (TWSD) with details on the district formation, boundary, government structure, population and land use, disadvantaged communities, and the provision of water and wastewater services and facilities. Based on the information included in this report, written Determinations that make statements involving each service factor that the Commission must consider as part of a Municipal Service Review are presented. The Determinations are based upon data presented in this Chapter for the Thermalito Water and Sewer District and are recommended to the Commission for consideration. The Commission's final MSR Determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

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# 7.1 Agency Profile & Overview

### *7.1.1 Agency Profile*

**Type of Agency:** Irrigation District
**Principal Act:** California Water Code, Division 11, §20500 et seq
**Functions/Services:**

- Management of raw water supply, water treatment, and distribution of potable water for residential, commercial, and municipal purposes;
- Wastewater collection and transport; and
- Solar electricity generation for internal use only.

**Main Office:** 410 Grand Avenue, Oroville, CA 95965
**Mailing Address:** Same
**Phone No.:** (530) 533-0740
**Fax No.:** None
**Web Site:** https://www.twsd.info/
**General Manager**: Jayme Boucher at <jboucher@twsd.info>
**Alternate Contact**: Chris Heindell at <cheindell@twsd.info>

**Meeting Schedule:** 3rd Tuesday of the month at 2:00 p.m.
**Meeting Location:** District Office Boardroom, 410 Grand Avenue – Oroville, California 95965
**Date of Formation:** 1922

**Area Served:** 14,873 acres near Oroville, CA

| | |
|---|---|
| **Population:** | Estimate ranges from 11,318 to 12,066 persons |
| **Number of water/sewer connections:** | 3,116 water connections and 2,365 sewer connections |
| **Gross Revenue:** | $4,336,141 in FY20/21 |
| **Expenditures:** | $4,250,423 in FY20/21 |

### 7.1.2 Agency Overview

Originally formed in 1922 as the Thermalito Irrigation District, sanitary sewer collection and conveyance services were added to the District's responsibilities in 1972. The District updated its name to the Thermalito Water and Sewer District (TWSD) in 2008 to reflect the two major public services it provides. TWSD operates under a "principal act," which governs the provision of one or more public services. As an irrigation district under California Water Code, Division 11, §20500 et seq, TWSD is empowered to provide a range of public services to the local community. Currently, the District provides the following services:

- Management of raw water supply, water treatment, and distribution of potable water for residential, commercial, and municipal purposes;
- Wastewater collection and transport; and
- Solar electricity generation for internal use only.

Please note that TWSD is empowered by its Principal Act to provide recreational services; however, it does not currently provide this service which would require approval from LAFCo to activate this latent power. The TWSD administrative office is located at 410 Grand Avenue – Oroville, California 95965. LAFCO's previous MSR for TWSD was adopted on June 1, 2006, via LAFCO Resolution No. 55-M 2005/06.

## 7.2 Agency Formation and Boundary

### 7.2.1 Formation

The Thermalito Water and Sewer District was originally organized on April 3, 1922, as Thermalito Irrigation District. The District was formed to provide raw irrigation water to the Thermalito agricultural community. The primary agricultural crops within the area when the District was formed were olive and orange orchards, irrigated pasture, grapes, and a couple of dairy operations (Butte Co. OEM, LHMP, 2019b). The District was authorized to operate by the California Water Code, Division 11, Section 20500 to 29978, derived from the 1897 Irrigation District Law. Soon after formation, the District issued a bond for $270,000 to finance the purchase and construction of irrigation canals, water rights, reservoirs, a reservoir site, and other property necessary for the District. In August 1923, the District purchased land from the Pacific Gas & Electric Company (PG&E) for $10,000 to develop the reservoir. Construction of the Concow Dam on Concow Creek began in November 1923 and was completed in December 1924. The Concow watershed was chosen because it was part of the original water distribution system owned by Pacific Gas & Electric Company. However, the purchase agreement with PG&E did not include the Wilenore/Concow water storage system, and it was essential that the District acquire the old Wilenore dam and land for the water rights. During the early years, Wilenore/Concow Reservoir water was used almost solely for irrigation. There were a few private wells within the District boundaries. However, most residential owners could not afford to dig for water as the hard pan layers under Thermalito made it cost-prohibitive. Therefore, almost all residences used the District

water for domestic purposes (Butte Co. OEM, LHMP, 2019). On July 1, 2008, the District changed its name to Thermalito Water and Sewer District (Butte Co. OEM, LHMP, 2019).

### *7.2.2 District Boundary*

The Thermalito Water and Sewer District's geographic boundary encompasses approximately 14,873 acres (or 23.24 square miles), as seen in Figure 7-1 (next page). The TWSD is primarily located in the southern portion of the County of Butte. The District's main boundary area includes a relatively condensed urban area to the south. The western and northern parts of the boundary area have larger tracts of open and/or sparsely developed lands. In addition, the District encompasses large areas of State lands, including the Thermalito Power Canal, Thermalito Forebay and State Park, and the Oroville Wildlife Area (Butte Co. OEM, LHMP, 2019). For example, TWSD's boundary overlaps with small portions of the Thermalito Forebay, and the State owns this water body. This particular area of overlap is for the purposes of providing water and wastewater services to the land portion of these properties (i.e., water service to the Forebay) (personal communication, C. Heindel, July 2022).

Lake Concow is shown as being part of the District's boundary as the detached area north of the main boundary area in the County's GIS database. There is no requirement for the District's boundary to be contiguous. However, since Lake Concow is the District's primary surface water source, it makes sense that this important facility could be part of the District's SOI /boundary. However, based on information from LAFCo's files, it is not clear when or how Lake Concow came to be considered part of the District's boundary. LAFCo's previous MSRs in 2006 and 2007 did not show Lake Concow within the TWSD boundary in either text or maps. Additional research on this item is recommended.

The CalWater Company is located to the south of TWSD. A portion of Cal Water's service area overlaps with the TWSD boundaries. This overlap area includes 17 parcels (APNs) and 19.7 acres as shown in Figure 1-2. The Lake Oroville Public Utility District is located east/south of TWSD. A portion of the City of Oroville's boundary and sphere of influence west of the Feather River overlap with the TWSD boundary and SOI. TWSD's boundary area also overlaps with the former County Service Area (CSA) NO. 26 – Thermalito Drainage, which CSA 26 was dissolved in 2019[1].

The District boundary currently includes 3,798 assessor parcels (LAFCO GIS, 2020). There have been no recent annexations. All areas within the boundary receive either water or wastewater service from this District. Some neighborhoods receive both water and wastewater service.

The District's sewer collection service only extends to about 3,680 acres (i.e., 25 percent of the boundary area). Much of the un-served area lies north and west of the current sewerage system infrastructure (TWSD, 2020b). For example, the Airport Industrial Park is an area where TWSD

[1] CSA 26 was managed by Butte County Public Works. CSA 26 was 14,000 acres in size and provided stormwater drainage services per Water Codes, Division 11, Part 1, Section 20500-29978.

only provides water services (the City of Oroville provides wastewater collection services here, and the City's wastewater line joins a TWSD sewer line) (personal communication, Boucher and Heindell, 2021). TWSD staff has indicated that there are no other areas of the District's service area that another agency might serve more efficiently (TWSD, 2021b).

### *7.2.3 Sphere of Influence*

This section briefly describes the existing Sphere of Influence (SOI) for the Thermalito Water and Sewer District. Additional details can be found in Appendix K, SOI Options. Butte LAFCO adopted the original SOI for the TWSD in 1985. Today, the District's SOI encompasses 44,101 acres and includes 4,383 parcels, as shown in Table 7-1 below. As part of this MSR preparation process, District staff indicated that they believed that the Sphere of Influence boundary is adequate for projected future needs due to its large size (TWSD, 2021b).

Table 7-1: Geographic Summary (2021) of Water or Wastewater Services for TWSD

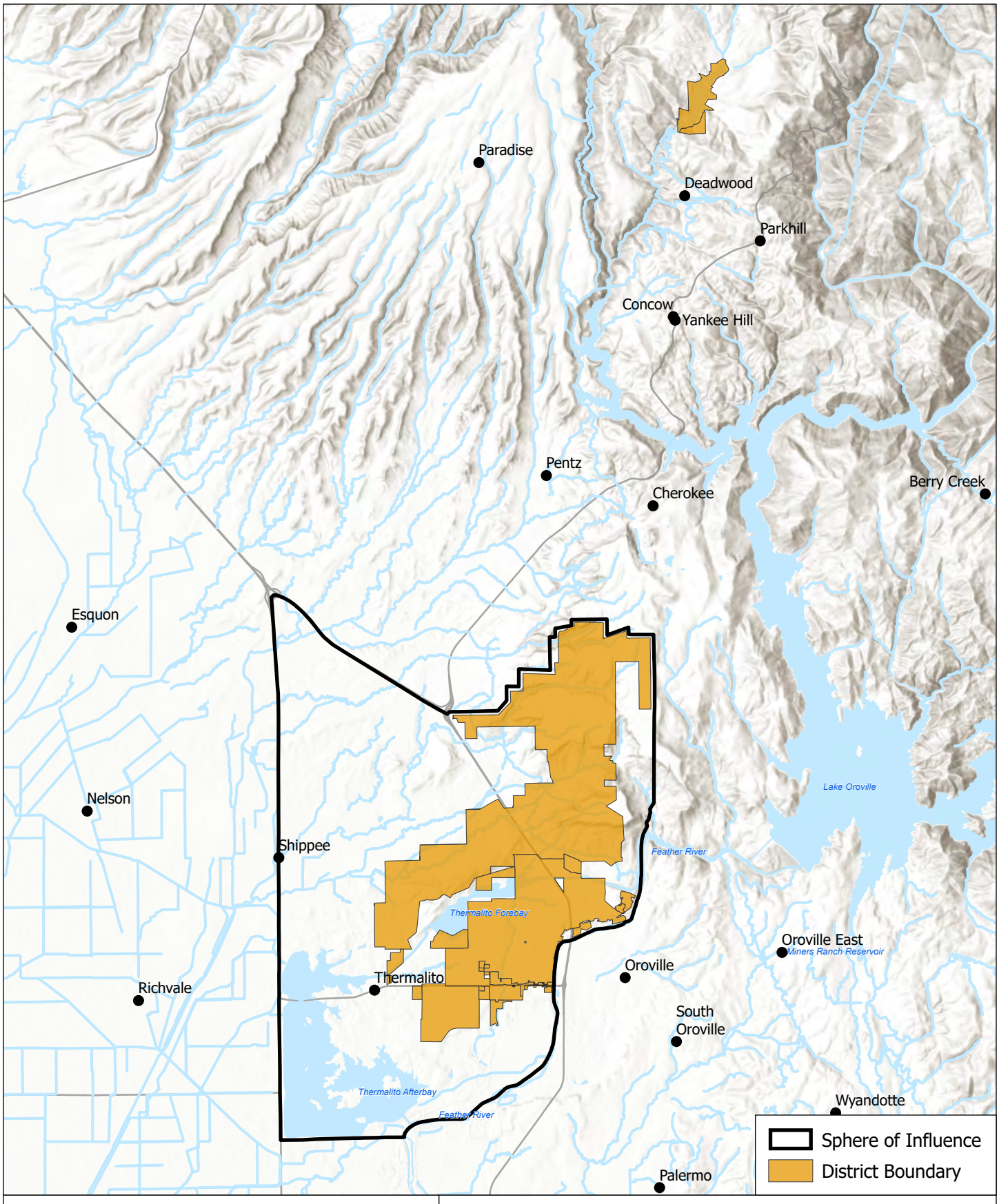
| | **Boundary Area (All Services)** | **SOI (All Services)** | **Total Boundary & SOI** |
|---|---|---|---|
| Total Acres | 14,873 | 44,101 | 58,974 |
| Square Miles | 23.24 | 68.90 | 92.15 |
| Number of Assessor Parcels | 3,798 | 4,383 | 8,181 |

*Source: Butte County GIS Data, 2020*

Butte LAFCO's 2006 MSR for Domestic Water and Wastewater Providers noted that the areas to the north, northeast, and west of the current Sphere of Influence are the areas where the District's SOI could be expanded if necessary. The areas immediately southeast of the District's SOI are currently being served by Cal Water - Oroville and SFWPA for water services and LOAPUD and the City of Oroville for wastewater collection services. Therefore, the District's boundaries do not cross the Feather River. Consideration should be given to the reorganization of the SOI for several reasons, including but not necessarily limited to the following:

1) The City of Oroville's sewer infrastructure interconnects to the District's wastewater collection system (the conveyance is by the District, and the City pays the District for utilizing its system);
2) The areas immediately to the southeast of the District are currently served by two domestic water providers and two wastewater collection providers;
3) Much of the District's service area is within the City of Oroville's boundaries;
4) Land east of Highway 70 and north of the Feather River receives wastewater collection service from the City of Oroville and water from the District; and
5) Within the District's service area, a small residential area east of Table Mountain Boulevard known as Rancho Golden is provided water by Cal Water -Oroville and wastewater collection by the City of Oroville.

*Data Source: Butte LAFCO, MSR, 2006*




Map Date: 09/29/2021
Data Source: Butte LAFCO

# Figure 7-1
# Boundary and SOI Thermalito Water and Sewer District

### *7.2.4 Extra-Territorial Services*

The TWSD does not provide extra-territorial services outside its District boundary (TWSD, 2021b). The District maintains mutual aid and/or cooperative agreements with nearby water and wastewater service agencies as described in "Facilities Sharing," Section 7.9 in this Chapter.

## 7.3 District Governance and Accountability

This section describes how performance, accountability, transparency, and public engagement relate to the public's trust in local government. LAFCO is required by the CKH Act to make specific determinations regarding a public agency's government structure and accountability.

### *7.3.1 Government Structure*

The TWSD is a local government agency structured as an Irrigation District consistent with its Principal Act: California Water Code, Division 11, §20500 et seq. The District has five elected Board Members who reside within the community. All registered voters who reside within the District boundaries are eligible to vote for and/or run for a seat on the District Board. The District Board appoints the General Manager (GM). The GM appoints department heads. The District is organized into two divisions, one for water and one for wastewater.

### *7.3.2 District Board*

The District is overseen by an elected five-member Board of Directors that serves as the decision-making authority. Each elected Board Member serves for a term of four years. Each director must be a voter and freeholder of the District and a resident of the Division they represent at the time of nomination and during their term; and shall be elected by voters who are residents of the District (Butte LAFCO, MSR, 2006).

A new Board President is selected by the Board Members each year. The District's active committees include the Administration/Inter-departmental/Personnel Committee, which is one combined committee. Other committees include Concow, SCOR, and Wyandotte Creek GSA committees. The current Board of Director's members, their committee appointments, and their terms' expiration dates are shown in Table 7-2 below.

Table 7-2: Thermalito Water and Sewer District Board of Directors

| Division | Name | Title | Term End | Committee Appointments |
|---|---|---|---|---|
| 1 | Brad Taggart | Director | 12/06/2024 | SCOR |
| 2 | Trevor Hatley | President | 12/06/2024 | Not available |
| 3 | Scott Koch | Director | 12/4/2026 | Administration, Concow, WC GSA |
| 4 | Bruce Wristen | Vice President | 12/06/2024 | Administration, Concow, SCOR, WC GSA |
| 5 | Mark Clark | Director | 12/08/2026 | Not available |

The District holds regular public meetings on the 3rd Tuesday of the month at 2:00 PM. Meetings are located at the District Office Boardroom, 410 Grand Avenue, Oroville, California, 95965.

Board members received a stipend of $7,200 annually[2] (CA State Controller, 2022). This stipend covers attendance at regular and special Board meetings. The Board's compensation is defined by Section 21166 of the California Water Code, and it is fixed by the adoption of an ordinance in accordance with Section 21166.

All meetings of the District Board and other advisory boards are open to the public in accordance with the Brown Act. The agenda for each District Board meeting includes a public comment period for items not on the agenda. Additionally, the Board meeting minutes reflect that the public is invited to speak on all items included on the agenda. All meeting agendas are publicly posted on a physical bulletin board in the District office and electronically posted on the TWSD website at: *https://www.twsd.info/board-meetings*. (TWSD, 2021b). Meeting minutes are posted on the website after the meeting is held and after the minutes are approved by the Board. On average, zero to three members of the public attend the monthly meetings. The District's legal counsel, who attends all regularly scheduled meetings, is responsible for ensuring District compliance with the Brown Act, new laws pertaining to the provision of related services, and the District's governing codes in consultation with the General Manager (Butte LAFCO, MSR, 2006).

In California, elected members of special district boards are required to comply with three laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005), which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training. A description of these three state laws is provided in Chapter 3, Introduction. An assessment regarding the compliance with these three ethics and accountability laws by elected board members of each of the subject water and wastewater-related agencies was made as part of this MSR process.

- Political Reform Act: Each district is required to have a conflict-of-interest code/policy. TWSD's Board adopted a code of ethics on November 19, 2019. TWSD's conflict of interest policy is available to the public at *https://www.twsd.info/board-policy*. The Political Reform Act also requires special district board members to disclose all personal economic interests by filing a "Statement of Economic Interests" with the District Clerk or Butte County. TWSD Directors complete Form 700, and the forms are filed annually with the County Clerk by January 1st. (personal communication, C. Heindell, July 2022). Compliance with this law was assessed by querying the FPPD Complaint and Case Information Portal, which has data for the years from 2010 to 2021 at:

[2] For comparison purposes, LOAPUD Board members are eligible to receive an annual stipend of $4,800 for attendance. SFWPA Board members are eligible to receive an annual stipend of $7,200 for attendance at regular and special Board meetings.

*https://www.fppc.ca.gov/enforcement/complaint-and-case-information-portal.html*. Query results for the TWSD found no violations.

- Assembly Bill 1234 (Salinas, 2005): Local government officials are required to take ethics training every two years. Compliance with this law was assessed for each water and wastewater agency studied in this MSR. In this case, TWSD posts ethics training certification on its website at: *https://www.twsd.info/board-members-ethics-certificates*. Training is offered on a regular basis. Table 7-3 below shows that all board members (Latulippe and Wristen) have completed this training. Therefore, TWSD's Board is in compliance with AB 1234, and this is an item that needs to be addressed.
- Government Code 53237 et. seq.: Special District Board Members must receive the required sexual harassment prevention two-hour training every two years. Compliance with this law was assessed for each water and wastewater agency studied in this MSR. In this case, TWSD posts certification of the prevention training on its website at: *https://www.twsd.info/board-members-ethics-certificates*. Training is offered on a regular basis. Table 7-3 below shows that all five board members have completed this training. Therefore, TWSD's board complies with Gov. Code 53237 et. seq., and this is an item that needs to be addressed.

Table 7-3: Ethics and Prevention Training By TWSD Board Members

| Name | Type of Training | Date of Training |
|---|---|---|
| Brad Taggart | AB 1234 – Ethics<br>GC 53237 Harassment Prevention | 1/19/2021 |
| Trevor Hatley | GC 53237 Harassment Prevention | 10/20/2020 |
| Scott Kock | AB 1234 – Ethics<br>GC 53237 Harassment Prevention | 12/13/2022 |
| Bruce Wristen | AB 1234 – Ethics<br>GC 53237 Harassment Prevention | 1/19/2021 |
| Mark Clark | AB 1234 – Ethics<br>GC 53237 Harassment Prevention | 12/13/2022 |

*Data Source: TWSD, 2021c and personal communication, C. Heindell, July 2022*

### *7.3.3 Accountability and Transparency*

Brown Act

The Brown Act is described in Chapter 3, Introduction, of this MSR. All meetings of the District Board and committees are open to the public, consistent with the Brown Act. The agenda for each meeting includes a public comment period, and agendas are made available 72 hours before meetings. Agendas are posted on the District website at *https://www.twsd.info/board-meetings* and distributed via email upon request. Any written document that relates to an agenda item is available for public inspection at the same time the writing is distributed to the members of the

Board of Directors. Written documents are made available to the public at the District Office. The District and its representatives have a solid record of adherence to the requirements of the Brown Act, the Political Reform Act, and similar laws (Butte LAFCo MSR, 2006).

The State Legislature updated the Brown Act in 2016 as codified in Government Code §54954.2 (see also Assembly Bill 2257). These new Brown Act requirements prescribe the methods and location by which an agenda must be accessible on an agency's website for all meetings, as detailed in the Introduction, Chapter 3. The new requirements necessitate that meeting agendas be retrievable, downloadable, searchable, and indexable. As part of this MSR, the website for each water or wastewater agency was evaluated to determine whether meeting agendas are available to the public consistent with AB2257. TWSD makes the current board agenda directly available on the homepage of its website at: *https://www.twsd.info/*. Additionally, from the homepage, one can find meeting minutes and agendas for the current year and past years by following this path from the homepage: "Our District" tab << "Board of Directors" subtab << "Board Meetings" sub-subtab. Once one navigates to the correct webpage, the necessary agenda information, with the most current agenda located at the top of the page, is available. A "quick-link" to the Board Meeting webpage is also available directly from the home page. However, Board packets (which contain staff reports) for regular and special meetings are only available by special request and not provided via the website. The District website agenda distribution meets the minimum requirements of the Brown Act 2016 Updates described in AB2257.

Assembly Bill (AB) 361, approved in September 2021, added Section 11133 to the CA Government Code regarding open meetings for state and local agencies using teleconferences. AB 361 authorizes a local agency to use teleconferencing for public meetings during the Covid-19 global pandemic (and other declared states of emergency). When holding a teleconference meeting, local agencies are required to give notice of the meeting and post agendas to allow members of the public to access the meeting and address the legislative body. Agencies are also required to include an opportunity for all persons to attend via a call-in option or an internet-based service option and to conduct the meeting to protect the statutory and constitutional rights of the parties and the public appearing before the legislative body. AB 361 had a sunset clause. On January 5, 2022, Governor Newsome signed Executive Order N-1-22 extending the sunset clause and permitted agencies to continue holding public meetings via teleconference through March 31, 2022. During 2020 -2022 when the Covid-19 pandemic was ongoing. The TWSD Board of Directors continued to hold "in-person" meetings. The option to call in and participate via conference phone was provided to Directors and the general public. For example, one Director was at a higher health risk and chose to call in to meetings (personal communication, Boucher and Heindell, 2021).

Under the Brown Act, closed sessions of Board meetings are not encouraged; however, the Act does provide guidance about exceptions when closed sessions can be held under special circumstances. LAFCO utilizes the number of closed sessions a Board holds during a year as an indicator of transparency since fewer closed sessions indicate better transparency levels. For the TWSD, the number of closed sessions was evaluated. In 2020, the TWSD held a total of 13 meetings, and six of these meetings included closed sessions. In other words, 46 percent of the

TWSD Board meetings in 2020 included closed sessions. The closed sessions dealt with the following topics:

- Conference with Real Property Negotiator regarding potential property acquisition.
- Public Employee Dismissal.
- Conference with Labor Negotiator regarding one employee case.
- Conference with Legal Counsel –Existing Litigation: Litigation against PG&E for damages suffered as a result of the Camp Fire.
- Conference with Legal Counsel – Anticipated Litigation
- Public Employee Appointment: Sewerage Commission-Oroville Region Legal Counsel.

The government code sections applicable to each closed session were listed on the meeting agenda.

Website

The Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8) requires that special districts have a functional website that lists contact information and contains financial statements, compensation reports, and other relevant public information. Compliance with the Special District Transparency Act is used by LAFCO as one indicator to determine the accountability and transparency of a District.

*CONTACT INFORMATION*

*Thermalito Water and Sewer District*
*410 Grand Avenue*
*Oroville, CA 95965*
*(530) 533-0740*
*Web Site: https://www.twsd.info/*

TWSD's website is kept updated and is easily navigable, with current and past agendas and financial reports available for download. Contact information, consumer confidence reports, and other publications are available for viewing and download on the website. The "contact us" page provides instructions to contact emergency services on a 24/7 basis. However, the District does not seem to have a policy requiring that the TWSD website be user-friendly and contain accurate and up-to-date information. Although the District website partially complies with the requirements of the Special District Transparency Act, there is always room for improvement, and it is recommended that TWSD consider adding the following features associated with its website and other public communication:

- Adopt a policy requiring that the TWSD website be user-friendly and contain accurate and up-to-date information; and
- Create a web page where community members can sign up for a free electronic subscription service to send automatic email notifications when a new agenda is available.
- Create a webpage that contains District news, and that is updated regularly.
- Ideally, all independent districts in California would post their employee wage scale by bargaining unit onto their website as described in the Finance Section 7.8 of this Chapter. Therefore, it is recommended that TWSD Post either the employee compensation rates OR a link to the California State Controller Government Compensation website at:

<https://publicpay.ca.gov/>. (TWSD's existing link does not currently link to helpful information).

General Accountability

The TWSD demonstrated accountability and transparency in disclosing information and cooperation with Butte LAFCO. The District cooperated with LAFCO's requests for information and participated in an interview with the MSR consultants. Additionally, the District works towards accountability through compliance with local, state, and federal regulations. Wastewater Regulations are described in Appendix C. Drinking water regulations are described in Appendix D.

Butte County is required by law to impanel a Grand Jury. The major functions of a Grand Jury are divided into criminal indictments and civil investigations, and the civil investigation portion requires the majority of time. The civil or "watchdog" responsibilities of the Grand Jury include examining all aspects of local government, including cities and special districts, to ensure that these agencies are being governed honestly and efficiently and that monies are being handled appropriately. If an agency is subject to many Grand Jury inquiries, this can be indicative of poor performance or a high number of complaints about an agency. For this analysis, the Butte County Superior Court Grand Jury reports for six years were studied (i.e., Years FY19-20, FY18-19, FY17-18, FY16-17, FY15-16, FY14-15). The results of this analysis indicate that the Thermalito Water and Sewer District has not been the subject of a Grand Jury inquiry in recent years.

Litigation is expensive for public agencies due to the costs of preparing an administrative record, retaining attorneys, and preparing briefs. Avoidance of litigation is an indicator of management's effectiveness in utilizing alternative dispute resolution mechanisms. TWSD is currently involved in litigation against PG&E for damages incurred by the Camp Fire related to operations at the Concow Reservoir and subsequent water quality issues at the District's treatment plant. TWSD's attorney now works on a contingency fee arrangement, meaning that unless resolved in favor of the District, no fees or costs will be incurred by the District other than internal staff expenses and in the event of a resolution in favor of TWSD, and all attorney's fees and costs will be a percentage of its recovery (TWSD, RFI, 2021b).

### *7.3.4 Management Efficiencies*

The General Manager is appointed by and reports to the Board of Directors and is responsible for directing District operations and overseeing and implementing policies on behalf of the Board. Managers at TWSD are responsible for "Exercising management and supervisory authority over all functions and personnel in accordance with policies and procedures of Thermalito Water and Sewer District" (TWSD, 2021b). An essential component of management effectiveness includes adopting a District-wide mission and vision statement. The TWSD Mission statement is: "*The Mission of the Thermalito Water and Sewer District (TWSD) is to provide reliable, high-quality water and sewer services while meeting customer demand and to manage District resources in an open, responsible, environmentally sound manner at the lowest practical cost*," and this Mission Statement is displayed prominently on the District website.

The General Manager oversees a staff of eleven full-time equivalent employees. Butte LAFCO's 2006 MSR found that the ratio of managers to workers is appropriate; the District is not 'top-heavy' in managers. The District has various policies and procedures related to personnel, provision of services, customer relations, operations and maintenance, relationships with other agencies, and the like. The management structure of the District is relatively simple and well-suited to the type of operations undertaken; the linear management structure ensures reportability and accountability. No alternative structures or reorganizations of the staff would result in more efficient operations, and the existing structure is considered appropriate for the District (Butte LAFCO, MSR, 2006). Additionally, the District is subject to yearly financial audits and has accomplished all recommendations from recent audits as described in Section 7.8 in this Chapter.

### *7.3.5 Staffing and Training*

District staffing is very efficient with 13 full-time equivalent (FTE) employees, with the part-time employees being counted as a ratio of the FTE number. Staffing includes Administration (4); Operations (6); and Treatment (3) (TWSD, 2021b). The State Controller's Office lists a total of fourteen positions (including both full- and part-time) as listed below:

- General Manager
- District Engineer
- General Foreman
- Office Manager
- Chief Plant Operator
- Utility Worker II
- Utility Worker I
- Water Treatment Plant Operator I
- Meter Reader/Repair Person
- Customer Service Representative
- Sr. Customer Service Representative
- Concow Caretaker

The annual salary paid to each employee is listed in the Finance Section 7.8 of this chapter.

### *7.3.6 Determinations for Governance and Accountability*

Based on the information included in Sections 7.1 through 7.3 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a Municipal Service Review. The determinations listed below in Table 7-4 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

| Table 7-4: MSR DETERMINATIONS: ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS, INCLUDING GOVERNMENT STRUCTURE AND OPERATIONAL EFFICIENCIES | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| TWSD-Acc-1 | Number of closed sessions during the year 2020 (ideally fewer than 50%). | In the year 2020, the TWSD held a total of 13, and six of these meetings included closed sessions. In other words, 46 percent of the TWSD Board meetings in 2020 included closed sessions. The government code sections applicable to each closed session were listed on the meeting agenda. |
| TWSD-Acc-2 | Does the agency's Website comply with the 2016 updates to the Brown Act described in Government Code §54954.2 and enacted by Assembly Bill 2257? | The District website agenda distribution meets the minimum requirements of the Brown Act 2016 Updates described in AB2257. It is recommended that Board packets also be made available via the website. |
| TWSD-Acc - 3 | Compliance with the Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8) requires special districts to have a functional website that lists contact information and contains financial statements, compensation reports, and other relevant public information. | It is recommended that TWSD consider adding the following features associated with its website and other public communication:<br>• Adopt a policy requiring that the TWSD website be user-friendly and contain accurate and up-to-date information; and<br>• Create a web page where community members can sign up for a free electronic subscription service to send automatic email notifications when selected website information is updated.<br>• Create a webpage that contains District news, and that is updated regularly.<br>• Ideally, all independent districts in California would post their employee wage scale by bargaining unit onto their website as described in the Finance Section of this Chapter. Therefore, it is recommended that TWSD Post either the employee compensation rates OR a link to the California State Controller Government Compensation website at: <*https://publicpay.ca.gov/*>. (TWSD's existing link does not currently link to helpful information).<br>The addition of these proposed website features will aid the TWSD towards full compliance with the Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8). |

| | | |
|---|---|---|
| TWSD-Acc-4 | Terms of office and the next election date are disclosed for District Board members, and committee appointments are online. | TWSD's website discloses the terms of office for each District Board member. Although the next election date for District Board members and committee appointments can be determined by making a special inquiry to District staff, this information is not currently available online. This is an item that needs improvement, and it is recommended that the TWSD website be updated to disclose the terms of office and the next election date. |
| TWSD-Acc-5 | Do elected Board members submit required forms and receive required trainings as prescribed by the three state laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005) which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training? | TWSD's elected Board members must submit required forms and receive required trainings as prescribed by the three state laws regarding accountability and ethics, including: 1) the Political Reform Act; 2) Assembly Bill 1234 (Salinas, 2005) which requires ethics training; and 3) Government Code 53237 et. seq. which mandates sexual harassment prevention training.<br><br>1) The Political Reform Act: TWSD's Board has a code of ethics adopted on November 19, 2019. TWSD's conflict of interest policies are available to the public at *https://www.twsd.info/board-policy*. The Political Reform Act also requires special district board members to disclose all personal economic interests by filing a "Statement of Economic Interests" with the District Clerk or Butte County. TWSD Board members submit the forms to the County Clerk annually. Additionally, there have been no complaints to the CA FPPC regarding filing Economic Statements of Interest required under the Political Reform Act.<br>2) Ethics training as required by AB 1234: TWSD posts certification of the ethics training on its website at: *https://www.twsd.info/board-members-ethics-certificates*. Training is offered on a regular basis. All TWSD board members have completed this training. Therefore, TWSD's Board complies with AB 1234.<br>3) Special district board members must receive the required sexual harassment prevention two-hour training every two years per Gov. Code 53237 et. seq. TWSD posts certification of the prevention training on its website. Training is offered on a regular basis. All five board members have completed this training. Therefore, TWSD's Board complies with Gov. Code 53237 et. seq. |

| | | |
|---|---|---|
| TWSD-Acc-6 | Does the agency work to inform and educate homeowners regarding water or wastewater safety and prevention consistent with Butte County General Plan Objective 6.2.5? | TWSD works to inform and educate homeowners regarding water or wastewater safety and prevention consistent with Butte County General Plan Objective 6.2.5 through the following Public Outreach programs: 1) informational fliers distributed in the monthly bill statements and 2) notices posted on the District website. There are sufficient opportunities for local involvement in District activities, and information regarding the District is available to members of the public. |
| TWSD-Acc - 7 | Current litigation and/or grand jury inquiry. | TWSD is currently involved in litigation against PG&E for damages incurred by the Camp Fire related to operations at the Concow Reservoir and subsequent water quality issues at the District's treatment plant. TWSD has not been subject to a grand jury report in recent years. |

## 7.4 Growth & Population Forecasts

The growth and population projections for the affected area is a determination that LAFCO is required to describe, consistent with the MSR Guidelines from the Office of Planning & Research (OPR) as set forth in the CKH Act. This section provides information on the existing population and future growth projections for the Thermalito Water and Sewer District. Historical and anticipated population growth is a factor which affects service demand. Appendix A at the end of this MSR/SOI Update provides detailed demographic and socio-economic information for the County of Butte and the City of Oroville. An economic forecast for the County of Butte is provided in Appendix B.

### *7.4.1 Existing Population*

The community of Thermalito is in a "Census Designated Place" (CDP) per the U.S. Census Bureau. The CDP has a total area of 13.0 square miles (8,320 acres). The population in the Thermalito CDP as of 2020 is 6,894 persons. However, the CDP and census tracts do not directly correspond with District boundaries, and the CDP is 56 percent smaller in size compared to the TWSD boundaries. Therefore, this MSR inputs data into calculations to provide a closer approximation to the existing population of the District. Table 7-5 below provides current population estimates for the TWSD boundary and SOI. The provision of both the lower and the higher population estimates is useful for better understanding the possible range of population dynamics, which change periodically depending on local conditions. For example, Butte County's population declined by three percent in 2021 to 202,669 from the 2020 estimate of 208,951. This decline could be due to numerous factors such as age or economics. However, continuing ramifications from the Camp Fire in the Town of Paradise could also be a contributing factor in the decline.

A high population estimate of 11,318 persons was generated in Table 7-5 using the known value of 5,659 registered voters residing in the TWSD boundary per the Butte County Elections Office. A multiplier of "2.0" was calculated based on the average number of residents per voter in Butte County as a whole. TWSD's Urban Water Management Plan (UWMP) (2020) analyzed the population data, considered the number of water connections, and calculated a population of 3.87 persons per water connection (TWSD, 2023).

Table 7-5: Existing Population Estimates (High, Medium, and Low), TWSD, 2020

| Description | Known Value in Boundary | | Multiplier | Population in Boundary | Population in SOI |
|---|---|---|---|---|---|
| Number of Registered Voters in boundary | 5,659* | | 2 | 11,318 | n/a |
| Number of water customers in boundary | 3,116** | | 3.8725 | 12,066 | n/a |
| Number of parcels in boundary | 3,798*** | | 2.22**** | 8,428 | 9,336 |

Data Sources:

*Registered Voter data provided by Butte County Elections Office, Denlay, Keaton, August 9, 2021. As of 2020, Butte County had a Total Registered Voters of 116,182 and a total population of 208,951, yielding a population-to-voter ratio of 2.
**TWSD, UWMP, 2020. Then a multiplier of 3.3 persons per water connection was applied.
***GIS Data provided by Butte LAFCO.
****There is an average of 2.13 persons per parcel in unincorporated Butte County and 2.4 persons per parcel average within the City of Oroville and these averages are based on 2020 CA DOF population data and 2021 GIS data. 2.22 is the average for TWSD as a multiplier.

Approximately 33 percent of the TWSD population resides in the City of Oroville, and 67 percent reside in unincorporated Butte County.

### *7.4.2 Existing Population in SOI*

The population in TWSD's SOI and outside the District Boundary is estimated to be 9,336 people based upon an average number of 2.13 persons per Assessor's Parcel in the unincorporated area.

### *7.4.3 Projected Population Growth*

Projecting the future population of a District is complicated due to varying annexation rates and census tracts that do not match District boundaries. Additionally, the Camp Fire has resulted in a re-distribution of the regional population, and the Covid-19 pandemic has slowed population growth in California. The DOF provides population projections at the County level, and the growth rate for the County of Butte is utilized to extrapolate population growth rates by Butte County Association of Governments (BCAG) and other agencies. Table 7-6 shows an estimated future population projection for the TWSD. Please note that LAFCO's 2006 MSR on Domestic Water

Table 7-6: Total Estimated and Projected Population (2020 – 2045) for TWSD

| | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | Percent Increase 2020 to 2045 | Numeric Increase 2020 to 2045 | CAGR 2020 to 2045 |
|---|---|---|---|---|---|---|---|---|---|
| Low Start Scenario* | 8,428 | 8,651 | 8,881 | 9,116 | 9,358 | 9,605 | 13.97 | 1,177 | 0.52 percent |
| Medium Growth** | 11,318 | 11,418 | 11,518 | 11,619 | 11,722 | 11,825 | 4.48 | 507 | 0.18 percent |
| High Growth Scenario*** | 12,066 | 12,635 | 13,204 | 13,773 | 14,342 | 14,911 | 24 | 2,845 | 0.85 percent |

*Data Sources:*

**The low start scenario is based on calculations of the number of parcels in boundary with a 2.65 percent average growth rate from the 2015 UWMP and from LAFCO's 2006 MSR which is translated to a compound growth rate of 0.52 percent.*

***Medium growth scenario is based on a population projection calculated as a percentage of the County of Butte's future growth as projected by the California Department of Finance. Demographic Research Unit. January 2019 Table P-1: Total Estimated and Projected Population for California and Counties: July 1, 2010 to July 1, 2060 in 1-year Increments. This information was used to establish the control total for BCAG's high forecast scenario for housing at 0.88 percent.*

****High Growth Scenario is based on TWSD's 2020 UWMP, Table 3-1.*

and Wastewater utilized an annual average population growth rate of 2.6 percent for TWSD (Butte LAFCO, MSR, 2006). TWSD's 2015 UWMP also utilized this 2.6 percent growth rate. However, BCAG utilized a 0.88 percent estimated growth rate in their Post Camp Fire Study 2018 – 2045 Forecast for the Oroville region. Table 7-6 provides three growth scenarios for the TWSD. In the "low start" scenario, the lower existing population estimate is utilized along with LAFCO's faster 2.6 percent annual growth rate. In the "high growth" scenario, the larger current population estimate in Table 7-5 is per TWSD's 2020 UWMP. By the year 2045, it is estimated that TWSD's existing boundary will encompass a population ranging from 9,605 to 14,911 persons.

The projected growth rate for the County of Butte anticipates development throughout the entire County. The addition of 507 to 2,845 more people to the TWSD by 2045 is possible as the District contains under-developed areas within the existing boundaries that could potentially be available for more intensive residential development. Areas located in the southern portion of the District, which are part of the City of Oroville, where single-family subdivision development continues to occur and expand, have a high probability of developing over the next twenty years. The City of Oroville has plans to annex all of the Thermalito area, which could spur growth, as shown in Figure 7-4 (page 7-30). Additional details on planned future development are described in Section 7.4.5 Potential Future Development.

### *7.4.4 Existing Land Use*

Land-use is a factor that affects population growth and, therefore, demand for public services. However, the TWSD is not a land-use authority. Currently, the primary land uses within the service area for the District are residential, commercial, industrial, agricultural, and open space. Those portions of the boundary located within the City of Oroville are developed with a range of land uses, including residential (low, medium, and high density), commercial development along the Highway 70 Corridor, and industrial development near the airport. For example, several commercial and industrial uses are found primarily along major roads in the District, such as Oro-Dam Boulevard West (State Route 162/SR 162) and Grand Avenue. The Airport is within the District's service area, but the area between the Thermalito Afterbay and the Airport is outside TWSD's service area. Several large subdivision developments have been constructed on the west side of the Oroville Municipal Airport. The Thermalito Elementary School District has schools in the vicinity. The Thermalito area also contains several areas of open space. For example, Ruddy Creek is the main drainage course for a significant portion of the Thermalito area. Oak trees and willows are located adjacent to the creek in some areas.

TWSD's reservoir (Lake Concow) is located in the center of a rural community called Concow. Concow is an unincorporated community and census-designated place (CDP). Due to a decline in employment and repeated wildfires, the population has declined to 402 persons. The Camp Fire destroyed Concow and the adjacent municipality of Paradise on November 8, 2018.

Butte County General Plan 2030

Approximately 67 percent of TWSD's boundary and all of its Sphere of Influence area is unincorporated and subject to the land-use policies and regulations of Butte County. Most land-use decisions in the unincorporated areas are initiated by private property owners and are secured via entitlements and land-use permits from Butte County and other agencies. In addition, the County plans for its future growth through its General Plan, which is a long-term comprehensive framework to guide physical, social, and economic development within the community's planning area. The General Plan contains a land-use map and associated policies that identify the types and intensities of permissible uses in relation to different land-use designations. The Butte County General Plan 2030 was updated and adopted on October 26, 2010 (County Resolution No. 10-152) and Amended on November 6, 2012 (County Resolution No. 12-124). The Oroville Area Land Use Plan of the Butte County General Plan designates a large portion of the TWSD boundary and SOI as Agricultural-Residential (A-R). This Agricultural-Residential designation allows agricultural uses and single-family dwellings at rural densities. This area's farms and ranches receive water from rainfall or groundwater, depending on the specific location. Farms and ranches in the TWSD boundary and SOI contribute to the agricultural sector's economic prosperity in Butte County by producing a wide variety of farm products.

The County's General Plan Housing Element was subsequently updated on August 26, 2014, through County Resolution No. 14-112. Butte County has opted to update its housing elements every eight years. The 2022 update to the Housing Element will aim to align with their Regional Transportation Plans (updated every four years) and the housing plans in the Regional Sustainable Communities Strategy (See BCAG). The County General Plan and associated Housing Element influence both the type and the rate of growth within the unincorporated areas, such as most of the TWSD's boundary and SOI.

Figure 7-2 (page 7-26) provides a map that merges the County's General Plan Land Use Map with the City's General Plan Land Use Map through the use of crosswalks to show the spatial relationships in land use designations graphically. There are considerable differences between the County and the City of Oroville's General Plans. The County of Butte's General Plan map has lower residential densities with minimum lot sizes of approximately one to five acres. Butte County's map designates several areas in Thermalito as Rural Residential (RR) with large residential lot sizes. For example, the local "Ghianda Heights" subdivision has lot sizes of ~16,000 square feet (~0.4 acre). This can be contrasted with the City of Oroville's General Plan map, which shows residential densities of 3 to 6 units per acre. Please note that in TWSD's SOI, the County General Plan designates land mainly as Agricultural.

Oroville General Plan 2030

Approximately one-third of the TWSD boundary is located in the City of Oroville and is subject to the City of Oroville General Plan Land Use Map, which designates a portion of TWSD's boundary as residential, including low, medium, and high-density residential. The Oroville 2030 General Plan was adopted in 2009 and updated in March 2015. The General Plan serves as a comprehensive guide for making decisions about land use, community character, circulation, open space, the environment, and public health and safety. The City General Plan contains

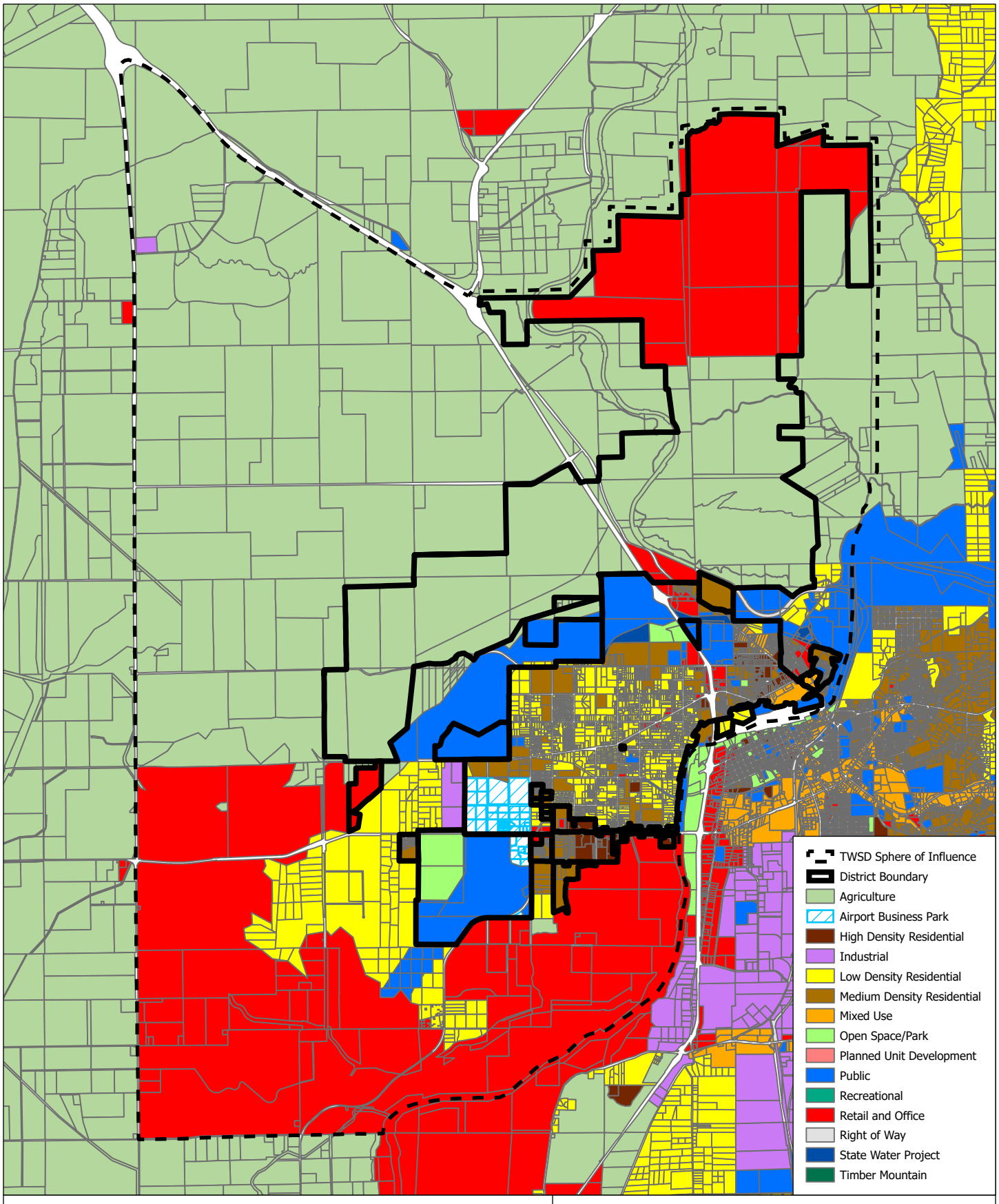
guiding principles related to livability, enhanced mobility, a vibrant local economy, natural resources, environment, recreation, community infrastructure, health and safety, and an involved citizenry (COOR, 2015). The General Plan provides the legal foundation for the zoning ordinance and other ordinances. The General Plan recognizes the water and wastewater services provided to City residents by other service providers, including Thermalito Water and Sewer District (TWSD), Lake Oroville Area Public Utility District (LOAPUD), South Feather Water & Power Agency (SFWPA), and California Water Service (Cal Water). The City's General Plan contains numerous policies regarding the provision of water and wastewater municipal services. The City's General Plan designates land uses within the incorporated areas of the TWSD boundary as Residential (low, medium, and high density), commercial, retail, and industrial, as shown in Figure 7-2.

Open Space & Agriculture

Butte LAFCO aims to protect open space and agriculture. For this MSR analysis, the spatial distribution of agricultural land was derived from the California Department of Conservation. The types of farmlands within the TWSD boundary and SOI include grazing land, prime farmland, farmland of statewide importance, and unique farmland, as depicted in Figure 7-3. TWSD does not provide raw (untreated) irrigation water to agricultural areas. Additionally, TWSD does not provide wastewater collection services to agricultural customers. Therefore, local agricultural areas are rainfall or groundwater-dependent and may also utilize individual septic systems for wastewater collection. LAFCO has an interest in documenting the conversion of agricultural and open space lands to other land use types, such as residential use.

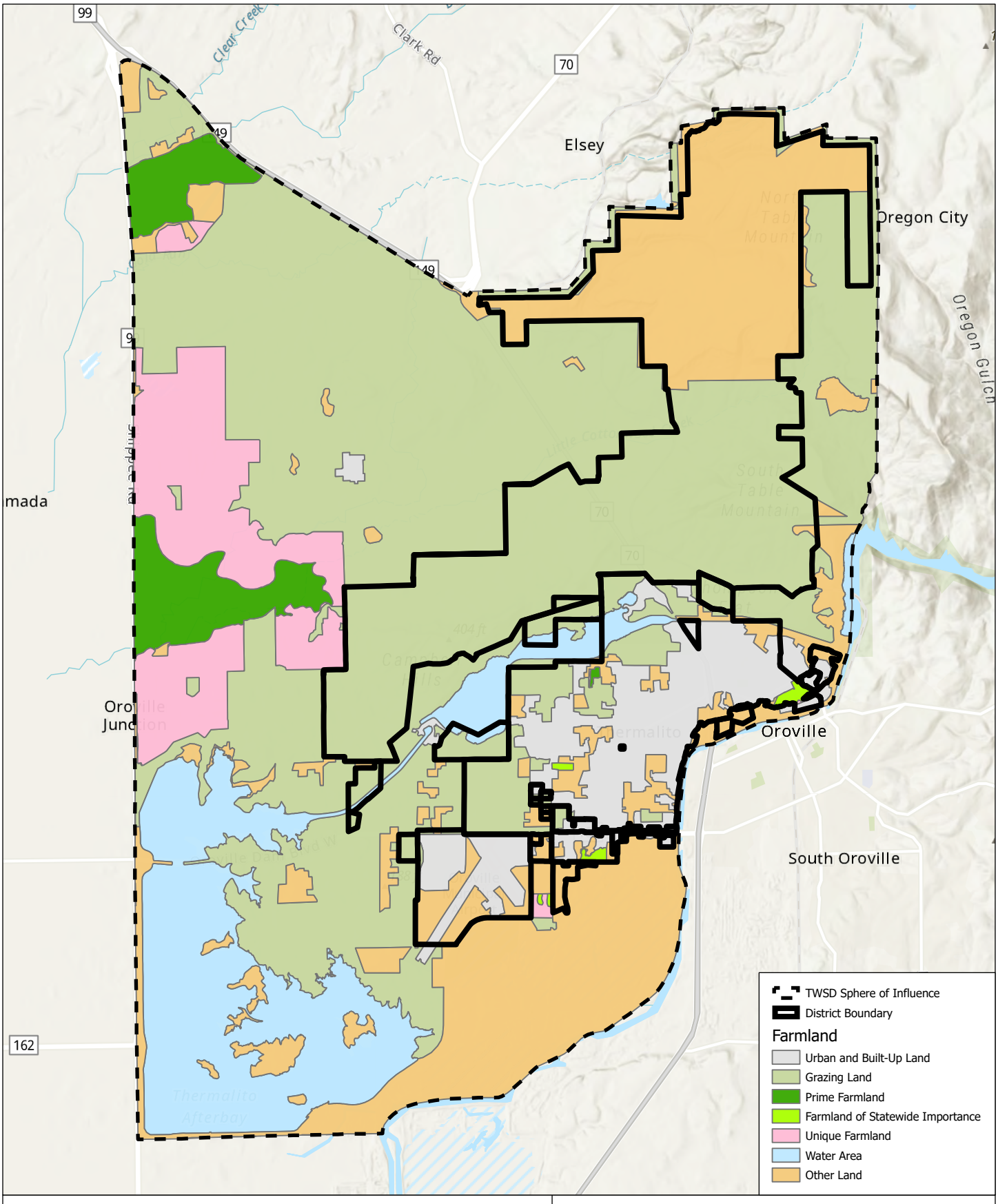
### *7.4.5 Potential Future Development*

Future population growth within the local community served by TWSD depends on zoning, general plan policies, and land use designations by the City of Oroville and Butte County. Given existing land-use patterns, most of the residential growth expected to be serviced by the TWSD will likely occur in the City of Oroville and the immediately surrounding areas. Butte County is embarking on an update of its current General Plan, which may refine development requirements. The City's General Plan indicates that the entire Thermalito area will likely develop with some form of urban/suburban use in the future. Additionally, new state laws (SB-9) encouraging the construction of accessory dwelling units may promote infill development in some neighborhoods. For purposes of this MSR Analysis, it is assumed that the average annual future growth rate (AAGR) within the TWSD boundaries will range from 0.88 percent to 2.65 percent, as listed in Table 7-6 above.




*Map Date: 09/29/2021*
*Data Source: Butte LAFCO;*
*Butte County Association of Governments (2021)*

# Figure 7-2
# TWSD
# City/County General Plan




# Figure 7-3
# TWSD Farmland

*Map Date: 09/29/2021*
*Data Source: Butte LAFCO;*
*Butte County Association of Governments (2021)*

When a private property owner proposes a new development, TWSD will coordinate with the respective City and County Planning Departments by providing information on the adequacy of its water supply, distribution system, and water rates to meet the area's current and future growth needs. Concurrently, information about the wastewater collection system (infrastructure and fees) will also be provided. Generally, the Lead Agency (such as the Planning Department for the City/County) will process applications for subdivisions and commercial developments and invite TWSD to comment on any service-related issues or associated environmental issues. The District participates and provides information as requested.

Much of TWSD's service area is within the City of Oroville's boundary. Some areas are outside the City's boundary, but they are close enough to the City that they can be expected to grow at a similar rate. The District has been experiencing growth westward along Highway 162 to Highway 99. If the City decides to annex areas, they are requested to collaborate with TWSD to determine whether a new wastewater lift station is needed and the mechanism to fund this infrastructure. Generally, the City of Oroville pays for City initiated projects (personal communication, Boucher and Heindell, 2021).

Significant additional growth is anticipated north of the Thermalito Diversion Canal within the District's service area in an unincorporated area of the County (Butte LAFCO MSR, 2006). Additionally, new development is expected to occur in the future in the areas to the east and west of the TWSD boundary and within the TWSD SOI. If the City allows new development to be located outside of the TWSD SOI in the future, TWSD staff indicates they could potentially provide services; however, it would need to be studied in detail on a case-by-case basis. For example, if sewer service were requested, it could be a complex proposition, and it might necessitate the construction of a new sewage treatment plant and/or the construction of a sewer line over a bridge. Similarly, the provision of water service to new geographic areas may also necessitate the installation of new water pipes and other infrastructure, depending on the location. (personal communication, Boucher and Heindell, 2021). Two development projects are proposed in the Thermalito area as listed below:

- The Village at Ruddy Creek is a proposed 97-lot subdivision at the southeast corner of 18th Street and Feather Avenue. The Oroville City Council originally approved the project in 2007 as a 172-lot subdivision, but the project was never annexed and constructed. The project was redesigned at a smaller scale with 97 homes and approved by the City Council in 2020. The re-zoning will become effective upon annexation to the City of Oroville. TWSD would be requested to provide water and wastewater collection services to the project.
- Diamond Oaks TSM 05-14, located north of Oro Dam Boulevard. and south of Grand Avenue on 23.9 acres And consisting of 98 single-family lots. Tentative Map extension to 8/23/2022 in the Thermalito area of Butte County.

Within the City boundaries, two new subdivisions are proposed in the area as listed below:

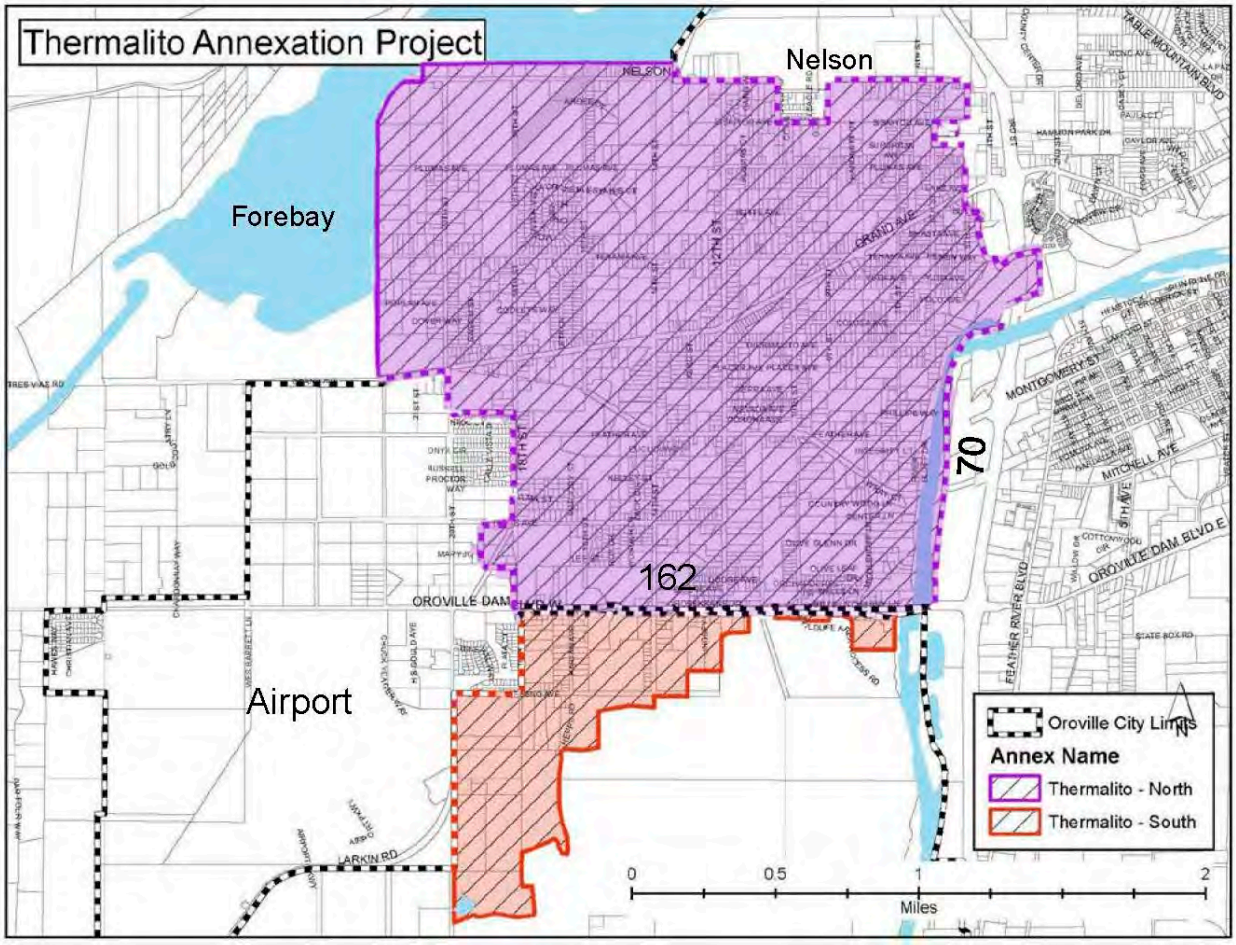
- Vista Del Oro is a project by Crowne Communities to construct 71 market-rate residential units located at Larkin & SR162 West in Thermalito. The City Council recently approved this project, and active construction is anticipated soon.

- Linkside Place II is a project by Generation Communities developers to construct 56 market-rate residential units at SR162 West & Christian Ave in Thermalito. The City Council approved the TSM, and the Final Subdivision Map is under review.

Additionally, local developers have several partially un-finished subdivisions (Orchard Crest, etc.) (Butte County OEM, 2019). TWSD has also issued several will-serve letters for future water and sewer service.

Figure 7-4 below shows the proposed Thermalito annexation area. It is anticipated that TWSD will continue to provide services to these areas into the future, including post-annexation. Please note that new state laws (including SB9) allow accessory dwelling units and junior accessory dwelling units to be built on a single lot, and this may also encourage infill housing within the City limits.

Figure 7-4: Proposed Thermalito Annexation Area



### *7.4.6 Local Hazard Mitigation Plan*

The Butte County General Plan's Safety Element (which includes the Local Hazard Mitigation Plan [LHMP]) was adopted by the County Board of Supervisors on November 5, 2019 (Butte OEM, 2019). Butte County, along with five incorporated communities and ten special districts, prepared the 2019 LHMP to reduce vulnerability to future hazard events. The Thermalito Water and Sewer District is the subject of a dedicated appendix (Appendix G) in the LHMP, and it lists the following potential local hazards:

- Climate Change;
- Dam Failure;
- Drought and Water Shortage;
- Earthquake and Liquefaction;
- Flood: 100-/500-year;
- Floods: Localized Stormwater;
- Stream Bank Erosion; and
- Wildfire.

It is important to note that the TWSD has both formal and informal emergency response plans and practices. During past emergencies, the District has assisted neighboring districts and other government agencies through mutual aid and other informal practices, as described in the following pages.

Climate Change

Climate change is projected to impact the Northern Central Valley (including Butte County) via the following: temperature increases, reduced precipitation, flooding, reduced agricultural productivity, reduced water supply, wildfire, public health, heat, groundwater depletion, and stream-flow degradation (Butte Co. OEM, LHMP, 2019). TWSD does have physical assets that are potentially at risk due to the impacts of climate change, such as those assets listed in Table 7-20. The assets most likely at risk include groundwater wells and the Concow Reservoir, which is sensitive to stream-flow degradation (Butte Co. OEM, LHMP, 2019).

Dam Failure

During periods of prolonged rainfall and flooding, dam failures can sometimes occur. The primary risk associated with dam failure is high-velocity flooding of properties located downstream of the dam. TWSD owns and maintains the Concow dam and reservoir. Since property and at least one person downstream would be at risk should the dam overtop or fail, this is classified as a high-hazard dam. Impacts to the TWSD from dam failure include damage to property and critical facilities, as well as potential loss of life. Other impacts include the costs to TWSD to rebuild the Concow dam if it fails. In the event of a catastrophe, TWSD could lose its ability to store/convey surface water per its DWR contract. Ongoing regularly scheduled preventative maintenance and upgrades are necessary to maintain integrity and protection for the Concow Dam (Butte Co. OEM, LHMP, 2019).

Drought

A lack of rain and snow over an extended period (usually a season or more) can result in drought conditions creating water shortages for some human activities and the environment. A drought's impacts result from the interplay between the natural event (less precipitation than expected) and the demand people place on the water supply. The vulnerability of the TWSD to drought is District-wide, and impacts may include a reduction in water supply and an increase in dry fuels. Drought-sensitive activities include wildfire protection, municipal usage, commerce, tourism, and recreation. Drought conditions can also cause soil to compact and not absorb water well, potentially making an area more susceptible to flooding. During extended droughts, over-drafting of aquifers can cause groundwater levels to drop, which may adversely affect the Districts wells. Additionally, an extended drought could have implications for the District's drinking water treatment plant. TWSD's drought contingency plans include voluntary conservation measures. To further cope with drought, the District could consider additional water storage capabilities and upgrading wells to reach lower groundwater depths (Butte Co. OEM, LHMP, 2019).

Earthquake and Liquefaction

The Cleveland Hills fault is the only known active fault in Butte County, and this fault is the August 1975 Oroville earthquake site. TWSD and the surrounding area are located at a relatively low to moderate risk of earthquake occurrence. Earthquakes can potentially cause the failure of water and sewer pipeline failures or structural damage to the drinking water treatment plant. Communities within the District also have a low risk of liquefaction from earthquake shaking (Butte Co. OEM, LHMP, 2019).

Flooding (Large Scale Flooding, Localized Stormwater, Levee Failure, and Storms)

In the winter and spring, heavy rain with strong winds, lightning, or hail sometimes occurs. The heavy precipitation can result in large-scale flooding, localized stormwater, or levee failure. The General Plan Safety Element noted that the Oroville area has historically been subject to flooding from various rivers and streams, including the Feather River and its tributaries. Flooding was much more prevalent before the construction of the Oroville Dam. Various storm drainage and flood control measures keep storm floodwaters within defined areas. Several neighborhoods within TWSD have a 1 percent and 0.2 percent annual probability of flooding. Although TWSD has identified no past occurrences of large-scale flooding, localized stormwater events caused sewer maintenance-holes to become inundated with water and caused inflow/infiltration issues within the sewer system. TWSD's assets at risk to large and small-scale flood events include the water treatment plant, wells, distribution lines, sewer collection lines, the sewer lift station, maintenance-holes, and District offices (Butte Co. OEM, LHMP, 2019).

Streambank Erosion

Stream bank erosion occurs on rivers, streams, and other moving waterways, including leveed areas in Butte County. The Oroville Dam and Thermalito Afterbay effectively trap sediment loads. Therefore, the Feather River (the portion located below the dam) has reduced suspended sediment, and this causes the River to become more erosive, transporting mining debris and older

alluvium downstream. Erosion is a slow process, taking place over periods of years. However, more significant erosion occurs during periods of high stream flow and during storm and wind events when wave action contributes to the extent and speed of streambank erosion. Roads and levees within the TWSD boundary area are subject to erosion. Concow Reservoir is especially susceptible to erosion. The District coordinates with Butte County to maintain their drainage ways to reduce streambank erosion as much as possible (Butte Co. OEM, LHMP, 2019).

Wildfire Risk

Wildfires can have devastating effects on watersheds through loss of vegetation and soil erosion, which may impact the County and TWSD by changing runoff patterns, increasing sedimentation, reducing natural and reservoir water storage capacity, and degrading water quality. Fires may result in casualties and can destroy buildings and infrastructure. The whole of the District lies either in a Moderate to High Fire Hazard Severity Zone as defined by Cal-Fire. TWSD especially noted two past wildfire events, including:

- A wildfire in the Concow watershed occurred during the summer of 1998, which resulted in the closure of Concow Road. The wildfire burned vegetation, and as a result, the Concow Reservoir received an excessive amount of sedimentation.
- The Camp Fire started in Pulga and destroyed the Town of Paradise and a considerable portion of Concow during November of 2018. The loss of vegetation impacted the Concow Reservoir, and later rain events triggered massive amounts of sediment and debris were carried into the lake.

The area around the District is not immune to numerous types of grass and brush fires, and any one of them could accelerate into an urban interface wildfire. Wildfires can cause short-term and long-term disruption to the County and District through loss of vegetation and soil erosion, which can change runoff patterns, increase sedimentation, reduce natural and reservoir water storage capacity, and degrade water quality. As development continues throughout the Planning Area, especially in these interface areas, the risk and vulnerability to wildfires will likely increase. In addition to wildfire risk, PG&E shutdowns can occur during red flag days, which affects the District. TWSD has generators and auto-transfer equipment that are utilized in the event of PG&E shutdowns (Butte Co. OEM, LHMP, 2019).

### *7.4.7 Determinations for Growth and Population*

Based on the information in Section 7.4 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 7-7 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

| Table 7-7: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| TWSD-Pop1 | Existing Boundary. | TWSD's 14,873-acre boundary area is located in the unincorporated County of Butte and includes most of the community of Thermalito. A portion of the City of Oroville's boundary and sphere of influence west of the Feather River overlap with the TWSD boundary and SOI. Given this overlap between the City and TWSD boundaries, it is important to have consistency is service and facilities among these two service providers.<br><br>Lake Concow is shown as being part of the District's boundary as the detached area north of the main boundary area in the County's GIS database. However, based on information from LAFCo's files, it is not clear when or how Lake Concow came to be considered part of the District's boundary. LAFCo's previous MSRs in 2006 and 2007 did not show Lake Concow within the TWSD boundary in either text or maps. Additional research on this item is recommended. |
| TWSD-Pop2 | Existing Sphere of Influence. | LAFCO initially established the District's SOI in 1985. The District's SOI encompasses 44,101 acres and includes 4,383 parcels. District staff indicates that the Sphere of Influence boundary is adequate for protected future needs due to its large size. |
| TWSD-Pop3 | Extra-territorial Services. | The TWSD does not provide extra-territorial services outside of its District boundary. |
| TWSD-Pop4 | Projected population in years 2020 to 2045. | By the year 2045, it is estimated that TWSD's existing boundary will encompass a population ranging from 9,605 to 14,911 persons. This represents an additional 507 to 2,845 persons expected to reside within TWSD boundaries. |
| TWSD-Pop5 | Do the District boundaries contain sufficient land area to accommodate projected growth? | Currently, the District's boundary area supports an average of 0.81 persons per acre, which is considered to be low population density. The City of Oroville General Plan suggests that growth may occur in the southern portions of the TWSD boundary, and there are opportunities for infill development. Additionally, the City of Oroville has plans to annex the Thermalito area. These data indicate that the TWSD boundaries contain sufficient land area to accommodate projected population growth. |

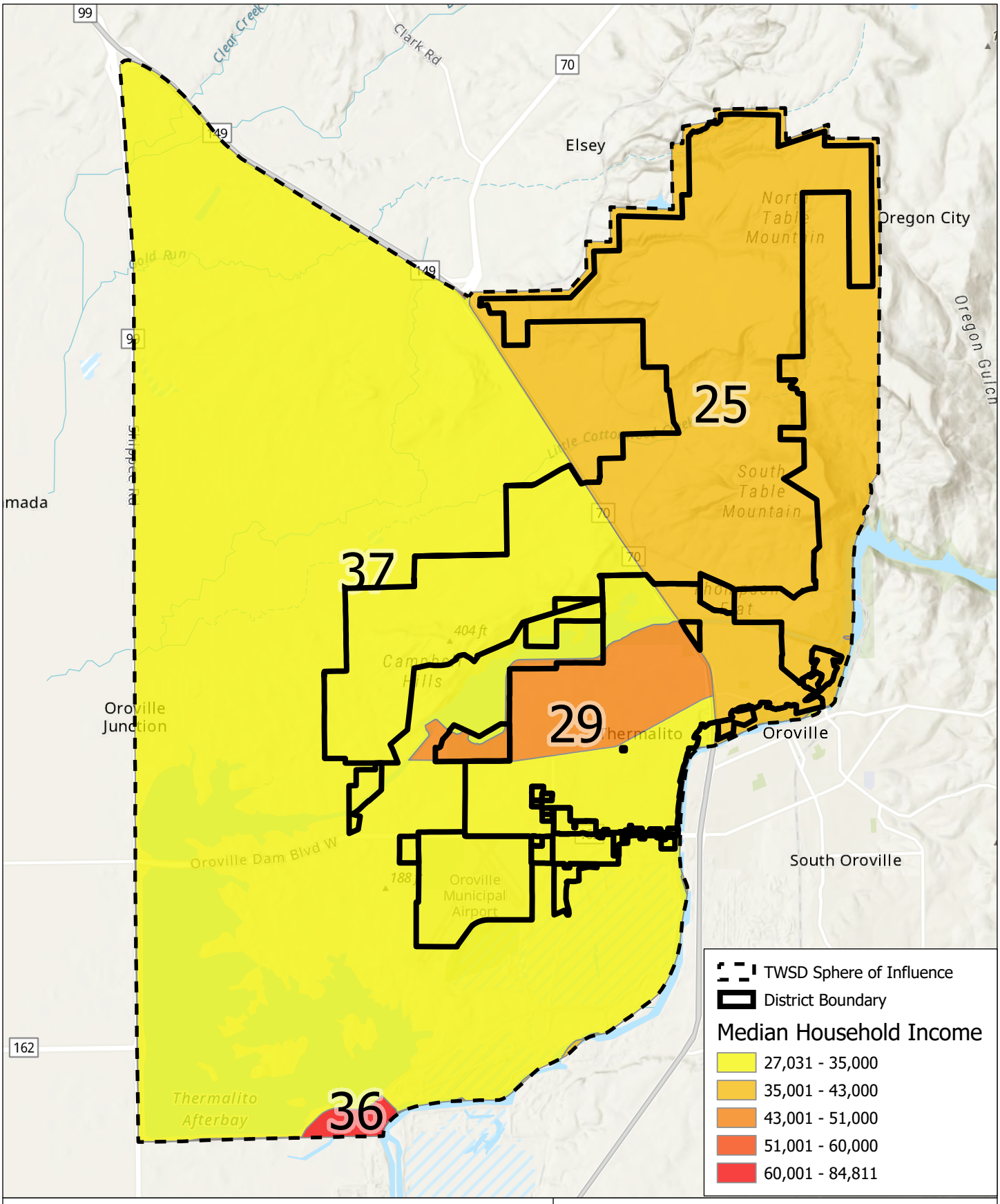
| Table 7-7: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| TWSD-Pop6 | Effect that the District's service provision will have on open space and agricultural lands. | Farmland of statewide importance and grazing land exists within the TWSD boundaries. However, TWSD does not provide raw water for irrigation purposes. Farmland within the boundaries and SOI are rainfall and/or groundwater-dependent and may utilize individual septic systems to dispose of wastewater. The services provided by TWSD have minimal effects on agricultural land and open space. |

## 7.5 Disadvantaged Unincorporated Communities

### *7.5.1 DUC Discussion*

A Disadvantaged Unincorporated Community (DUC) is an unincorporated area of a County in which the annual median household income (MHI) is less than 80 percent of the statewide MHI. The statewide annual median household income (MHI) in California for 2019 was $75,235 (U.S. Census, 2021). The year 2019 is the baseline year because it is the most recent year for which numerical and spatial (GIS) data is consistently available. Eighty percent of the statewide MHI (2019) equals $60,188.00, the threshold used to determine which geographic areas qualify as disadvantaged communities. This analysis uses Census Tracts to determine DUCs because this level of analysis provides the most uniform income data available statewide. Data for this report was collected from the 2019 American Community Survey 5-Year Estimates at the census tract level. A census tract is a geographic area defined by the United States Census Bureau. The geographic size of census tracts varies widely depending on the population density; a census tract typically has around 4,000 residents but can range from 1,200 to 8,000. There are five census tracts within the TWSD boundary and sphere of influence, as shown in Figure 7-5. Four of these Census Tracts have MHIs below the $60,188 threshold and therefore are classified as disadvantaged unincorporated communities as listed in Table 7-8 (next page).

| **Table 7-8: Median Household Income by Census Tract** | | | |
|---|---|---|---|
| **Census Tract** | **Population (2019)** | **Square Miles** | **Median Household Income** |
| 25 | 5,353 | 54.9 | $37,054 |
| 29 | 3,310 | 2.4 | $48,897 |
| 36 | 4,202 | 127.7 | $65,625 |
| 37 | 4,889 | 48.4 | $32,401 |
| 24 | 4,725 | 196.0 | $40,071 |
| Source: US Census, 2019 American Community Survey 5-Year Estimates and *https://tigerweb.geo.census.gov/tigerweb/* | | | |




Map Date: 09/29/2021
Data Source: Butte LAFCO; US Census Bureau
American Community Survey (ACS)

**Figure 7-5**
**TWSD Census Tracts**

Census tract 24 is listed in Table 7-8 above because Lake Concow is within this census tract and is also part of the TWSD boundary area. Lake Concow is geographically disjointed from the primary portion of the District boundary and is therefore not shown on the map, Figure 7-5.

Census tract 37 was identified in the Butte County General Plan Environmental Justice Trends document as a particular concern because "the Thermalito DAC has high unemployment rates and high rates of households living below the federal poverty line compared to the rest of California. Households in this area have low incomes but also a lower housing cost burden. The Thermalito DAC has a slightly higher proportion of residents that are people of color compared to the rest of the County but lower than throughout the state; average life expectancy is shorter than the rest of the County and state. The DAC's pollution burden is highest in the categories of pesticide use and proximity to impaired water bodies. This DAC scores above the 75th percentile for the following factors: pesticide use; heart attack-induced emergency room visits; low birth weight infants; population without a high school degree; households below the federal poverty line; and relative unemployment" (Butte County, 2021a).

Local median household incomes within the District's boundary are low, as listed in Table 7-8. Therefore, the ability of low-income residents to pay their utility bills (including water bills) is a concern. The State of California, Office of Environmental Health Hazard Assessment, has assessed various parameters for community water systems throughout the state and posted the information to the online database called the "Human Right to Water Data Tool." The database gives TWSD a *Water Affordability Composite Score of* "3" (Poor), meaning that given the annual median household income of the water system residents, their average water bill may be high relative to their ability to pay (OEHHA, 2021). However, the Finance Section (Section 7-8) shows that TWSD's rates are reasonable and reflect the actual cost of providing public services. It is noted that TWSD's water rates are the second lowest in the County. Additionally, TWSD has taken steps to reduce costs and increase efficiency, as shown in Section 7.9. Recommended actions that LAFCO and TWSD can take to improve water affordability are provided in Sections 7.8 and 7.9.

Golden Feather Mobile Home Park

The Golden Feather Mobile Home Park has an on-site wastewater system that has received multiple violations from state regulatory authorities. State agencies approached TWSD and inquired about connecting the mobile home park to the TWSD wastewater collection system. TWSD is working with Jacob's Engineering Consultants to consider the feasibility and to develop a plan. TWSD had submitted a Grant Funding Application for connecting the GFMHP to its collection system. The Golden Feather Mobile Home Park is located at 703 Oro Dam Blvd W, Oroville, CA 95965, and this is an unincorporated disadvantaged area.

DUC Summary

In summary, the four disadvantaged census tracts are provided public services by numerous local and state agencies. Within the TWSD boundary, water service is provided to the DUCs by the District. Outside the TWSD boundary, individual privately-owned wells provide groundwater as needed. Cal Water may also provide water to areas within the City of Oroville. Wastewater

collection services are also available from the TWSD to areas within its boundary. The Sewerage Commission – Oroville Area (SC-OR) provides wastewater treatment to TWSD customers. Outlying areas rely on individual septic systems for wastewater disposal. Fire protection services are provided by the City of Oroville only to those parcels located within the City. For other parcels within the TWSD boundary and SOI, fire protection service is provided by two agencies:

- The remaining portions of the TWSD boundary and SOI to the north, west, and east (to some extent) are provided fire protection by the Butte County Fire Department (BCFD). Butte County Fire Department provides services to approximately 1,550 square miles of Butte County from 42 fire stations. BCFD directly serves approximately 102,000 unincorporated residents of Butte County, 2,700 in the City of Biggs, and 5,000 in the City of Gridley. Through automatic and mutual aid agreements, BCFD also provides resources to the cities of Oroville, Chico, and the Town of Paradise. In addition, the Butte County Fire Department (BCFD) contracts for staff with the California Department of Forestry and Fire Protection (CAL FIRE). Under this contract, the County pays CAL FIRE salaries and benefits and other related costs to staff County-owned fire stations and apparatus.
- CAL FIRE contracts with BCFD to provide services such as fire control; emergency medical service, technical rescue response; hazardous materials response; flood control assistance; fire prevention and public safety education; fire law enforcement/arson investigation; and vegetation management. CAL Fire is the lead fire protection agency for wildland fires in the SOI within State Responsibility Areas (SRAs).

All TWSD boundary and SOI areas receive essential services of water, wastewater, and structural fire protection (or acceptable private alternatives). Therefore, no DUCs within the existing TWSD boundary or SOI lack essential public services. No public health or safety issues have been identified, except for the Golden Feather Mobile Home Park.

### *7.5.2 Determinations for Disadvantaged Unincorporated Communities*

Based on the information included in Sections 7.5 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 7-9 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

| Table 7-9: MSR DETERMINATION: LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES WITHIN OR CONTIGUOUS TO THE SPHERE OF INFLUENCE | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| -DUC-1 | The median household income is identified. The DUC threshold MHI (80 percent of the statewide MHI) is clearly stated. The MHI in the Agency's boundary is described. | Four of the five census tracts encompassing the TWSD boundary and SOI have a MHI of less than the $60,188.00 threshold for 2019 and are classified as DUCs. |
| -DUC-2 | Potential DUCs are considered. The provision of adequate water, wastewater, and structural fire protection services to DUCs is considered. | Due to the identified DUCs receiving essential services of water, wastewater, and structural fire protection, there are not any communities within the existing TWSD boundary or SOI that lack public services (or a private alternative). No health or safety issues have been identified other than the Golden Feather mobile Home Park. However, water affordability remains an issue for local residents, and recommendations have been provided in the finance section. |

# 7.6 Public Services

## 7.6.1 Service Overview

This Chapter evaluates the efficiencies of services provided by the Thermalito Water and Sewer District. TWSD provides the following services:

- Water Supply, Conservation, and Treatment
- Wastewater Collection and Transmission
- Solar-electric power to offset its internal costs

The TWSD currently services 3,116 water customers, and the number of sewer connections is 2,365 (TWSD, 2021b). Of the 3,116 water customers, approximately 156 are commercial accounts, and the remainder are residential. Approximately 23 domestic sewer collection system customers are commercial or industrial users (TWSD, 2021b). A single large industrial use can generate as much wastewater as many acres of residential use, and the impact on the sewer conveyance infrastructure can be significant (TWSD SSMP, 2020b). It should be noted that the spatial distribution of wastewater infrastructure is much smaller compared to the drinking water

system, and sewer pipes cross only 25 percent of the boundary area. This results in fewer sewer customers (compared to water customers), as shown in Table 7-10 below. The two services that TWSD does not currently provide, storm drainage and recreation, are briefly described in Sections 7.6.4 and 7.6.6.

Table 7-10: Number of Customers for Key Municipal Services

| Service | Number of Customers in 2021 |
|---|---|
| Water | 3,136 |
| Sewer | 2,365 |
| Solar Electric Power | 2 |

## 7.6.2 Water Service

### *7.6.2.1 Water Resource Planning*

Protecting water quality and maintaining an adequate water supply are critical for the future of the Thermalito community. Given this importance, the TWSD and other regional and statewide agencies prepare a range of water resource management plans described in the following paragraphs.

***Urban Water Management Plan***. California's urban water suppliers prepare urban Water Management Plans (UWMPs) to support their long-term resource planning and ensure that adequate water supplies are available to meet existing and future water demands. The Urban Water Management Planning Act (CWC §10610 – 10656 supplemented by CWC §10608 et seq) specifies the requirements for UWMPs. The TWSD's 2020 UWMP is dated March 2023 and was submitted to the CA Department of Water Resources at: *https://wuedata.water.ca.gov/uwmp_plans.asp?cmd=2020* . This TWSD 2020 UWMP describes TWSD's existing water facilities, system water use, baselines, water system supplies, contingency plan, and water demand management measures and was utilized as a data source for this MSR.

***Integrated Regional Water Management Plans***: TWSD does not participate in an Integrated Regional Water Management Plan (IRWMP) process (TWSD, 2021b). There are several IRWMPs in Butte County, and other water districts have found participation to be useful. Participation in an IRWMP process demonstrates collaboration with stakeholders on watershed protection and specific projects that may be eligible for grants.

***Sustainable Groundwater Management Act***

TWSD complies with the California Sustainable Groundwater Management Act (SGMA) by collaborating with its partners to prepare a management plan for the aquifer. Specifically, the District is part of a joint powers authority (JPA) for the Wyandotte Creek Groundwater Sustainability Agency (WCGSA), as detailed on their website at: *www.wyandottecreekgsa.com* . A member of the District's Board concurrently sits on the Board for the WCGSA. The GSA is meeting all of the current milestones, and a Draft Groundwater Sustainability Plan is available for

public review per the SGMA regulations (TWSD, 2021b). Regular reports about the Wyandotte Creek GSA are provided to the TWSD Board of Directors at their monthly meetings.

Permits: Adopted Decisions and Orders from the State Water Board

The State Water Resources Board has issued several orders related to Thermalito Water and Sewer District Water Treatment Plant (Water System No. CA0410008) as listed below:

- Order No. R5-2020-0065, Rescission of Waste Discharge Requirements/Monitoring & Reporting Program, Adopted on 10 December 2020
- Order No. R5-2008-0172, Change of Name and/or Ownership of Facilities, Adopted on 24 October 2008
- Order No. R5-2008-0065, Waste Discharge Requirements/Monitoring & Reporting Program, Adopted on 25 April 2008

Data Source: *https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/*

TWSD operates its water system with permits from the State of California Regional Water Quality Control Board (SRWQCB) and the State Water Resources Control Board – Division of Drinking Water (DDW).

#### *7.6.2.2 Existing Water Supply and Treatment,*

The District is located within a hydrologic basin called the Sacramento River Sub Basin. Specifically, the southeastern portion of the District is located within the Feather River watershed. The northwestern portion of the District is located in the Sacramento River watershed, as described in Appendix I. The TWSD provides potable water to users within its boundary limits, as shown in Figure 7-1. TWSD has two sources of water: groundwater and surface water (TWSD, 2021b). The District currently provides water services to approximately 3,136 municipal customers. Approximately 95% of their water and sewer customers are residential. Total annual water consumption is currently at 6.9 million gallons per day (MGD) (TWSD, 2021b).

Surface Water

The District's surface water supply is provided primarily from the Concow Reservoir (Wilenore Reservoir). Concow Reservoir is located east of the Town of Paradise and west of Highway 70. The reservoir is fed by Cirby Creek and Concow Creeks, natural drainages. The natural pattern of seasonal precipitation in the watershed determines the water flow into the Concow Reservoir. Elevations range from 2,000 feet at the base of Concow Dam to 3,600 feet at the uppermost elevation in the watershed. The watershed size for the Concow Reservoir is approximately 9,587 acres (TWSD, 2015). The District's primary water supply is routed from the Concow Reservoir through DWR's State Water Project facilities, including Lake Oroville, Oroville Dam, and the Thermalito Complex, which includes the Thermalito Diversion Pool and Thermalito Power Canal. TWSD pumps its supply from the Thermalito Power Canal to its municipal water treatment plant (WTP) (TWSD, UWMP, 2015). TWSD's surface water rights allow for 8,200 acre-feet (AF) storage annually, as described in Table 7-14. Historically, the District has utilized less than its maximum water right.

Concow Reservoir has the physical capacity to hold 8,200 AF, and this directly corresponds to the water rights allocated to TWSD (TWSD, 2021b). Even in the driest years, the local precipitation within the watershed has always replenished the Concow Reservoir to spill. As a result, the water supply (and associated these water rights) have been very stable (Butte LAFCO MSR, 2006). This supply is over three times the current annual demand. TWSD's water sources (groundwater and surface water) have not yet been adversely affected by drought or usage.

The District has good quality raw water supplies (Butte LAFCO, MSR, 2006). However, winter storms and wildfire events can both serve to increase turbidity in the District's surface water supply. Therefore, it is essential for TWSD to have both: (1) an adequate drinking water treatment plant; and (2) access to an alternative source of water (i.e., groundwater) to ensure good water quality (Butte LAFCO, MSR, 2006).

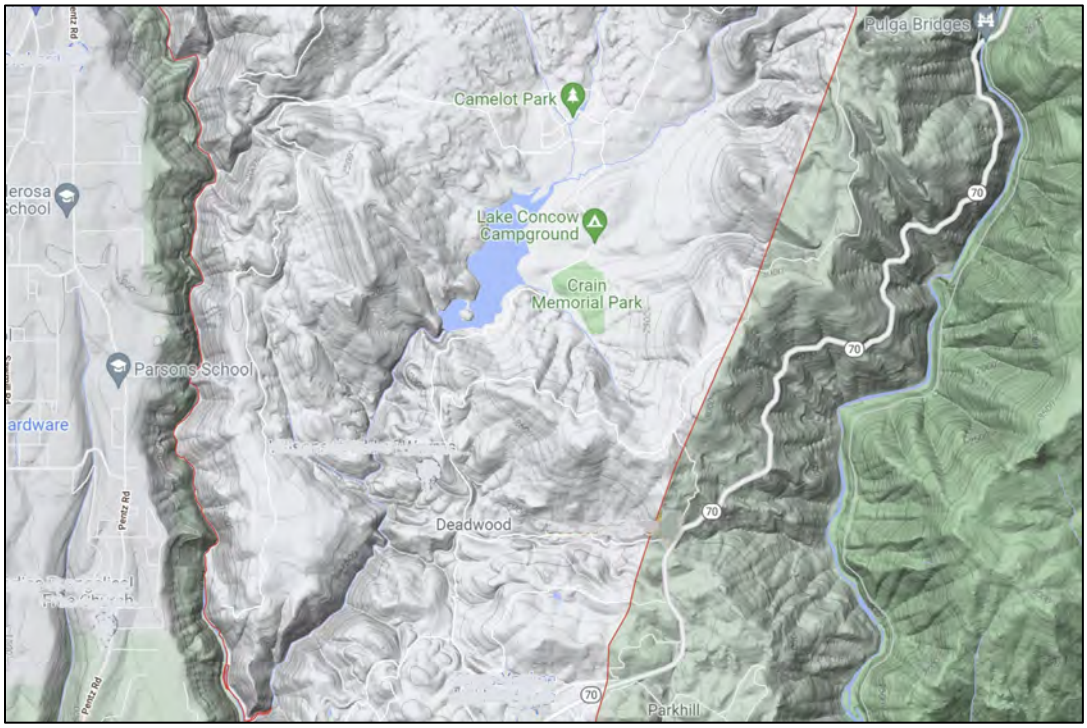



Figure 7-6: Map of Concow Reservoir, Courtesy of Google Maps.

Groundwater

Groundwater is an essential part of TWSD's water supply, and TWSD owns and maintains four active wells located within its boundary area (personal communication, C. Heindell, 2022). The backup supply for TWSD is provided by groundwater accessed through four wells, which are capable of drawing up to 3 MGD when needed. These wells have an average depth of 200 feet (Butte LAFCO, MSR, 2006). One groundwater well is used to irrigate and provide domestic water to a local golf course (personal communication, Boucher and Heindell, 2021). The groundwater

wells withdraw water from the East Butte Groundwater Subbasin of the Sacramento Valley Groundwater Basin (TWSD, 2015).

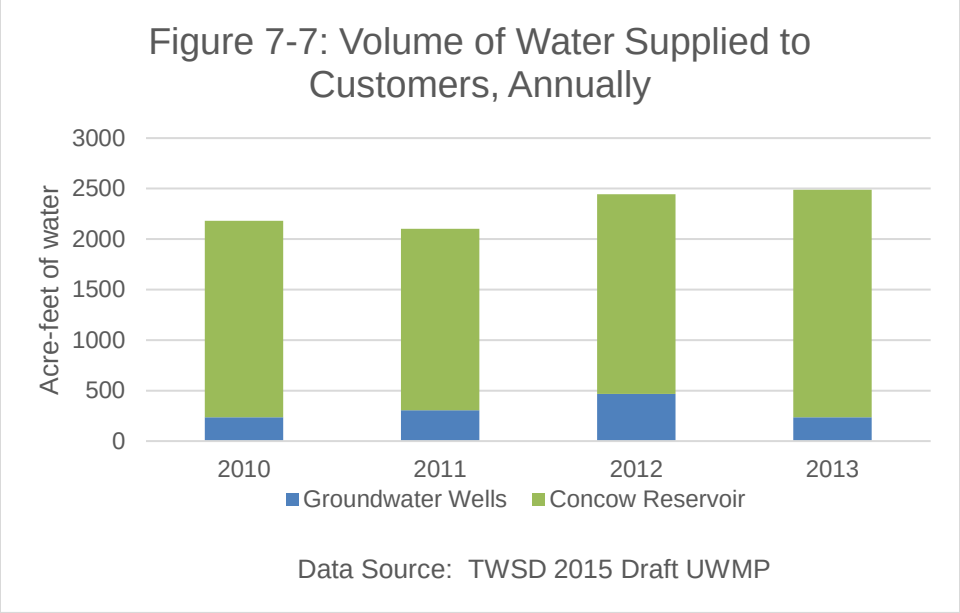
If the four wells are operated at their maximum, the total annual output would be 3,258.5 acre-feet per year (AFY). However, much less groundwater is actually utilized, with usage averaging 300 AFY. This is approximately 14.5% of the total water supplied to consumers. The ratio of groundwater to surface water utilized can vary from year-to-year. However, for both surface water and groundwater, there is generally a surplus available (TWSD, 2015).

Water Treatment Service

TWSD treats raw water to create a safe potable water supply for the local community. TWSD's raw water sources are high quality, in general. However, treatment is necessary to meet public health requirements. The tradeoffs associated with water treatment are that treatment improves water quality and protects public health; however, disinfection by-products are created. Water quality is described in detail in Section 7.6.2.6. The water treatment plant currently has the physical capacity to treat 4 million gallons per day. The water treatment plant is utilized to treat the surface water supply only. The District's groundwater supply does not undergo treatment. It is disinfected at the source and delivered to the distribution system (personal communication, C. Heindell, 2022). The wells could potentially produce up to 2.9 MGD. Combining the treated surface water and the groundwater yields a total of 6.9 MGD of municipal water supply for TWSD customers (TWSD, 2021b). TWSD is working on a proposed future capacity upgrade of the treatment plant to bring it to 8.0 MGD (TWSD, 2021b). The site contains sufficient land to accommodate the expansion of the treatment plant. The water treatment plant is a significant part of TWSD's infrastructure and is described in more detail in Section 7.7.

#### *7.6.2.3 Water Demand*

This section studies the demand for potable water, including the existing and potential future demand. All TWSD customers have metered water service (TWSD, 2015). TWSD's Urban Water Management Plan, 2020, provided the data analyzed in this section. As shown in Figure 7-7 below, during the years 2010 to 2013, TWSD delivered an annual average of 2,304 acre-feet (751 MG) to its customers. To identify trends and account for natural variability in precipitation in the watershed, it is important to look at a longer time span than that provided in Figure 7-7 below. TWSD staff indicates that over the last 10 years, from 2012-2021, District customers' annual range of water use was 1,680.30- to 2,318.94 acre-feet (TWSD, 2021b).




Daily per capita water use is 209 gallons (gcpd) (TWSD, 2015). This means that an average resident of TWSD utilizes 209 gallons per day for washing, drinking, and landscaping. Implementing water conservation measures could potentially reduce average water demand down to 167 gcpd (TWSD, 2015). However, water demand can vary seasonally due to increased outdoor landscaping water needs and other reasons, as shown in Table 7-11 below.

| Table 7-11: Seasonal Water Demand TWSD | | |
|---|---|---|
| | **Peak Demand** | **Average Demand** |
| Winter | 1.65 MGD | 1.09 MGD |
| Summer | 7.13 MGD | 3.61 MGD |
| Data Source: (TWSD, 2021b) | | |

Water system losses are a component of water demand. Water losses are typically attributed to leakage, evaporation, or other factors. Although TWSD's Draft 2015 Urban Water Management Plan estimated water losses at approximately 13 percent (TWSD, 2015), District staff indicates that the current average water loss for 2021-2015 is 4.2 percent. In the past, old galvanized service lines and inaccurate meter readings were identified as contributing to water loss. In 1996, the District started a meter replacement program. Replacement of the meters and other physical improvements have reduced water loss. TWSD continues to make physical infrastructure improvements on an ongoing basis, and this will result in reduced water loss and associated reduced water demand over the long run.

TWSD does not provide raw water to any agricultural customers. The District strictly serves domestic water service only (personal communication, Boucher and Heindell, 2021). TWSD's drinking water system does not have exit flows (TWSD, 2021b). In addition to providing treated domestic water, TWSD also supplies water to local fire hydrants and ensures adequate water

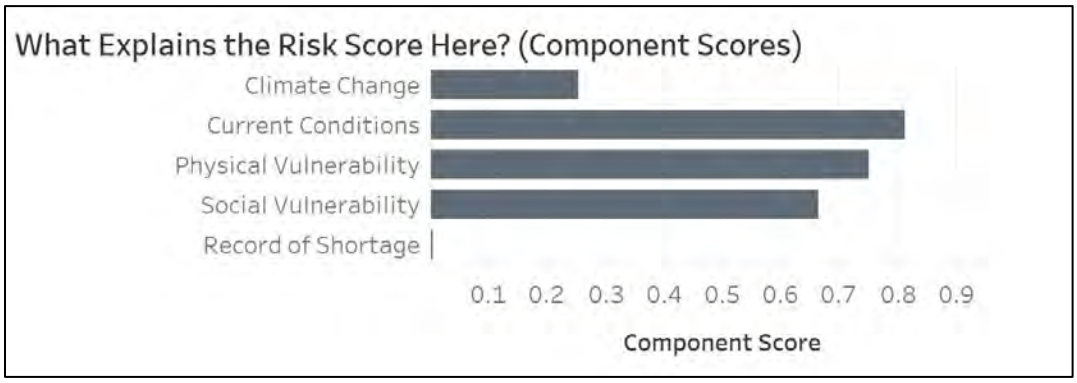
pressure to support fire flows. TWSD does not own any hydrants. The local fire districts own the hydrants and are responsible for them. TWSD only supplies water to the hydrants (personal communication, Boucher and Heindell, 2021).

#### *7.6.2.4 Drought Risk and Water Conservation*

Drought Risk:

The California interactive website for Drought and Water Shortage Risk of Self-Supplied Communities database developed by the California Dept. of Water Resources (DWR) was queried for the Thermalito area (US Census ID Block Group 060070037002), which contains 339 households, according to the US Census estimates (ACS 2012-2016). This includes 21 Tribal Homes, and 22% of the local population relies upon private domestic wells. The Thermalito community has an overall Risk Score of 70 (on a scale of 0-100, with zero being no risk and 100 indicating very serious risk) (DWR, 2021a). The Risk Score of 70 is based on several components, as depicted in Figure 7-8 below.

Figure 7-8: DWR Drought Risk Component Score for Thermalito Community




Data Source: DWR, 2021a

Indicators used to estimate drought and water shortage risk were grouped in the categories in the bar chart shown in Figure 7-8 above. The bars are longer for those components that contribute more to the risk score. Bars are shorter (or closer to zero) for those than contribute less to the risk score. Those bars that are absent (i.e., for "Record of Shortage") indicate they do not drive risk for this area (based on available data) or no data was available. For more details on the methods and data sources, see the report here: *https://water.ca.gov/Programs/Water-Use-And-Efficiency/2018-Water-Conservation-Legislation/County-Drought-Planning*. In conclusion, although TWSD has a stable water supply and historically has had a low drought risk, changing conditions mean that TWSD will need to continue to actively monitor precipitation in the watershed and implement drought conservation programs as needed.

When estimating future water demand, many California water districts run modeling scenarios to account for climatically shifting runoff availability. TWSD has not run such scenarios in the past (TWSD, 2021b).

Water conservation is accomplished through State laws and local actions. State laws, such as the 2015 new product standards adopted by the CA Energy Commission, promote water conservation by ensuring that household appliances and plumbing fixtures (i.e., toilets, showerheads, faucets, clothes washers, dishwashers, etc.) are water efficient. Due to recent droughts, homeowners throughout the state have been actively conserving water by taking shorter showers and reducing the amount of water dedicated to outdoor landscaping. The actions of individual homeowners have a cumulative result in reducing water demand. TWSD's infrastructure improvements, such as pipeline replacement, also conserve water. In addition, the UWMP Plan includes a Water Shortage Contingency Plan, which includes a four-stage response program to deal with water shortages over an extended period of time (TWSD, UWMP, 2015). The TWSD will continue implementing programs to monitor water savings and implement sound water conservation practices.

Water Recycling

Recycling grey water by utilizing water for outdoor landscaping and golf courses or parks can reduce water demand (especially peak summer demand). There are two ways for local communities to implement water recycling: 1) individual homeowners can connect their washing machine or shower drain to their individual grey water system and utilize the grey water in their garden; and 2) a water or wastewater district can operate a local recycled water system from their wastewater treatment plant site. Since TWSD does not directly operate the sewage treatment plant, it does not currently implement a water recycling program. However, TWSD is an active member of SC-OR and has influence over the programs and procedures at the wastewater treatment plant. Additionally, TWSD staff and Board members are very knowledgeable about the local terrain within District boundaries and have ideas about specific locations where recycled water could be useful. In the future, when a water recycling program could be useful in reducing peak summer water demand, TWSD will be in a good position to coordinate with SC-OR to assist in implementing such a program.

Future Water Demand

LAFCO is interested in studying projected future water demand to understand whether there is sufficient supply to serve future needs. Several factors contribute to future water demand, including population growth, types of agricultural crops grown and associated demand, evapotranspiration rates, and several other factors. Housing growth and other development types will influence future water demand, and therefore, the District keeps track of "Will Serve Letters" or promises made to supply water. TWSD has issued will-serve letters to the following residential developments:

- Riverbend Apartments (City of Oroville, - 72-unit apartment complex),
- Olive Ranch Apartments (City of Oroville, -81 unit apartment complex),
- Village at Ruddy Creek (Butte County, -97 unit subdivision),
- Oroville Heights (Butte County, -72 unit apartment complex),
- Linkside Phase II (Butte County, -56 unit subdivision.)

Each of the Will Serve Letters expires 1 year from issuance (TWSD, 2021b).

TWSD's 2015 UWMP developed models that estimate future water demand for "normal" water years, where an average amount of precipitation falls, and "dry" years, which represent drought conditions. Table 7-12 below shows demand for potable in five-year increments out to 2035 for a "normal" water year.

Table 7-12: Demand Comparison – Normal Year

| | 2025 | 2030 | 2035 | 2040 | 2045 *(Opt)* |
|---|---|---|---|---|---|
| Supply totals (autofill from Table 6-9) | 2,636 | 2,791 | 2,946 | 3,101 | 3,256 |
| Demand totals (autofill from Table 4-3) | 2,468 | 2,649 | 2,833 | 3,020 | 3,212 |
| Difference | 168 | 142 | 113 | 81 | 44 |
| NOTES: Units in AF. | | | | | |

*Data Source for Table 7-12 above: TWSD, UWMP 2020*

Table 7-13 below shows demand for potable in five-year increments out to 2035 for a "single-dry" water year.

Table 7-13: Demand Comparison – Single Dry Year

| | 2025 | 2030 | 2035 | 2040 | 2045 (Opt) |
|---|---|---|---|---|---|
| Supply totals* | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 |
| Demand totals* | 2,243 | 2411 | 2592 | 2786 | 2995 |
| Difference | 6,157 | 5,989 | 5,808 | 5,614 | 5,405 |
| ***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3. | | | | | |
| NOTES: based on the driest year of 2013 from historical period of record from 2001-2020. | | | | | |

*Data Source for Table 7-13 above: TWSD, UWMP 2020*

In the event of a multiple-year drought, the 2020 UWMP estimates that demand could increase up to 3,227 acre-feet per year (TWSD, 2023). This represents the worst-case scenario.

In 2021, TWSD staff offered the following summary: the anticipated growth rate for water service would add approximately 50 connections per year (1.7 percent) (TWSD, 2021b). The existing water facilities can accommodate growth for the next 5-10 years (TWSD, 2021b).

> The 2020 UWMP provides a concise summary of existing and projected demand as follows:

> Water demand within the District was 2,033 AF on average between 2016 and 2020. Taking into account historical water use, expected population increase and other growth, climactic variability, and other assumptions, water demand within the District is projected to be 2,468 AFY in 2025 and increase to 3,212 AFY by 2045. In dry year periods such as an extended 5 year drought, water demands are expected to be up to 2,092 AFY by 2025 (TWSD, 2023).

Water use tends to increase during the summer and TWSD's peak summer demand is approximately 7.13 MGD. Please note that peak water demand occurs on a short-term, temporary basis, usually during the summer. Therefore, peak water demand is measured as a daily demand, i.e. million gallons per day (MGD). Other volumes of water, such as the annual demand are measured over a longer timeframe and are averaged, statistically.

The 2020 UWMP considers the existing design capacity of the water treatment plant; historical trends of past production; projected future population; and overall water supply of 8,200 AF plus groundwater. The UWMP concludes that TWSD has sufficient water supply to meet projected future water demand through the planning period to 2035 (TWSD, 2023).

Water Rights

In California, there are several different types of water rights, consistent with the basic principles of California Water Law. Appendix F provides a basic primer on California Water Law and the relationship between certain water rights and procedures for making water transfers. A water district, such as TWSD, must have a valid water right to divert, use and/or transfer water. TWSD has water rights to 8,200 acre-ft of water annually, which is stored in the Concow Reservoir (TWSD, 2021b). In 1985, the State Water Resources Control Board (SWRCB) approved water rights order No. WR85-06 to verify that TWSD was entitled to utilize the entire 8,200 AF of water stored in Concow Reservoir (SWRCB, 1985). Since the physical capacity of the Concow Reservoir is 8,200 AF, this is the amount of water storage allocated to TWSD under their water right.

Table 7-14: TWSD Surface Water Rights

| Application ID | Filing Date | Diversion Rate (ft3/sec) | Storage (acre-feet) | County |
|---|---|---|---|---|
| A001739 | March 25, 1920 | 0 | 8,200 | Butte |

Data Source: Butte LAFCO MSR, 2006 and TWSD, 2021b

The SWRCB issued license application No. A001739 designated a "place of use" which is the state's geographic description of the location and area where the water could actually be utilized. The place of use seems to be the 14,000-acre "service area" of TWSD. The place of use includes Concow and the surrounding area. Under the license terms, TWSD is able to count the surrounding recreation areas (for example, fishing areas at Concow). However, TWSD's LAFCO-approved boundary area is currently at 14,873 acres. It appears that 873 acres are not covered in the permitted "place of use". It is recommended that both LAFCO and TWSD compare the geographic extent of its "place-of-use" in its water right and compare that to the District boundary.

Purchase agreements: TWSD does not currently purchase any water from any other organization (TWSD, 2021b). This means that TWSD is not a federal water contractor (i.e., it does not purchase water from the U.S. Bureau of Reclamation). TWSD is not a State Water Project Contractor. Although TWSD's water supply is routed through Lake Oroville, this route is a historic legacy resulting from the removal of the lower Miocene Canal and TWSD's outlet due to the construction of the Oroville Dam. The Miocene Canal is not operational in this local area. TWSD does occasionally sell water to other California water agencies. For example, TWSD sold water to Santa Clara Valley Water District in 2021. In July 2021, the State Water Resources Control Board, Division of Water Rights, approved an order of temporary changes to water right License 845 (Application 1739) For The Thermalito Water And Sewer District. TWSD filed a petition for temporary change involving the transfer of up to 3,500 acre-feet of water to Santa Clara Valley Water District. This allowed water that was stored in Concow Reservoir to be delivered to this bay area water district during the recent drought. (Order is available on this website: *https://www.waterboards.ca.gov/waterrights/*). TWSD also conducted a one-time water transfer of 1,793 AF to the Westlands Irrigation District in 2013 (TWSD, 2015). These types of one-time water sales generally do not affect TWSD's underlying water right.

#### *7.6.2.5: SOI – Water*

TWSD's existing SOI has a large geographic size at 44,101 acres. TWSD currently does not provide extra-territorial services and does not provide water or wastewater service to its SOI. If areas within the existing SOI were to be annexed into the boundary, it would potentially increase water demand. Therefore, any additional annexations should be evaluated within the context of the following:

- City and County General Plans;
- California Environmental Quality Act (CEQA);
- New State laws, such as SB 9, promote the construction of accessory dwelling units and infill; and
- Fiscal integrity and fee payments (for example, under SB-9, some fees are not required).

Any new annexations should be determined on a case-by-case basis with a review of anticipated water demand, conservation measures, and updated inventories of supplies. All new development in the TWSD should provide for its appropriate shares of pipes, pipelines, and reservoirs.

#### *7.6.2.6 Drinking Water Quality*

This section focuses on one aspect of water quality: the quality of drinking water. The quality of water discharged into natural streams, rivers, and lakes is described in relation to the SC-OR wastewater treatment plant in Chapter5?. When drinking a glass of water, it is important for customers to understand whether this water is safe for consumption and free from pollution to protect their health and safety and promote overall wellness. TWSD's water quality monitoring program includes taking samples of raw and treated water throughout the year from many locations in the District's boundary area. TWSD's annual Consumer Confidence Report (CCR) demonstrates a consistent delivery of high-quality drinking water. Four online databases were queried to further consider TWSD water quality in additional detail, including the California

Drinking Water Watch; the Environmental Working Group; the California Integrated Water Quality System Project; and the Human Right to Water Tool.

California Drinking Water Watch

TWSD's water system was queried on the CA Drinking Water Watch (Safe Drinking Water) online database. Over the past twenty years, TWSD has received only five water quality violations for the Thermalito Water Treatment Plant (Water System No. CA0410008). The most recent violation occurred in June 2020, when lab results showed Total Haloacetic Acids exceeded the water quality rule for Stage 2 Disinfectants and Disinfection Byproducts (California Drinking Water Watch, 2021). Details are listed in Table 7-15 below.

Environmental Working Group

The Environmental Working Group (EWG) is a non-profit organization that provides water quality information to inform the public about public health matters. The EWG is not a regulatory agency, and they do not set regulatory limits. However, they do publish health guidelines that are readily available to the public. A query of EWG's online database shows that 18 total contaminants are found in the TWSD water system, and these query results are shown in Appendix P.

Table 7-15: Water Quality Violations Listed in Database for TWSD

| Violation Category Code | Violation Type Description | Rule Name | Contaminant Name | Compliance Status Description | Compliance Period Begin Date | Compliance Period End Date |
|---|---|---|---|---|---|---|
| MCL | Maximum Contaminant Level Violation, Average | Stage 2 Disinfectants and Disinfection Byproducts Rule | Total Haloacetic Acids (HAA5) | Returned to Compliance | 01-Apr-20 | 30-Jun-20 |
| MCL | Maximum Contaminant Level Violation, Monthly (TCR) | Total Coliform Rule | Coliform (TCR) | Returned to Compliance | 01-May-05 | 31-May-05 |
| MR | Monitoring and Reporting (DBP) | Stage 1 Disinfectants and Disinfection Byproducts Rule | Total Haloacetic Acids (HAA5) | Returned to Compliance | 01-Apr-06 | 30-Jun-06 |
| MR | Monitoring and Reporting (DBP) | Stage 1 Disinfectants and Disinfection Byproducts Rule | TTHM | Returned to Compliance | 01-Apr-06 | 30-Jun-06 |
| MR | Initial Tap Sampling for Pb and Cu | Lead and Copper Rule | Lead and Copper Rule | Returned to Compliance | 30-Jun-93 | 01-Mar-00 |

Data Source: California Drinking Water Watch, 2021

California Integrated Water Quality System (CIWQS): Water Treatment Plant for Thermalito Water and Sewer District

The Regulated Facility Report is part of the CIWQS database, and it is available online at: *http://www.waterboards.ca.gov/ciwqs/*. This database query showed no active violations at the TWSD Water Treatment Plant, as listed in the data download in Table 7-16 below (CIWQS, 2021).

Table 7-16: Water Quality Data Download from CIWQS

| Agency | Project Type | Regulatory Status | Order No. | WDID | Effective Date | Review Date | Design Flow | TTWQ | # Enforcement Actions within 5 years | # Violations within 5 years |
|---|---|---|---|---|---|---|---|---|---|---|
| Thermalito Water & Sewer District | Water Treatment Plant | Active | R5-2018-0085 | 5A04NC00032 | 12/10/2020 | 12/7/2023 | 0.157 | 3 | 0 | 0 |

*Data Source for Table 7-16: CIWQS, 2022*

Human Right to Water Data Tool

The State of California Office of Environmental Health Hazard Assessment has assessed various water quality parameters for community water systems throughout the state and posted the information to the online database called the "Human Right to Water Data Tool." The database analysis utilizes a scoring system to assess and rate various water quality parameters. The scores have a possible range: 0 – 4, with zero being the best and four (4) being the worst. This database was queried, and the results for the TWSD Water Treatment Plant (PWSID: CA0410008) are described below.

- *Water Quality Composite Score*: 0.00 (Excellent)
- *High Potential Exposure Score:* 0 (Excellent - This system had 0 contaminants with high potential exposure)
- *Duration of High Potential Exposure Score:* 0 (Excellent - This system had 0 years of high potential exposure)
- *Data Availability Score:* 0 (Excellent - This system had 14 contaminants with required data in the study period)
- *Compliance with Primary Drinking Water Standards Score:* 0 (Excellent - This system had: 0 contaminants with at least 1 MCL violation in the study period)
- *Maximum Duration of Non-Compliance Score:* 0 (Excellent - This system had: 0 years of non-compliance)
- *Water Accessibility Composite Score*: 0.00 (Excellent – This system is generally not vulnerable a water system is to a supply outage or shortage)

Water Affordability is discussed in the Finance Section 7.8.

***Quality of Groundwater***

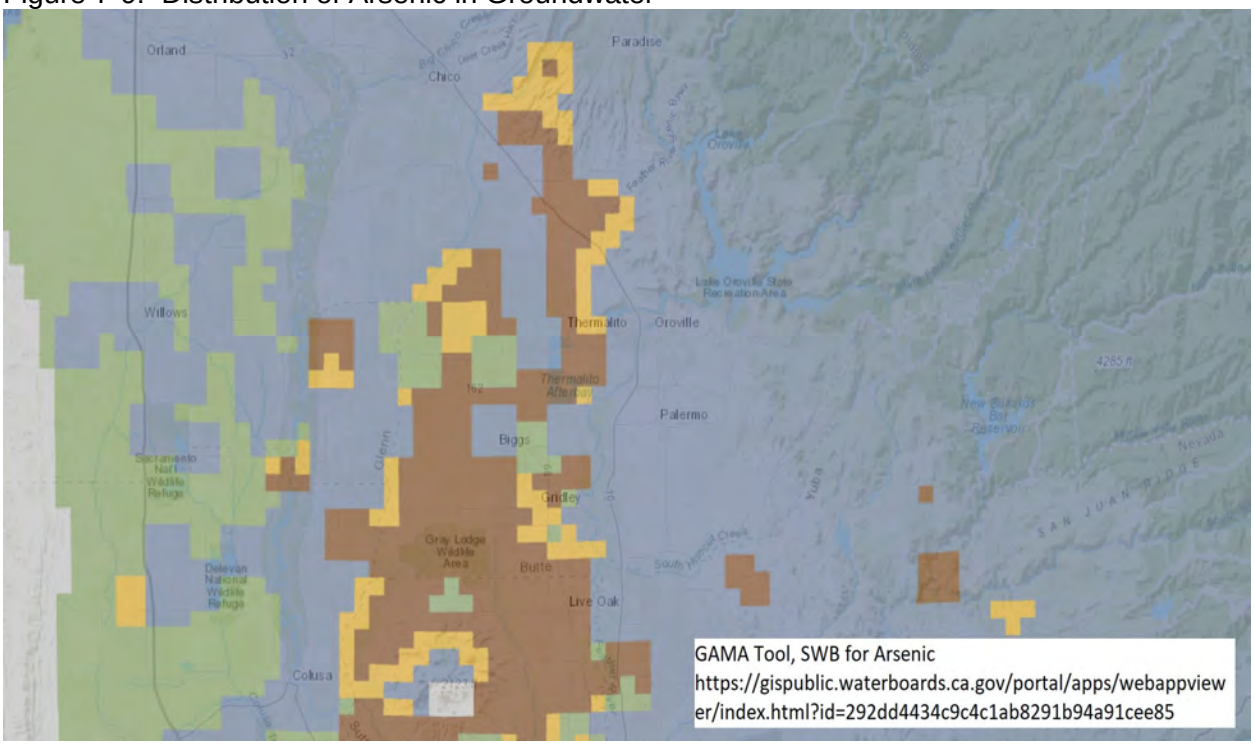
Groundwater Ambient Monitoring and Assessment Program

The State Water Board's Groundwater Ambient Monitoring and Assessment Program (GAMA) and the U.S. Geological Survey (USGS) have created tools to help users understand groundwater quality in California. The Domestic Wells Water Quality Tool created as a part of the "Needs

Assessment" was queried (CA SWB, 2021c). Of the five public districts studied in this MSR, only the Thermalito Water and Sewer District utilizes groundwater as a drinking water source. (Privately owned Cal Water Co. also utilizes groundwater as detailed in Appendix Q.) The USGS notes that "arsenic occurs naturally as a trace component in many rocks and sediments. Whether the arsenic is released from these geologic sources into groundwater depends on the chemical form of the arsenic, the geochemical conditions in the aquifer, and the biogeochemical processes that occur. Arsenic can also be released into groundwater as a result of human activities, such as mining, and from its various uses in industry, in animal feed, as a wood preservative, and as a pesticide. Arsenic poses a problem in drinking-water supplies because it is toxic at low levels and is a known carcinogen. In 2001, the USEPA lowered the MCL for arsenic in public-water supplies to 10 micrograms per liter (µg/L) from 50 µg/L" (USGS, 2021).

The GAMA tool reports that Arsenic has been detected in the groundwater located west of Thermalito, as shown in Figure 7-9 below. Reported values of arsenic are 1.384172 units (Section Detection) for the dark brown areas and 0.8056882 units (Section Detection) for the yellow areas (SWB, 2021).

Figure 7-9: Distribution of Arsenic in Groundwater



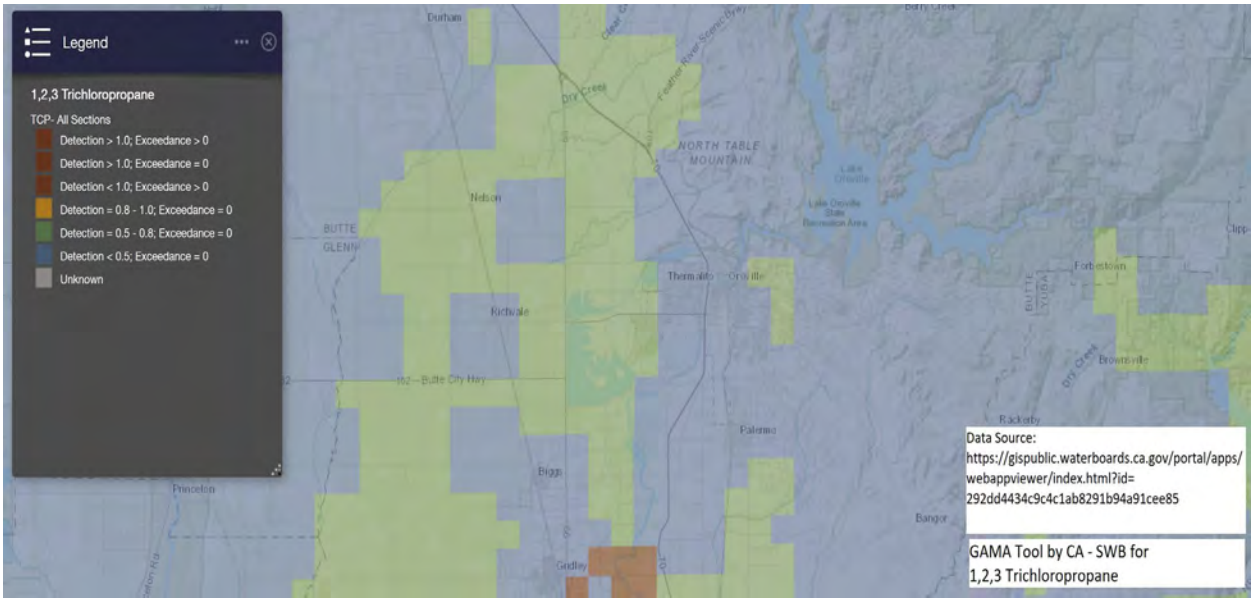

Data Source for Figure 7-9 above: CA SWB GAMA Needs Analysis 2021.

1,2,3 Trichloropropane (TCP) is exclusively a man-made chlorinated hydrocarbon, typically found at industrial or hazardous waste sites. TCP is often present at sites contaminated by other chlorinated solvents. TCP has been used as an industrial solvent and as a cleaning and degreasing agent; it has been found as an impurity resulting from the production of soil fumigants.

TCP is used as a chemical intermediate in the production of other chemicals, such as liquid polymers. EPA has classified TCP as likely to be carcinogenic to humans. In animal studies, short-term exposure may cause eye and throat irritation; long-term exposure has led to liver and kidney damage and reduced body weight. Remediation technologies available to treat TCP contamination in groundwater and soil include granular activated carbon, dechlorination by hydrogen release compound, reductive dechlorination by zero-valent zinc, and others (EPA, 2017)

Figure 7-10 (next page) shows the spatial distribution of TCP in the local groundwater. The area located west of Thermilto has a TCP Section Detection of 0.5959582 units. The area located southeast of Oroville has a TCP Section Detection 0.5212298 units and covers a spatial area of one square mile (SWB, 2021).

Figure 7-10: Spatial Distribution of TCP in the Local Groundwater




Per- and Polyfluoroalkyl Substances

Long-lasting chemicals called per- and polyfluoroalkyl substances (PFAS) are commonly known as “forever chemicals” because they are persistent and can cause public health and environmental harm long after release. PFAS are increasingly turning up in public drinking water systems and private wells. PFAS are used in a range of commercial and industrial applications, including firefighting foams, greaseproof food wrapping, non-stick cookware, and stain- and water-repellent carpets, textiles, and outdoor gear. However, human exposure to these substances is linked to serious adverse human health impacts, including liver damage, high cholesterol, obesity, diabetes, cancer, thyroid disease, asthma, immune system dysfunction, reduced fertility, low birth weight, and effects on children’s cognitive and neurobehavioral development (UC Berkeley Law, 2020). Although PFAS are not currently regulated, the US Environmental Protection Agency recently announced investigations into their toxicity. There is a

probability of federal regulations being released within the next few years. The EPA has identified eight industrial facilities that have the potential of using and releasing PFAS in the Oroville area. This is a concern for the TWSD because it partially relies on groundwater for its water supply. The eight industrial facilities include two plastics and resin manufacturers, one electronics manufacturer, one printer, one fire training facility, one metal coating business, one radar site, and one packaging facility (PEER, 2021). However, TWSD has participated in the SWRCB's PFAs testing and is below the reporting limit for all groundwater wells (personal communication, C. Heindell, 2022).

When protecting water quality, one of the most critical actions a water district can implement is to protect the health of its watershed. To this end, TWSD prepared a Drinking Water Source Assessment on February 19, 2003, submitted to the CA Department of Health Services. This Source Assessment listed several vulnerability findings, including airport, concentrated aquatic animal production, historic gas stations, septic systems, wastewater treatment plant, wastewater collection pipes that are located near wells, crops, and golf courses (TWSD, Consumer Confidence Report, 2021g).

The water quality of the TWSD supply is good, as detailed in the preceding paragraphs. In summary, the factors influencing the District's ability to supply and/or deliver water to the customer include groundwater levels, drought conditions, and Lake Oroville Operations (TWSD, 2021b).

## 7.6.3 Wastewater Collection and Treatment

### *7.6.3.1 Existing Wastewater Collection Services*

The Thermalito Water and Sewer District (TWSD) provides wastewater collection services to local properties, including residential, commercial, industrial, irrigation, and institutional customers (TWSD, SSMP, 2020b). The District's sewer collection service only extends to about 3,680 acres, covering 25 percent of the 14,873-acre boundary area. Much of the un-served area lies north and west of the current sewerage system infrastructure (TWSD, 2020b).

TWSD's wastewater collection system includes: approximately 34 miles of gravity sewer lines; 570 sewer maintenance holes; 4,300 lineal feet of force mains; and 532 maintenance-holes, lampholes, and clean-outs (TWSD, 2020b). In addition, the Linkside Sewage Lift Station serves the Linkside subdivision located on Oro Dam Boulevard (TWSD, 2020b). The sewer system conveys wastewater to a treatment plant owned and operated by the Sewerage Commission - Oroville Region (SC-OR). SC-OR was created in 1973 under a joint powers agreement (JPA) between the City, Thermalito Water and Sewer District (TWSD), and the Lake Oroville Area Public Utility District (LOAPUD). The individual agencies maintain and operate their own wastewater collection systems that discharge into the SC-OR wastewater treatment plant. This Chapter focuses only on the wastewater collection and conveyance provided by the TWSD within its boundary area. The wastewater infrastructure needs and deficiencies are evaluated in terms of supply, capacity, condition of facilities, and service quality in relation to operational, capital improvement, and finance plans.

The TWSD currently provides wastewater collection services to 2,365 sewer connections (TWSD, 2021b). A total of 23 commercial or industrial customers utilize the sewer collection system (TWSD, 2021b). One TWSD connection may serve many individual customers. There is significant annual variability in the number of new connections added to TWSD's wastewater system. The TWSD does not provide wastewater collection services to customers outside its jurisdictional boundaries. There may be parcels within the TWSD boundary and within the SOI that rely on individual septic systems. The Butte County Environmental Health Division regulates these septic systems. Additional data about septic systems were not readily available.

In addition to the office staff, the Wastewater Division is staffed by a field foreman and six (6) field operators. The field operators conduct maintenance, inspection, and construction/repair operations. Additionally, staff responds to all sewage spills seven days a week, 24 hours a day. The District's Engineer (Christopher Heindell) serves as the legally responsible official for the implementation of the District's Sewer System Management Plan (SSMP) (TWSD, 2020b). All the wastewater staff undergoe regular safety training, including customer service, asbestos concrete handling, equipment safety, confined space, trench safety, sanitary sewer overflow prevention and response, and other associated training (TWSD, 2020b).

There are several measures of integrity for a wastewater collection system, including peaking factors, efforts to address infiltration and inflow (I/I), and inspection practices. The TWSD undertakes testing and other measures to ensure the system's integrity. Integrity checks are as follows: peaking factors during wet weather events, monitoring pumping stations during rain events, and inspection of maintenance-holes during rain events (TWSD, 2021b).

Water conservation programs such as low-flow toilet rebates, leak detection pills, etc., can reduce water use and the amount of wastewater generated. To further improve safety and service, the TWSD encourages compliance with the California Plumbing Code requirements for wastewater Backflow Prevention Devices[3].

Water Recycling: TWSD does not operate a wastewater treatment plant and therefore does not have direct access to treated wastewater that could be utilized as part of a water recycling program. However, TWSD is a member of the SC-OR JPA and could potentially participate in water recycling in the future. The TWSD boundary area contains numerous land-uses that could benefit from non-potable water, including street tree landscaping.

Sewer EPA Categorical Users: The Federal Environmental Protection Agency (EPA) categorical users are significant industrial users regulated under a local pretreatment ordinance. Since the TWSD does not operate the wastewater treatment plant, it does not have direct involvement with this regulation. SC-OR is the lead agency for industrial pretreatment. However, there are no EPA

[3] Please note that backflow devices can also be required for regular water pipes. All new developments are required to install backflow protection on domestic and fire protection services. The only exception being manufactures homes which do not have fire sprinklers.

categorical users within the District boundaries (TWSD, 2021b). Additional details about EPA Categorical Users are provided in Chapter 5.

Treatment and Disposal: SC-OR is responsible for wastewater treatment and disposal, as described in Chapter 5. TWSD is a member of the SC-OR JPA.

#### *7.6.3.2 Planning and Permits for Wastewater Service*

This wastewater service provider complies with the RWQCB requirements to complete a SSMP pertaining to its sewer systems, including a Sewer Overflow Emergency Response Plan Element for Sanitary Sewer Overflow (SSO) reporting (State Water Resources Control Board, 2006). The District approved a SSMP in December 2020 that guides the proper management, operation, and maintenance of all parts of the TWSD sanitary sewer system under its control, consistent with the requirements of the State Water Resources Control Board's (SWRCB's) Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (TWSD, 2020b). The SSMP aims to reduce and prevent SSOs and mitigate SSOs if they occur. The SSMP is updated every five years. The 2020 SSMP is available to the public in the District office. District staff indicates that the new SSMP will soon be posted to the District's website.

Permits: TWSD's wastewater collection and conveyance system operate under permits from the State Water Resources Control Board (SWRCB), including Order No. 2006-0003-DWQ (Statewide General Waste Discharge Requirements for Sanitary Sewer Systems), which was adopted by the SWRCB on May 2, 2006, and revised in 2008.

#### *7.6.3.3 Wastewater- Water Quality Database Reports*

Overview

This section provides the results of database searches on water quality for the TWSD. Compliance of wastewater agencies with water quality regulations promulgated by the State Water Resources Control Board (State Water Board) and the Central Valley Regional Water Quality Control Board (Regional Water Board) is important to LAFCO. This type of information is essential since, during a drought, a community can't rely upon 'dilution' as a solution to pollution. When local water supplies are scarce, keeping the water supply at a high level of water quality is desirable.

California Integrated Water Quality System Project

The California Integrated Water Quality System (CIWQS) is a relational database used by the State and Regional Water Boards to track permit violations and enforcement activities. TWSD has permits from the Central Valley Water Quality Control Board and is classified as a "Permittee." Permittees are allowed to self-report their permit violations to the CIWQS. A seven-year term from January 1, 2015 to December 31, 2021, was queried in the CIWQS database. CIWQS database query was run on Feb 22, 2022 for TWSD. The database shows that the facility's Waste Discharger Identification (WDID) is 5A04CR00230. The database lists TWSD's 401 certification issued on 01/02/2014. No violations or unusual events (other than one SSO reported in the next

section) were found. The California Water Board has a Waste Discharge Requirements (WDR) Program such that waste discharges that can be exempted from the California Code of Regulations requirements are issued waste discharge requirements, and are regulated by the WDR Program. Typical discharge types include domestic or municipal wastewater, food processing-related wastewater, and industrial wastewater. Thermalito Water & Sewer District has one WDR No. R5-2018-0085 issued in December 2020. Query results showed no violations for TWSD. In summary, a query of the general CIQWS database did not reveal any red flags associated with TWSD's wastewater system.

**Table 7-17: CIWQS Database Query Results**

California Home

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

California Integrated Water Quality System Project (CIWQS)

| Party ID | Reg Measure ID | Facility ID | Facility Name |
|---|---|---|---|
| 45730 | 301570 | 631332 | Thermalito Water & Sewer District CS |
| 45730 | 348575 | 721645 | Thermalito WTP |
| 45730 | 393986 | 800934 | Thermalito Water & Sewer District East Trunk Interceptor Project |
| 45730 | 440821 | 721645 | Thermalito WTP |

The current report was generated with data as of: 02/22/2022
Regional Boards are in the process of entering backlogged data.
As a result, data may be incomplete.

**Regulatory Measures (non-enforcement)**

| Reg. Measure ID | Regulatory Measure Type | Region | WDID | Status | Program | Order No. | RM Effective Date | RM Termination Date | Relationship | Relationship Start Date | Relationship End Date | Amended? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 440821 | Enrollee - WDR | 5R | 5A04NC00032 | Active | WDRNONMUNIPRCS | R5-2018-0085 | 12/10/2020 | None | Discharger | 10/12/2020 | None | N |
| 393986 | 401 Certification | 5R | 5A04CR00230 | Historical | CERFILLEXC | None | 01/02/2014 | 01/02/2018 | Discharger | 11/21/2013 | None | N |
| 348575 | WDR | 5R | 5A04NC00032 | Historical | WDRNONMUNIPRCS | R5-2008-0065 | 04/25/2008 | 12/10/2020 | Discharger | 07/07/2008 | None | Y |
| 301570 | Enrollee - WDR | 5R | 5SSO10857 | Active | SSOMUNISML | 2006-0003-DWQ | 08/21/2006 | None | Discharger | 04/20/2006 | None | N |

Total Regulatory Measures: 4

**Violations within the past year**

| Violation ID | Occurrence Date | Violation Type | Violation Description(+) | Violation Status | Priority | Source | Facility Name | Violated Reg. Meas. ID | Violated Reg. Meas. Order No. | Linked to Enf. |
|---|---|---|---|---|---|---|---|---|---|---|

Report defaults to display violations within the last year. Click here to see last five years of violations. Refer to the Interactive Violation Report for more data.

Total Violations: 0

*Click the "(+/-) Violation Description" link to expand and contract the violation description.

**Enforcement Actions**

| Enforcement ID | Enforcement Type | Enf. Order No. | Title | Program | Effective Date | Status |
|---|---|---|---|---|---|---|
| 353175 | Staff Enforcement Letter | None | SEL 9/11/2008 for Thermalito Irrigation District | WDR | 09/11/2008 | Historical |

Total Enforcement Actions: 1

*Data Source: State Water Resources Control Board Party At a Glance database at: https://ciwqs.waterboards.ca.gov/ciwqs*

Sanitary Sewer Overflow Database

The State Water Board maintains a Sanitary Sewer Overflows (SSO) database from public/permitted systems and private lateral sewage discharges. This database is a specific module in the CIWQS. The State Water Board formalized the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003 (SSS WDRs), on May 2, 2006. All public agencies that own or operate a sanitary sewer system comprised of more than one mile of sewer pipes that convey wastewater to a publicly owned treatment facility must be covered under the SSS Waste Discharge Requirements. The SSS Waste Discharge Requirements requires enrollees, among other things, to maintain compliance with the Monitoring and Reporting Program, and reporting requirements and penalties for Sanitary Sewer Overflows (SSOs) have become more significant over the past few years. As a result, each district is now required to analyze its system for SSO potential and have an action plan to eliminate the SSO potential (TWSD, 2020b).

A seven-year period from January 1, 2015 to December 31, 2021, was queried in the CIWQS-SSO database. The SSO database query was run on Feb 22, 2022 for TWSD. The results of the SSO database query regarding TWSD are listed below in Table 7-18. There was only one Sanitary Sewer Overflow event in the TWSD boundary area during this seven-year timeframe. One spill occurred in December 2020, and it was assigned event ID 871321. The spill location was near Oro Dam Boulevard. in association with a maintenance hole located on Rosekrans Drive. The spill volume was 10 gallons and was discharged to unpaved land. The spill did not reach a storm drain or a water body. The spill type was Category 3, meaning that “All other discharges of untreated or partially treated wastewater resulting from an enrollee’s sanitary sewer system failure or flow condition” (less than 1,000 gallons and did not reach a water body). The spill was caused by debris associated with construction.

#### *7.6.3.2 Wastewater Collection and Conveyance Service to the SOI*

TWSD does not provide wastewater service to its SOI. The provision of wastewater services to the SOI is provided through private septic systems under the regulation of the Butte County Environmental Health Department.

Sewer Service Upon Annexation: As the area grows and develops, property owners may request annexation to TWSD and/or the City of Oroville (COOR). If parcels within its SOI were annexed into the TWSD boundaries, there would be a corresponding increase in demand for services.

**Table 7-18: Sanitary Sewer Overflows in TWSD**

| Region | Responsible Agency | Collection System | Total Number of SSO locations | Total Vol of SSOs(gal) | Total Vol Recover (gal) | Total Vol Reach Surface Water | Percent Recover | Percent Reach Surface Water | Miles Pressure Sewer | Miles Gravity Sewer | Miles of Laterals | Number of Pump Stations | WDID | Collection System Performance Report |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5R | Thermalito Water & Sewer District | Thermalito Water & Sewer District CS | 1 | 10 | 10 | 0 | 100 | 0 | 0.8 | 34.7 | 0 | 1 | 5SSO10857 | Operational Performance |

Data Source: *https://www.waterboards.ca.gov/water_issues/programs/ciwqs/publicreports.html*

That increase in demand should be quantified, and the TWSD system should be assessed for capacity prior to annexation. COOR generally does not require properties to connect to the sewer system just because they have been annexed to the City, provided they receive sewerage service from an existing provider. For example, the City is considering an annexation in the Thermalito area. The Thermalito Water and Sewer District already serves the area, and that will not change upon annexation.

## 7.6.4 Storm Water Drainage / Flood Protection

### *7.6.4.1 Existing Storm Water Drainage / Flood Protection*

Storm water in the Thermalito area is managed by Butte County Public Works (TWSD, 2021b). A portion of the Thermalito area is located in Flood Zone AE, as determined by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (Map 06007C0788E, last updated January 6, 2011). Butte County has prepared a Master Drainage Plan for the entire Thermalito drainage area, last updated in November 2009. Stormwater in the Thermalito area is often directed through surface systems and pipes to Ruddy Creek[4]. Butte County may see increased flood risk as atmospheric rivers and other weather phenomena manifest (Wing, et al., 2022). Storms and floods have the potential to damage TWSD infrastructure and to generate conditions associated with infiltration into the wastewater pipes. Stormwater was identified as a potential future hazard to TWSD infrastructure in the Butte County Local Hazard Management Plan as described in Section 7.4.6 of this Chapter.

When new development occurs in the area, the City of Oroville requires development to comply with Post Construction Standards consistent with the Federal Clean Water Act. Within the City, stormwater is often stored and infiltrated on-site. Oroville's geology is conducive to this practice. The practice reduces infrastructure costs and increases aquifer recharging (COOR, 2021d). In the future, if drought becomes more prolonged, capturing water from floods and miscellaneous storms may become more critical in the community's water management strategy. Since TWSD relies partially on groundwater to provide water services, re-charging the groundwater table will continue to be a resource management concern.

## 7.6.5 Solar-electric Power

In 2006, LAFCO's MSR recommended that the Thermalito Water and Sewer District consider implementing a solar program to reduce electricity costs (Butte LAFCO, 2006). TWSD installed its solar array in 2012 and currently produces electricity for internal use only. The solar system is a 481-kW ground-mount solar array. The solar panels produce enough electricity to offset the

[4] In the past, County Service Area (CSA) NO. 26 – Thermalito Drainage provided stormwater drainage services to this area. CSA 26 was managed by Butte County Public Works per per California Water Codes, Division 11, Part 1, Section 20500-29978. CSA 26 was closed and is no longer active.

District's electricity bill, resulting in millions of dollars in savings each year. For example, the TWSD treatment plant utilized 674,406 kwh of electricity in 2020. This was offset by the solar power production, which contributed 765,350kwh of energy, bringing the net energy use to **-** 0.944kwh in 2020. The solar system has a 25-year lifespan. The solar panels are mounted in an area that covers two acres. The system operates efficiently. Solar generation greatly offsets the cost of producing treated water at the treatment plant (TWSD, 2021b).

### 7.6.6 Recreation

TWSD owns and maintains two fishing locations on the bank of Lake Concow (personal communication, C. Heindell, 2022). Lake Concow is the surface water reservoir for TWSD. The Lake supports several aquatic species, such as resident rainbow trout (Oncorhynchus mykiss), benthic macroinvertebrates, and foothill yellow-legged frogs. There is a privately owned campground located in proximity to Lake Concow; however, this campground is not affiliated with TWSD. Please note that the campground is currently closed due to damage from the 2018 Camp Fire. Members of the general public have occasionally expressed interest in utilizing the Lake and surrounding area for passive recreation, such as walking or fishing. TWSD is listening to these public comments. However, recreation services are not an active power for TWSD. To provide recreation services in the future, TWSD would need to request permission from LAFCo to activate this latent power.

Alternatively, TWSD could consider pursuing a formal agreement with Paradise Park and Recreation District to collaborate on providing recreation services. TWSD currently has good communication with the Paradise Recreation and Park District and together they are exploring potential recreational options at Lake Concow. The two Districts are currently soliciting public comment about potential future programs, facilities and the recreational use of Lake Concow to meet the needs of future generations. Their on-line survey is available at: *http://www.paradiseprpd.com/concow-planning*.

## 7.7 Infrastructure and Public Facilities

#### *7.7.1 Introduction to Facilities and Infrastructure*

This section describes existing infrastructure facilities and the associated infrastructure needs, especially as they relate to current and future users. Infrastructure needs and deficiencies are evaluated in terms of supply, capacity, condition of facilities, and service quality with correlations to operational, capital improvement, and finance plans. TWSD has four primary types of facilities: 1) administrative; 2) water; 3) wastewater; and 4) solar. Infrastructure development and maintenance is an integral part of the service that the TWSD provides. The TWSD has a Capital Improvement Plan as part of its annual budget, as described in the Finance Section 7.8 in this chapter. TWSD's infrastructure falls into the four above listed categories and is summarized in Tables 7-19 and 7-20 below

| Table 7-19: TWSD Facilities for Key Services | |
|---|---|
| **Department/Division/ Service** | **Infrastructure/Facilities** |
| Administrative | The administrative office and other facilities are located at 410 Grand Avenue, Oroville, CA 95965 |
| Water | TWSD owns and actively maintains several facilities related to its drinking water department, including a water treatment plant (WTP), four groundwater wells, water storage tanks, a maintenance yard, and Concow Reservoir. Additionally, there are approximately 59.2 miles of water distribution pipelines. See Table 7-21 for additional details. |
| Sewer | TWSD's wastewater collection system includes: approximately 34 miles of gravity sewer lines; 570 sewer maintenance holes; 4,300 lineal feet of force mains; and 532 maintenance-holes, lampholes, clean-outs, and pump stations. |
| Solar Electric Power | The solar system is a 481-kW ground-mount solar array. The solar panels are mounted in an area that covers two acres. The solar system has a 25-year lifespan. |
| Recreation | TWSD owns and maintains two fishing locations on the bank of Lake Concow. Concow Reservoir is a site with the potential for additional passive recreation activities (such as hiking and photography) in the future. However, LAFCO permission to activate the power to provide recreation services may be needed. TWID should explore a cooperative relationship with PRPD to manage recreation resources at Concow Reservoir. |
| Hydro-electric | TWSD does not currently generate hydroelectric energy. However, the potential exists for future micro-hydro development. |

All of the infrastructure listed in Tables 7-19 and 7-20 above are owned and maintained by TWSD unless otherwise noted. TWSD conducts routine maintenance on these facilities.

### 7.7.2 *Administrative Facilities*

TWSD's existing administrative and other facilities are located at 410 Grand Avenue, Oroville, CA 95965. The administrative offices provide office space and conference rooms for all TWSD staff, including finance, customer service, and management. The Board's meeting room is also at this location.

Table 7-20: Critical Infrastructure – TWSD

| Name of Asset | Facility Type | Replacement Value | Which Hazards Pose Risk |
|---|---|---|---|
| Concow Reservoir & Dam | 97' High arch cement dam | $30,000,000 | Body contact with the Lake is unsafe |
| Water Treatment plant | Micro Membrane system | $7,320,000 | Some chemicals are stored at plant high voltage |
| Office and maintenance yard | Office and equipment storage & repair | $1,100,000 | High voltage, petroleum, heavy equipment |
| Four deep water wells | Three wells are centrifugal 1submersable | $3,000,000 | High voltage, 12.5% Bleach |
| Clearwell Storage | Water Storage tank | $770,000 | Fall Hazard |
| 2.5 MG Storage | Water Storage Reservoir | $1,500,000 | Fall Hazard |
| 59 Mile Distribution Pipe system | 2" to 30" pipe for water Delivery | $38,940,000 | None |
| 34.7 Miles of sewer Collector system | 6" to 18" pipe for sewer collection | $27,482,400 | None |
| Sewer Lift Station | Pump station | $110,000 | High Voltage |
| Water Treatment Plant | Pressure Vessel Treatment plant | $1,000,000 | Some chemicals are stored at plant and high voltage |
| **Total** | | **$111,222,400** | |

*Data Source for Table 7-20: Butte County OEM and TWSD, LHMP, 2019.*

## 7.7.3 Water Facilities

TWSD owns and actively maintains several facilities related to its drinking water department, including a water treatment plant (WTP), four groundwater wells, water storage tanks, a maintenance yard, and Concow Reservoir. Additionally, there are approximately 59.2 miles of water distribution pipelines. These facilities are described in more detail in the following paragraphs.

| Table 7-21: Property owned and Maintained by TWSD | | | |
|---|---|---|---|
| **Address** | **Assessor's Parcel Number** | **Size (acres)** | **Use and Notes** |
| 410 Grand Avenue | 031-215-002 | 1.48 | **District Office** with an adjacent maintenance yard. Located within COOR boundary. Tax Rate Area: 104010 |
| 535 Table Mountain Boulevard | 031-040-038 | 3.99 | **Water Treatment Plant**. Located within COOR boundary. Tax Rate Area: 004087. |
| No address assigned | 031-030-035 | 7.45 | Located adjacent to 031-040-038 and within COOR boundary. Tax Rate Area: 004092 |
| Throughout District | Not available | Not available | **Four groundwater well sites** |
| Concow Lake | 058-330-018<br>058-170-077<br>058-230-017 | 60.83<br>104.68<br>225 | **Concow Reservoir** and the 275 dry land acres surrounding the Reservoir. Located in unincorporated Butte County. |
| Corner of 5th and Grand (no address available) | 031-215-005 | 0.33 | **"The Grange" Parcel.** Future TWSD facility expansion area. Located within COOR boundaries. Tax Rate Area: 004010. |
| Data source: TWSD, 2021b, and Butte County GIS Interactive Tool at: *http://gis.buttecounty.net/Public/Index.html?viewer=GISSearch* | | | |

As listed in Table 7-21 above, the TWSD recently purchased "The Grange" parcel located adjacent to TWSD's main building, on the corner of 5th and Grand. This parcel contains some historic sewer facilities that the City of Oroville will soon remove as a "clean-up". The parcel represents an opportunity for future expansion if needed (Personal communication, Boucher and Heindell, 2021).

### *7.7.3.1-Concow Reservoir Facility*

The Concow Reservoir (also known as the Wilenore Reservoir) has a capacity of 7,225 acre-feet. The Reservoir was created by constructing the Wilenore Dam, which holds the water from the tributary. The District began constructing the Concow Dam in November of 1923 and completed the project in December 1924 (TWSD, 2015). Raw water from Concow Reservoir is delivered to the TWSD drinking water treatment plant by a 48-inch diameter main to the State Powers Canal. (Butte LAFCO, MSR, 2006).

Under the original appropriative water rights licenses issued in 1928 and 1929, TID/TWSD held title to 45% of the water, and the remaining 55% was held by TMID (Table Mountain Irrigation District). Construction of the Oroville Dam and appurtenant facilities of the State Water Project in

the 1960s wiped out TWSD's original water distribution point. This necessitated an alternative means of conveying the District's Concow water to its downstream customers. In 1965 the California Department of Water Resources (DWR) agreed to release TWSD's share of Concow water into the West Branch of the Feather River, either by way of Concow Creek or through the PG&E Lime Saddle power plant. TID/TWSD's agreement with the Department of Water Resources was amended in 1971 to allow delivery of Concow water via Concow Creek to Lake Oroville. DWR gives credit for water delivered and provides an equivalent amount of Lake Oroville water to the District delivered through the Thermalito Power Canal. (Butte Co. OEM, 2019). The District has a water right of 8,200 acre-feet from the Concow watershed, and at no time shall the reservoir capacity drop below 1,000 acre-feet to accommodate the fish population. When full, the Concow Reservoir has a capacity of 7,225 acre-feet (Butte Co. OEM, 2019).

DWR's Division of Safety of Dams regulates dams to prevent failure, safeguard life, and protect property consistent with the California Water Code. The Division reports the following data regarding TWSD's Concow Dam. Concow Dam was built in 1925, with Dam Number 67-0 and National ID Number CA00277. The dam's height is 94 feet, and its crest length is 335 feet. The dam is certified. The downstream hazard is rated as high. The condition assessment is rated as satisfactory. The Division of Safety of Dams conducts periodic inspections of Concow Dam.

A privately owned and operated campground is located near Concow Reservoir. This campground has its own well for water supply (personal communication, Boucher and Heindell, 2021).

Future improvements at the Concow Reservoir could potentially assist to offset costs associated with water delivery, such as the potential for micro-hydro to be installed at the spillway and/or along the distribution route. This potential electricity generated by future micro-hydro could be used to offset existing costs (personal communication, Boucher and Heindell, 2021).

### *7.7.3.2-Water Treatment Plant*

This Water Treatment Plant (WTP) is located on 3.8 acres on the north side of the Thermalito Power Canal, approximately a quarter-mile east of State Route Highway 70, at 535 Table Mountain Boulevard, Oroville, Butte County. Water flows from Concow Reservoir to the Oroville Dam diversion and then to the Forebay. TWSD pulls water out from this flow process and directs it to their WTP. The WTP was originally permitted by the SWRCB on 03-22-1979. Currently, the WTP operates under a permit from the RWQCB called Order Number R5-2018-0085-0040. The WTP identification number is WDID 5A04NC00032. The WTP Design Flow is 4.0 Million Gallons Per Day (MGD) (personal communication, C. Heindell, 2022). TWSD treats its water supply to make it safe for drinking at the Water Treatment Plant. The treatment system uses a Micro Membrane Filtration which was introduced to the treatment process in April 2008. This Filtration

System allows the District to filter surface water without adding chemical additives. The raw water is pumped against a membrane with a pore size (membrane openings) small enough to screen particles smaller than bacteria and viruses. The small sizes of the pores achieve removal and inactivation of micro particles such as bacteria and viruses. California health regulations require that a residual disinfectant be injected into the filtered water and allowed enough contact time to provide adequate residual disinfection throughout the distribution system. To meet the disinfectant requirement, sodium hypochlorite (chlorination) is injected into the finished water stream. The sodium hypochlorite is created onsite and is chemically equivalent to 0.8% bleach (TWSD, Consumer Confidence Report, 2021). The plant's current drinking water treatment system meets all State regulatory requirements regarding water quality as described in Section 7.6.2.6 of this Chapter.

In the past, the lower capacity of the drinking water treatment plant was a bottleneck that could have prevented increasing the number of customers (Butte LAFCO, MSR, 2006). Since then, in April 2008, the District constructed a membrane filtration system to meet state health standards and began to phase out the old pressure vessel system. This newish membrane filtration system allows the District to maintain service during periods of maximum demand and to accommodate the level of future population growth. Today, the water treatment plant is staffed seven days per week. The current capacity of the water treatment plant is 4.0 million gallons per day maximum (personal communication, C. Heindell, 2022).

The WTP operates under a permit from the RWQCB. One of the permits is related to backwash, a common operation at such facilities, and this permit is called Waiver R5-2018-0085, which is set to expire on 7 December 2023 (CIQWS, 2022). The permit requires that the backwash water be stored on-site in three ponds. As part of the permit requirements, TWSD is required to conduct monitoring, and the monitoring data is submitted to the Central Valley Water Board Quarterly and Annually (CIQWS, 2022).

Figure 7-11: Water Treatment Plant - Existing Site

The water treatment plant has a vacant area to allow expansion. The interior footprint is large enough to allow additional treatment capacity (i.e., equipment added to the existing facility) for treatment of up to 12.0 million gallons per day max (personal communication, Boucher and Heindell, 2021). The municipal water treatment plant capacity upgrade is currently in process. The new total capacity will be 8 MGD (personal communication, C. Heindell, 2022). This upgrade could help TWSD reach its goal of being less reliant on groundwater.

Water Treatment Plant Inefficiency

The TWSD Water Treatment Plant (WTP) operates independently and efficiently. However, TWSD's WTP is one of three water treatment plants that currently serve the Oroville region (four plants if Bangor WTP is included). Each of the three water treatment plants (TWSD, SFWPA, and Cal Water) require individualized treatment, operations, maintenance, capital improvements, and regulatory oversight. Given that Oroville (and its environs) is a small to medium city, in relation to population size, having three water treatment plants is not the most efficient approach. If an opportunity to reduce the number of treatment plants were to arise in the future, the improved efficiency could be beneficial to the community. The inefficiency is a concern to LAFCO because the low median income of local residents creates a water affordability issue, as described earlier in this chapter. It is recognized that there are historical reasons for the situation with three separate drinking water treatment plants. LAFCO's 2018 Oroville Region Water Service Study recommended that the three entities openly and honestly consider the potential for water treatment consolidation in the future. Although there may be challenges due to the very different ownership models of the entities, the Authors of this MSR concur with this recommendation of LAFCO's 2018 Oroville Region Water Service Study.

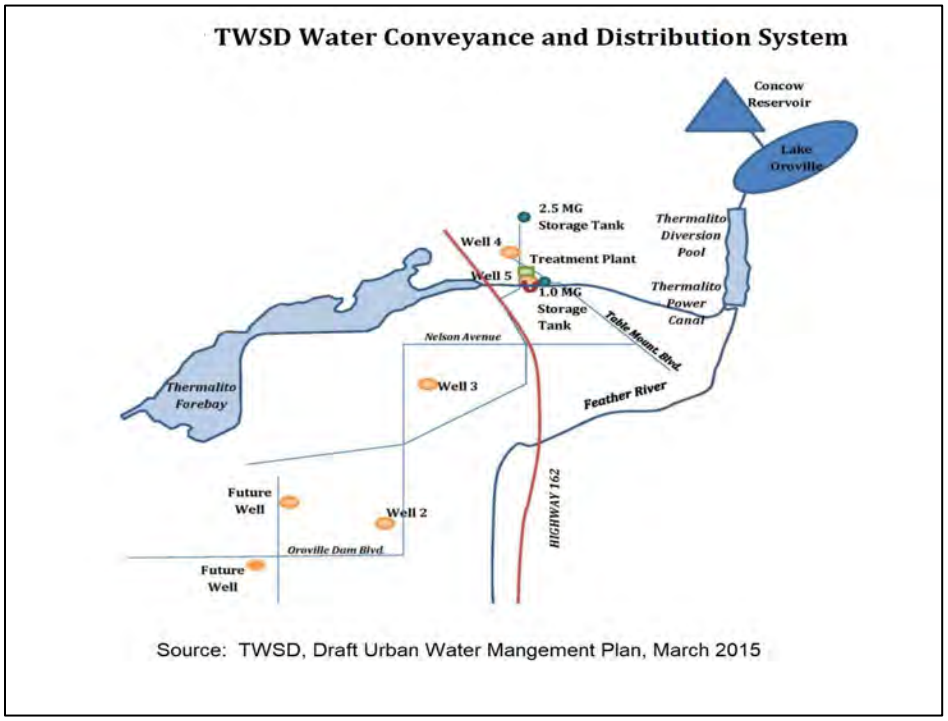
Water Distribution System Infrastructure

TWSD has extensive infrastructure designed to deliver potable water to its customers. After treatment, water is stored in several tanks. The District has 3.5 MG (million gallons) of treated storage capacity to provide pressure to the system and prevent water shortages during periods of high demand. One reservoir is a 2.5 MG distribution reservoir on the lower flanks of Table Mountain. There is also a 1 MG Clearwell within the system. The water tanks are new, with the 1 MG Clearwell tank installed in April 2019 and the 2.5MG Tank installed in March 2020 (personal communication, C. Heindell, 2022).

The new $2.5 million water tank allowed the water system to gain an additional 5 units of pressure per square inch (psi) throughout (Personal communication, Boucher and Heindell, 2021). The new tanks are sited on a concrete base foundation, several inches thick. Hexagon glass tile in the tank's roof is engineered in panels. When one panel needs repair or replacement, it can be pulled out separately and replaced. The circular dome style is designed to be cost-efficient (personal communication, Boucher and Heindell, 2021). This storage, in addition to the four wells, provides a significant level of backup that can support the maximum demand in the District for a short period. From the treated water storage tanks, water is distributed to customers via gravity feed (no pump stations are needed for domestic water).

The District owns a vactor, dump truck, water truck, two backhoes, a trailer air compressor, dump trailer, an F-450 utility truck, five work trucks, and a jeep (TWSD, 2021b). In addition, TWSD has an interconnection with the California Water Service of Oroville. The potable water interconnection is for emergency uses only (TWSD, Consumer Confidence Report, 2021g).

**Figure 7- 20: TWSD Water Conveyance and Distribution System**




### *7.7.3.3-Groundwater Well Facilities*

In addition to the District's surface water, TWSD has four active groundwater wells located throughout the District boundary. TWSD's groundwater supplies were originally developed from six wells. However, wells No. 1 and No. 6 were abandoned, and a new well site was grant deeded for the future replacement of Well No. 1. Although these wells had been used to supply a majority of domestic water demands in the past, they are presently utilized as a supplemental source; surface water from the Concow system provides the primary supplies. Groundwater is added to the system to reduce the effects of disinfectant byproducts that pass through the treatment plant's membrane filtration system. Therefore, Wells No. 4 and No. 5 are used during the year to dilute the concentration of the production seasons (Butte Co. OEM, 2019). A 33-foot deep well and associated water pumps are located at the Water Treatment Plant.

LAFCO's 2006 MSR recommended the addition of more wells or more storage to provide a satisfactory backup in the event that surface water becomes temporarily unavailable or unusable (Butte LAFCO, MSR, 2006). Since then, the TWSD has added more water storage capacity but has reduced the number of active wells from five down to four.

#### *7.7.3.4: Water Supply and Treatment Facilities to the SOI*

The SOI is currently unincorporated and located within the jurisdiction of the County of Butte. Parcels in the SOI do not receive municipal (treated) water; therefore, TWSD does not own or maintain any infrastructure in the SOI. Please see Section 7.6.3.2 above for details regarding potential actions subsequent to a proposed annexation to the District boundary.

## 7.7.3 Wastewater Collection Facilities

#### *7.7.3.1 Collection System Infrastructure*

The wastewater collection system infrastructure was originally installed in 1975. The asbestos cement pipes were installed originally, and they have a life expectancy of up to 100 years. Newer sewer pipes consist of PVC. The District's sanitary sewer collection system is predominately a gravity-flow system, although the system includes 0.8 miles of force main and one pump station (TWSD, 2020b). A significant portion of the wastewater collection system infrastructure has been replaced or upgraded. Today, TWSD's collection system consists of 34.7 miles of gravity sewer line with approximately 570 maintenance holes. Additionally, the system has 20.4 miles of lateral lines (CIQWS, 2022). The pipelines are constructed of several types of materials, depending on age, including vitrified clay pipe (VCP), polyvinyl chloride (PVC), asbestos concrete (AC), and cast iron (TWSD, SSMP, 202b). There have not been significant collection system expansions beyond the original system installation. However, some small expansions have been constructed associated with developments. TWSD does not have current plans to expand infrastructure other than developer-driven main line extensions on a case-by-case basis (TWSD, 2020b).

Routine maintenance is conducted on wastewater infrastructure. For example, cameras are used to observe sewer pipes and determine whether any roots infiltrate into joints. Root intrusion can be treated with the use pipe patching or slip-lining. The District's wastewater collection system is about 45+ years old and is generally in good condition. There have been some isolated problems with root infiltration, but they have not had a significant impact on the system's capacity and are resolved on an ongoing basis through regular maintenance (Butte LAFCO, MSR, 2006).

The Linkside Sewer Lift Station is an important facility, and it is located on Oro Dam Boulevard to serve the Linkside Subdivision. The Linkside Lift Station has automatically controlled alternating pumps, and it is inspected weekly as part of the sewer pump station preventative maintenance program. The Linkside Lift Station is currently being upgraded to send operational data to the TWSD treatment plant to facilitate off-site monitoring by the District Treatment Plant Operators (TWSD, 2020b).

The East Trunk Line transports wastewater in the Thermalito area and to the SC-OR lift station. In 2014, TWSD began the East Trunk Line Replacement Project (CWSRF Project No. C-06-7646-110) with $2.6 million in funding from the State Water Board. TWSD cooperatively shares capacity of the East Trunk Line and the airport area collection trunk line with the City of Oroville, and these trunk lines are referred to as Joint Use Facilities. Under its agreement with the City, TWSD provides pipeline conveyance capacity for the City collection system that covers most of the area northwesterly of the Feather River and easterly of the Highway 70 freeway and the Oroville Airport Industrial area. Design flows for Joint Use Facilities include capacity for the City of Oroville of 0.74 million gallons per day (mgd) in the East Trunk, and 0.2 mgd in the Airport Collection, also identified below as the Oro Dam Boulevard Interceptor. An updated agreement for the TWSD East Trunk anticipates future flows of 1.10 mgd for the City and 0.76 mgd for the District, for a combined flow of 1.86 mgd (TWSD, 2020b). TWSD owns and maintains the wastewater Joint Use Facilities (Personal communication, Boucher and Heindell, 2021).

TWSD wastewater conveyance infrastructure transports wastewater to the SC-OR pump station located at Ruddy Creek, where it connects to its main trunk line. TWSD has lateral sewer lines that project off the SC-OR Trunk line. The main interceptor is located near the South Feather River Lift Station (personal communication, Boucher and Heindell, 2021).

TWSD owns and maintains a range of equipment dedicated to maintaining the wastewater collection system, including the following:

- Permanent emergency electrical generator with an auto transfer switch for Linkside Lift Station
- (2) Pickup trucks
- (1) One-ton utility truck
- (1) 350 kW portable electrical generator
- (1) 3-inch portable pump
- (2) Submersible/portable pump (4-inch 6-inch available as needed)
- (1) Air Compressor
- (2) Backhoes
- (1) Dump truck
- (1) Vactor Jet Rodder truck
- (1) Ques Inc CCTV van
- (1) Portable lateral camera
- (1) Portable lateral power snake
- *Data source: TWSD, SSMP, 2020b*

TWSD's vehicles (listed above) currently utilize fossil fuels. The California Air Resources Board (CARB) approved a new rule on Aug 25, 2022 which requires new car sales in California to be zero-emission vehicles (ZEVs) by 2035. While it is not yet clear whether new electric vehicle laws will apply to the type of trucks utilized by TWSD, it is likely that sometime in the future, TWSD may be asked to consider purchasing or retrofitting vehicles reliant upon an alternative energy sources such as electricity,biogas, hydrogen, or other source. The price per gallon of gasoline has risen in 2022; therefore, alternative fuel/energy for vehicles can sometimes be cheaper.

Wastewater Treatment Plant

The Sewerage Commission-Oroville Region (SC-OR) provides wastewater treatment and disposal for the TWSD through its operation of the wastewater treatment plant located on South 5th Avenue, south of downtown Oroville. All of the wastewater collected by TWSD is discharged to the SC-OR West Interceptor, located on Oro-Dam Boulevard. The West Interceptor conveys wastewater to SC-OR's Main Interceptor at South 5th Avenue and Cal Oak Road, from which it is then conveyed to the SC-OR's wastewater treatment plant for treatment and disposal. The SC-OR West Interceptor currently exceeds its hydraulic capacity during peak wet weather flows, which could result in a Sanitary Sewer Overflow (SSO) (TWSD, 2020b). Nevertheless, TWSD believes that the SC-OR treatment plant currently has the capacity to handle the expected growth for this area for the time frame considered in this document (TWSD, 2020b).

Due to the recent Camp Fire affecting the nearby Town of Paradise, the population in the Oroville area has fluctuated, and future residential, commercial, and institutional development have been approved by both the City and County as described in Section 7.4.5, above. Future expansion of the wastewater treatment plant is possible to keep up with demand. The wastewater treatment plant is expected to grow to approximately 6.45 MGD through build-out per the Sewer Master Plan Update in 2013 by Carollo (COOR SSMP, 2019). Please see chapter 5 for additional details on SC-OR.

Wastewater Infrastructure Maintenance and Capital Improvement Plan

TWSD replaces and repairs infrastructure on a regular basis. In addition, the TWSD has implemented collection system best management practices (BMPs) and conducted preventative maintenance and scheduled replacement of aging infrastructure. TWSD's SSMP contains a Rehabilitation and Replacement Plan, which describes TWSD's goal is to conduct visual and video inspections to assess each sewer mainline. The video inspection is conducted via the District's CCTV van. Information from the video inspection is used to prioritize repairs, replacement, or rehabilitation (TWSD, 2020b). Pipelines are replaced on a schedule, and every year some of the older pipelines are replaced. The old clay sewer pipes are prioritized for replacement (personal communication, Boucher and Heindell, 2021).

The District also has a Fats, Oils & Grease (FOG) protocol which aims to decrease backups. Routine cleaning of all the District's sewer lines takes approximately 5 years to complete. The progress of the sewer main flushing is tracked through mapping and work orders. (TWSD, 2020b).

The Capital Improvement Program for the wastewater system is identified in the SSMP. Several Capital Improvement projects are listed in the SSMP and Table 7-22 below. These projects are sometimes long-term endeavors that can begin before and continue beyond the budget cycle (TWSD, 2020b).

| Table 7-22: Wastewater System Capital Improvement Plan | | | | | |
|---|---|---|---|---|---|
| **Project No.** | **Project Title** | **2018/19** | **2019/20** | **2020/21** | **Total Cost** |
| S-1 | Ruddy Creek (Phase 1) | 280,000 | | | $280,000 |
| S-2 | Toleman Ravine Crossing (Realignment and installation of lift station) | | | $70,000 | $70,000 |
| S-3 | Linkside Liftstation Telemetry | | $5,500 | | $5,500 |
| S-5 | Ruddy Creek (Phase 2) | | | $300,000 | $300,000 |
| *Data Source: TWSD, SSMP, 2020b* | | | | | |

The rehabilitation, infrastructure improvements, and capacity upgrades require careful planning. The Capital Improvement Plan costs listed in Table 7-22 above are used to develop sewer rates and plan for the issuance of bonds, if necessary, to finance the projected capital improvements. Since the Sewer Fund is an enterprise fund, sewer fees are established to meet projected needs as detailed in the Finance Section 7.8.

As listed in Table 7-22 above, the Ruddy Creek Trunk Line replacement is an ongoing sewer project. The District has completed the sewer replacement on Hardnett Court, which corrected several slope issues. The District has replaced approximately 2,000 lineal feet of clay pipe and will continue until the entire trunk line has been replaced. The remaining infrastructure improvements will likely be due to age and/or conditions of pipe found during maintenance activities (TWSD, 2020b).

#### *7.7.3.2 Existing Capacity of Wastewater Infrastructure*

TWSD's boundary area is 14,873 acres; however, the District's sewer collection service only extends to about 3,680 acres. Much of the un-served area lies north and west of the current sewerage system (TWSD, 2020b). Another method the District uses to assess its service capacity is to convert its individual customer account number (currently 2,330 accounts) to a calculated equivalent dwelling unit (EDU), and this equates to approximately 2,911 EDUs (TWSD, 2020b).

TWSD's Average Daily Dry Weather (ADDW) wastewater flow is estimated to be approximately 0.397 MGD, as reported by SC-OR in 2018. The maximum daily wet weather flow (MDWWF) was approximately 3.67 MGD in 2019, as shown in Table 7-23 below.

Table 7-23: Historical Flows for TWSD Collection System

**Table 8-1: Historical Flows for TWSD Collection System**

Sanitary Sewer Master Plan

| Year | Average Annual Flow (MGD) | | Seasonal Average (MGD) | | Maximum Month (MG) | | Maximum Day (MGD) | |
|---|---|---|---|---|---|---|---|---|
| | AAF | % Change | ADWF | AWWF | MMDWF | MMWWF | MDDWF | MDWWF |
| 2014 | 0.344 | -18.87% | 0.35 | 0.38 | 11.89 | 19.63 | 1.00 | 2.70 |
| 2015 | 0.366 | 6.40% | 0.36 | 0.39 | 11.76 | 13.95 | 0.93 | 1.94 |
| 2016 | 0.429 | 17.21% | 0.33 | 0.54 | 10.72 | 22.63 | 1.00 | 2.76 |
| 2017 | 0.314 | -26.81% | 0.23 | 0.40 | 8.34 | 19.99 | 1.08 | 2.76 |
| 2018 | 0.406 | 29.30% | 0.39 | 0.42 | 12.41 | 15.82 | 1.29 | 2.70 |
| 2019 | 0.428 | 5.42% | 0.38 | 0.49 | 11.96 | 22.42 | 1.22 | 3.67 |

Notes:

AADF- Average Annual Daily Flow (annual flow expressed in daily units)

ADWF - Average Dry Weather Flow (average flow that occurs on a daily basis during the dry weather season (May-August)

AWWF - Average Wet Weather Flow (average flow that occurs on a daily basis during the wet weather season (November-March)

MMDWF - Maximum Monthly Dry Weather Flow (maximum flow during a dry weather month)

MMWWF - Maximum Monthly Wet Weather Flow (maximum flow during a wet weather month)

MDDWF - Maximum Daily Dry Weather Flow (maximum flow during a dry weather day)

MDWWF - Maximum Daily Wet Weather Flow (maximum flow during a wet weather day)

PDWF - Peak Hour Dry Weather Flow (maximum hourly flow during dry weather)

PWWF - Peak Hourly Wet Weather Flow (maximum hourly flow during wet weather)

In summary, TWSD's wastewater collection system currently has no significant capacity issues regarding service to existing customers (Butte LAFCO, MSR, 2006). In the past 5 years, there has been no events where peak flows exceeded the capacity of the TWSD's sewer collection system (personal communication, C. Heindell, 2022).

Estimated Future Demand – Wastewater Collection

Any new development occurring within the District will influence future demand for wastewater collection services. Because the District does not have the legal authority to make land-use decisions, supply and demand are anticipated through developments and annexations. Please note that several variables influence customer generation of wastewater flow. For example, prolonged drought and associated water conservation measures can reduce inflow to the TWSD collection system. Therefore, this capacity assessment provides broad generalizations based on historic trends and projected into the future.

TWSD's Average Daily Dry Weather (ADDW) wastewater flow is expected to grow to 0.67 MGD within the next 20 years based on the annual population growth rate of 2.6% (TWSD, 2021b). New residential and commercial developments are required to submit engineered plans and may be required by the District to provide detailed sewer capacity studies during the permitting process. These developments may be required to upgrade the existing collection system

downstream if additional capacity is required (Butte LAFCO, MSR, 2006). If extension or modification of the District's sanitary sewer facilities is required to provide service, the landowner is required to enter into a pre-annexation and development agreement with the District that outlines the terms and conditions of extensions and/or modifications to the sewer system (TWSD, 2020b). TWSD has adequate capacity within its system of sewer pipes, and it can sometimes be relatively easy to expand the quantity and/or size of sewer pipes. However, there are challenges associated with providing future sewer service to a growing community. Factors influencing TWSD's ability to collect wastewater and provide public service to customers include the viability of pumping stations along Oro Dam Boulevard and inflow/infiltration during winter months (TWSD, 2021b). Since TWSD's wastewater infrastructure covers only 25 percent of its boundary area, the geographic location of new development could be a barrier to receiving service if the location is outside of the existing service area. Extension of sewer pipes to new geographic locations may be expensive if it is necessary to cross natural barriers such as a river or other physical barriers such as a highway. Additionally, elevation changes might require new pumps. An example of a barrier to providing service to new geographic areas is the Feather River Bridge. If a river crossing is needed in the future, a "jack and bore" construction technique could be used. (personal communication, Boucher and Heindell, 2021).

The capacity to serve proposed new urban and suburban development is carefully planned by TWSD staff. The 2020 Sewer System Management Plan identifies capacity increases that would be required the meet expected future growth. TWSD has adopted connection fees to fund capacity increases.

Decisions about whether or not to issue "will serve letters" for wastewater service to new/proposed development is part of the planning process. Will-serve letters related to the sewer system have been issued for the following projects:

- Village at Ruddy Creek (Butte County, -97 unit subdivision).
- Oroville Heights (Butte County, -72 unit apartment complex).
- Linkside Phase II (Butte County, -56 unit subdivision).

Based on the above three projects, capacity has been committed for planned or proposed development at approximately 225 EDUs. Each of the Will Serve Letters expires 1 year from issuance (TWSD, 2021b). Will-serve letters are also important to SC-OR to assist them in accounting for capacity at the wastewater treatment plant and associated facilities. For example, SC-OR has pump stations that could present capacity bottlenecks (TWSD, 2021b). Part of the Will-Serve letters is a required Developer Agreement with SC-OR if the development is over 25 units. SC-OR also requires a Capacity Study, as described in Chapter 5. Although TWSD's wastewater system has some capacity to service future development, this capacity is not infinite. The need to provide additional capacity is assessed on a case-by-case basis.

#### *7.7.3.3 Wastewater Facilities (SOI)*

Parcels within the SOI are mostly unincorporated and are located within the jurisdiction of Butte County. These parcels do not currently receive municipal sewer service; therefore, TWSD does not have any wastewater infrastructure within its SOI.

New development occurring within the SOI should be evaluated in relation to potential impacts on the provision of sewer services. The cost of extending wastewater infrastructure is not determined in advance by TWSD. Rather, new development is responsible for the construction of all sanitary sewer lines serving each development, and costs are considered on a case-by-case basis depending on geographic location, topography, and barriers.

### 7.7.4 Solar-electric Facilities

Photovoltaic solar panels are located at the water treatment plant site, and the electricity generated is sent to PG&E for credits as described in Section 7.6.5.

### 7.7.5 Recreation Facilities

TWSD owns and maintains two fishing locations on the bank of Lake Concow. These locations include parking and paths to the water. The District does not provide any other formal recreation facilities. Concow Reservoir is primarily utilized for water supply purposes by TWSD. Near the Concow Reservoir, two other organizations provide recreation opportunities as listed below:

1. Paradise Recreation District has Crane Park. (It is possible that TWSD could collaborate with Paradise Recreation District regarding the future use of the Concow Reservoir) (personal communication, Boucher and Heindell, 2021).
2. Camping is available at the Lake Concow Campground, a privately managed facility open to the general public as described on their website: *https://lakeconcowcampground.net/*. Tent camping and self-contained RV's (dump station on-site) camping are allowed for a small fee. Prices for the use of the campground are: Day use $5.00 per car; RV dump station $5.00 each use; general overnight camping at $15.00 per night per car (2-week maximum stay).

### 7.7.5 Infrastructure Needs and Deficiencies

The American Society of Civil Engineers, Region 9 has several recommended remedies for California's aging drinking water infrastructure as outlined in Appendix K and as summarized below:

- Address Aging Infrastructure Needs.
- Continue To Make Conservation A California Way Of Life.
- Increase Regional Self Reliance And Integrated Water Management Across All Levels Of Government.
- Achieve The Co-Equal Goals For The Delta.
- Manage And Prepare For Dry Periods.

Infrastructure needs and deficiencies are common features of large facilities, such as a water/sewer district. TWSD prepares a capital improvement plan as part of its annual budget to

address its specific needs. Infrastructure needs or deficiencies (i.e., pipelines, hydrants, tanks, reservoirs, etc.) are described by TWSD staff as the need to upgrade capacity at the municipal drinking water treatment plant within the next 12 months. In the next five years, the District would like to continue implementing its pipeline replacement project as aging infrastructure reaches the end of its useful life (TWSD, 2021a).

Complaints: The number and handling of complaints is an indicator of both accountability and the potential need for improvement. TWSD customers may make complaints by sending written correspondence to the district office or online at: www.twsd.info (TWSD, 2021b). 25 complaints were received in 2019, and 24 were received in 2020. These complaints include the following: tase/odor, high or low pressure, color, etc. Each complaint is reported to the State Water Resources Control Board, along with a summary about how the item was fixed. The majority of the complaints are issues associated with the customer's plumbing and can be solved by flushing their service line (TWSD, 2021b).

### *Determinations for Infrastructure and Public Facilities*

Based on the information included in Section 7.7 above, the following written determinations make statements involving each service factor which the Commission must consider as part of a municipal service review. The determinations listed below in Table 7-24 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

| Table 7-24: MSR DETERMINATION: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES | | |
|---|---|---|
| **Number** | **Indicator** | **Determination** |
| TWSD-PUB-1 | Has the Agency been diligent in developing plans to accommodate the infrastructure and service needs of current and future constituents? Regularly reviews and updates its service plans to help ensure that infrastructure needs and deficiencies are addressed in a timely manner. | TWSD has one plan relevant to delivering potable water, namely its Urban Water Management Plan of 2015. TWSD has one planning document supporting its delivery of wastewater conveyance services, namely its 2020 Sewer System Management Plan. It is recommended that TWSD post both plans on its website so they are readily accessible to constituents.<br><br>TWSD has made a good start towards developing a formal capital improvement plan by listing wastewater improvement projects in its SSMP and by listing proposed capital expenses for one year in the annual budget. However, it is recommended that TWSD improve its capital planning by projecting multiple years of capital expenses consistent with projects that should be described for both wastewater (SSMP) and potable water (UWMP). It is recommended that TWSD improve its diligence in developing plans to accommodate the infrastructure and service needs of current and future constituents and to ensure that infrastructure needs and deficiencies are addressed in a timely manner. |
| TWSD--PUB2 | Does the District provide sufficient services to meet current and future demands with: 1) water supply for potable water; 2) wastewater capacity; and 3) solar electricity? | TWSD provides sufficient services to meet current and future demands as follows:<br>1) Based on the water supply and water demand assessments described in TWSD's 2020 UWMP, the Concow Reservoir and the four active groundwater wells contain sufficient supply to adequately meet the current and foreseeable demand through 2045.<br>2) TWSD provides wastewater collection and conveyance, and its wastewater collection system includes approximately 34.7 miles of gravity sewer line with approximately 570 maintenance holes and one sewage lift station.<br>3) The sewer system conveys wastewater to a treatment plant owned and operated by the Sewerage Commission - Oroville Region. TWSD wastewater infrastructure currently covers 25 percent of its boundary area. Expansion into new geographic areas is possible if needed. However, new pumps or lift stations may be needed depending on the elevation of any future expansion area.<br>4) TWSD generates electricity using solar panels, which offsets the utility costs at the treatment plant. |

| | | |
|---|---|---|
| TWSD-PUB-3 | Is there duplicate infrastructure by other agencies nearby? | Two nearby agencies offer wastewater services similar to TWSD, including the City of Oroville and LOAPUD. Since TWSD provides sewer/water services to COOR lands, there is geographic overlap. Additionally, there is geographic overlap with the Cal Water service area for water services.<br><br>Similarly, two nearby agencies offer drinking water services similar to TWSD, including SFWPA and the private California Water Company. Additionally, the North Yuba Water District provides raw water to agricultural customers in Yuba County. However, within the TWSD's boundary area, it is the only water service provider. If, in the future, an opportunity to reduce the number of drinking water treatment plants were to arise, it is possible that the improved efficiency could be beneficial to the community. LAFCO's 2018 Oroville Region Water Service Study recommended that the three entities openly and honestly consider the potential for treatment plant consolidation in the future. Additional recommendations about potential future governance structure options are provided in Appendix C. |
| TWSD-PUB-4 | The District has preventative maintenance measures and has planned for the replacement of aging infrastructure. | TWSD actively implements preventative maintenance on its water and wastewater infrastructure; however, the MSR Authors did not find a summary describing the recent improvements. In addition, a multi-year plan for the replacement of aging infrastructure (i.e., a Capital Improvement Plan) for both water and wastewater could not be found by the MSR Authors. Therefore, there is insufficient information to address this determination. However, the SSMP lists capital projects for the wastewater system, and the District's annual budget lists capital expenses for the upcoming year. Additionally, TWSD staff have identified infrastructure needs and deficiencies as aging pipeline infrastructure. |
| TWSD-PUB-5 | Evaluation of the agency's capacity to assist with and/or assume services provided by other agencies. | TWSD has demonstrated some capacity to assist with or assume services provided by other agencies. For example, TWSD has a good financial basis with revenues in line with expenses. TWSD has retained staff engineers and other professionals necessary to serve a leadership role, and these skilled staff persons have the ability to assist with or assume services provided by other agencies. Additionally, TWSD has close collaborative relationships with nearby independent government agencies, as demonstrated by its collaboration with the SC-OR and the Wyandotte GSA. TWSD successfully |

| | | |
|---|---|---|
| | | (continued)<br>communicates with nearby local agencies such as the City of Oroville, Butte County, and SFWPA. TWSD's leadership capacity could be improved by developing a clear and multi-year capital improvement plan and by posting its UWMP and SSMP on the website in a timely manner.<br><br>TWSD currently has good communication with the Paradise Recreation and Park District, and together they are exploring potential recreational options at Lake Concow. TWSD could consider pursuing a formal agreement with Paradise Park and Recreation District to collaborate on providing recreation services. |

## 7.8 Financial Ability To Provide Services

### *7.8.1 Introduction to Financial Metrics*

LAFCO is required by the CKH Act to make a determination regarding the financial ability of the Thermalito Water and Sewer District to provide public services. This Chapter provides an overview of financial health and context for LAFCO's financial determinations. The District's audited Comprehensive Annual Financial Reports (CAFRs) (which TWSD calls 'Annual Financial Reports') for the fiscal years 2018/2019, 2019/2020, and 2020/2021 are the primary source of information for this Chapter. Based on recent recommendations from the Little Hoover Commission, this determination on the financial ability to provide services is based upon several key financial performance indicators that LAFCOs throughout the State consider in MSRs.

In California, special districts are classified as enterprise or non-enterprise districts based on their source of revenue:

- Enterprise Districts: Finance of district operations is via fees for public service. Under this model, the customers that consume goods or services such as drinking water or raw water, sewage collection, or disposal, pay a fee. Rates are set by a governing board, and there is a nexus between the costs of providing services and the rates customers pay. Sometimes enterprise districts may also receive property taxes or other revenues which comprise a portion of their budget.
- Non-enterprise districts: Districts that receive property taxes are typically classified as non-enterprise districts. Services that indirectly benefit the entire community, such as flood or fire protection, community centers, and cemetery districts, are often funded through property taxes.

TWSD is an Enterprise District that charges fees for its two primary services: water supply, treatment, distribution, and sewage collection and transport services. TWSD does not collect property taxes. However, the District turns in delinquent accounts on a fiscal year basis to Butte County. The County pays the District and adds the amount to the property tax roll.

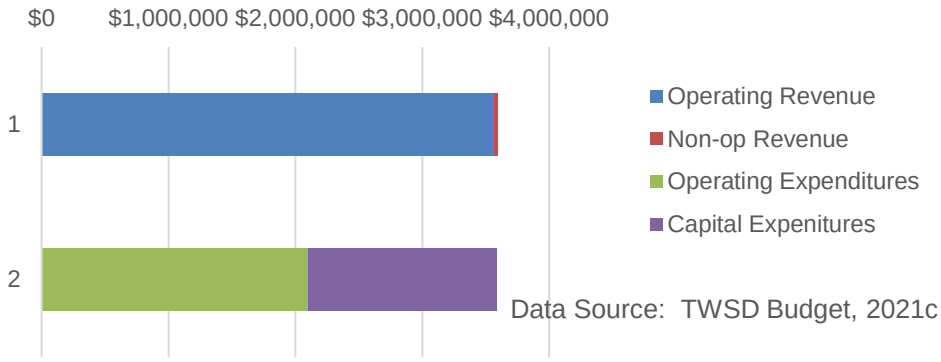
TWSD tracks finances related to water and sewer services under separate enterprise funds. The District's annual financial statements describe designated accounts that show the water and sewer utilities being accounted for separately. These details are provided in the supplementary tables in the annual financial report. In addition, other important financial tables, such as the Consolidated Statement of Net Position (located at the beginning of the annual financial report), reflect the District's combined water and sewer operations (TWSD, AFR, 2021d).

TWSD's budget for the fiscal year ending June 30, 2022 (FY21/22) reflects past performance, current requirements, and future opportunities and risks. Additionally, the District's budget for FY 21/22 shows separate budgeted amounts for the water and sewer operations (TWSD, 2021a, Budget). The budget for both the District's water and sewer utilities is balanced, meaning revenues and transfers from reserves are equal to the sum of expenses, debt service, capital projects, and transfers to reserves, as shown in Figure 7-12 (TWSD Budget, 2021a). The District does not have "blended component units" consisting of organizations whose respective governing boards are comprised entirely of the members of the District's Board of Directors (TWSD, AFR, 2021d).

### *7.8.2 Financial Policies & Transparency*

The District prepares and approves a budget with an annual timeframe, which includes a capital improvement budget. It is TWSD's practice to present a report regarding financial warrants (i.e., payment authorizations) to the Board of Directors during regular monthly meetings. The fiscal year begins on July 1 and ends on June 30. The current budget and the past five years of Annual Financial Reports are available to the public via the District's website.

Figure 7-12: Comparison of Budgeted Revenues and Expenses for Water Services FY21/22




Data Source: TWSD Budget, 2021c

Every year the District publishes an audited Annual Financial Report (AFR). The Government Code requires an annual independent audit of the District's financial records by a certified public accountant who serves as independent auditors. There are four types of audit opinions: unqualified, qualified, adverse, and disclaimer. An unqualified opinion is a clean opinion meaning the entity passed its audit. A qualified opinion means the entity passed the audit with notable exceptions. A disclaimer or adverse opinion essentially means the entity flunked its audit. The independent audit on FY20/21 (year ended June 30, 2021) was performed by Fechter &

Company, Certified Public Accountants. The auditors expressed their opinion that the District's financial statements present fairly, in all material respects, the financial position of the District as of June 30, 2021, and the respective change in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America (TWSD, AFR, 2021d).

A District's financial policies function as business rules that ensure an agency's transactions are recorded consistently and correctly. It is important for a District's financial policies to be made available to the public. Although TWSD does not seem to have a comprehensive District Code that combines its policies, the District does have a webpage that provides the specific financial policies and procedures related to Board Member and Staff Compensation, Reimbursement, and Compensation Policy, Disclosure of Reimbursements, Financial Reserves Policy, Financial Transaction Report, and Conflict of Interest Policy. These policies are available to the public as a .pdf download from the following webpage: *https://www.twsd.info/district-transparency*. Additionally, TWSD's Annual Financial Report lists several accounting policies and a summary of a few key accounting policies is listed in Table 7-25 below:

Table 7-25: TWSD Accounting Policies

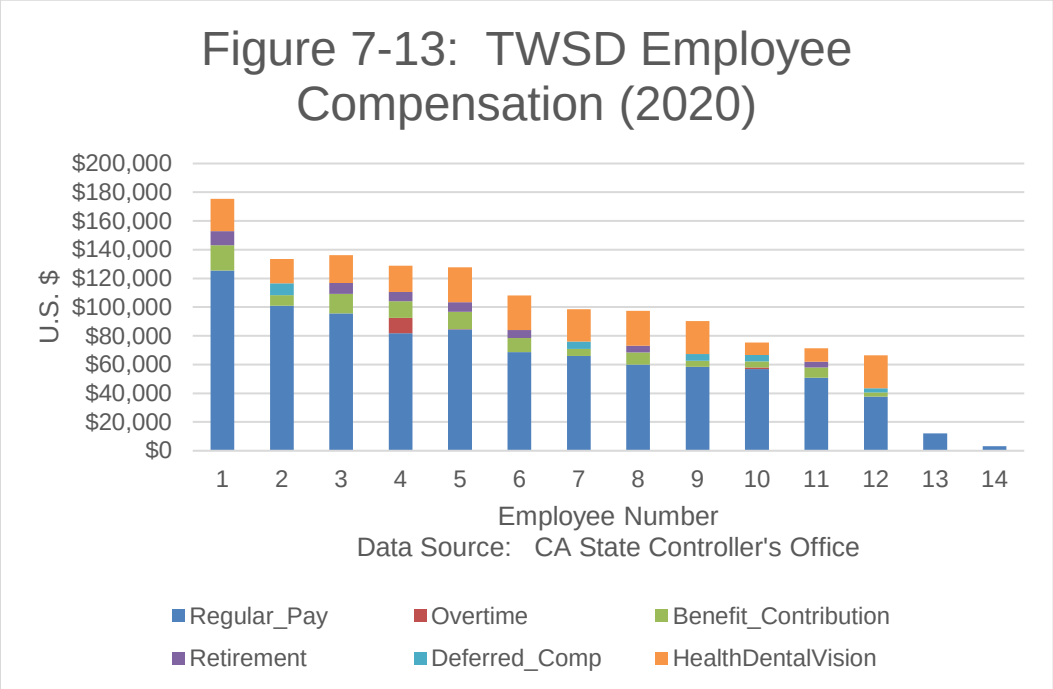
| **Name of Policy** | **Brief Description of Policy** |
|---|---|
| Budget Basis of Accounting | The budgets of the District are adopted on a basis consistent with generally accepted accounting principles. |
| Use of Estimates | The preparation of the basic financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported changes in net position during the reporting period. |
| Accounts Receivable | Accounts receivable consist primarily of amounts due on water and sewer services. Delinquent accounts for water or sewer services are treated pursuant to Water Code. |
| Inventory of Materials and Supplies | Inventory of materials and supplies consists primarily of water meters, pipes, and pipe fittings for construction and repair to the District's water transmission and distribution system. |
| Prepaid Expenses | Certain payments to vendors reflect costs or deposits applicable to future accounting periods and are recorded as prepaid items in the basic financial statements. |
| Compensated Absences | The District maintains a Memorandum of Understanding (MOU) with its employees for unused vacation and sick leave. |
| Cash and Investments | The District has adopted a formal investment policy as required by Section 53600 et seq. of the California Government Code. The District's treasurer is responsible for selecting depositories and investing idle funds according to the adopted investment policy. |

Data Source: TWSD, AFR, 2021d

Readers are invited to view the entire TWSD accounting policies list in the annual financial reports. Ideally, all independent districts would have an adopted purchasing policy that provides specific procedures for purchases and procurement practices. Unfortunately, TWSD does not appear to have a specific purchasing policy, and this is a situation that could be improved in the future. The District's financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recognized when earned, and expenses are recorded when the liability is incurred, regardless of the timing of related cash flows (TWSD, AFR, 2021d).

Data Transparency

Financial data transparency promotes accountability and provides information to citizens about what their local government is doing. Transparency lets residents stay informed and learn about local government revenue, spending, and debt. District staff reports regularly to the Board of Directors regarding financial warrants, and this information is available to the public via the meeting agenda packet. In addition, it is noted that budgets and financial statements for recent years are posted on the District's website (TWSD, RFI, 2021b). Transparency with salary data is also an important attribute for special districts in California. The Thermalito Water and Sewer District provides competitive compensation and a benefits package to full-time, regular employees, as shown in Figure 7-13 below. The Thermalito Water and Sewer District correctly forwards a report to the California State Controller for Government Compensation in California per Government Code Section 53891. Ideally, all independent districts in California would post their employee wage scale by bargaining unit on their website. However, this information is not currently (as of Jan 11, 2022) available on the TWSD website, and this item needs improvement.



### *7.8.3 Revenues, Expenditures, and Net Position*

Revenues

TWSD has two basic types of revenue:

- Operating revenues consist primarily of charges for services.
- Non-operating revenues and expenses are related to financing and investing-type activities.

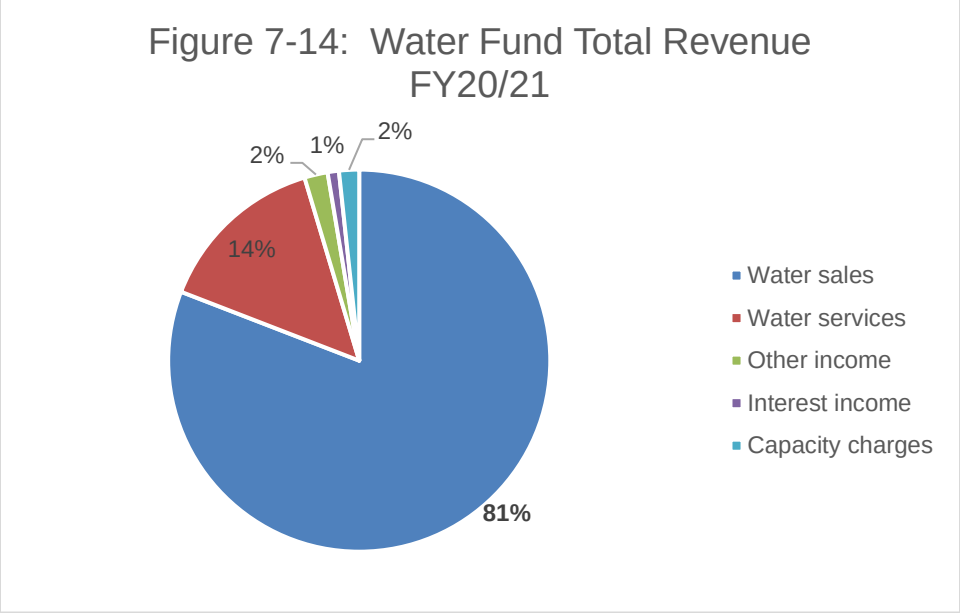
The District has multiple sources of revenue, including sales to customers, service charges, and interest income. The discussion below considers revenue from the water fund and the sewer fund.

In FY20/21, TWSD's total revenue for the water fund was $2,810,144, as shown in Table 7-26, and the largest source of revenue was water sales to customers, as shown in Figure 7-14, below (TWSD, AFR, 2021d). Non-operating revenues, including investment income and capacity charges for the water fund were $74,572 in FY20/21 (TWSD, AFR, 2021d).

**Table 7-26: Total Revenue TWSD FY20/21**

| | Water | Sewer |
|---|---|---|
| Water sales | $2,272,563 | 0 |
| Water services | $407,678 | 0 |
| Other income | $55,331 | 0 |
| Interest income | $26,831 | $6,708 |
| Capacity charges | $47,741 | $49,988 |
| Sewer use sales and services | 0 | $1,469,301 |
| **TOTAL REVENUES** | **$2,810,144** | **$1,525,997** |

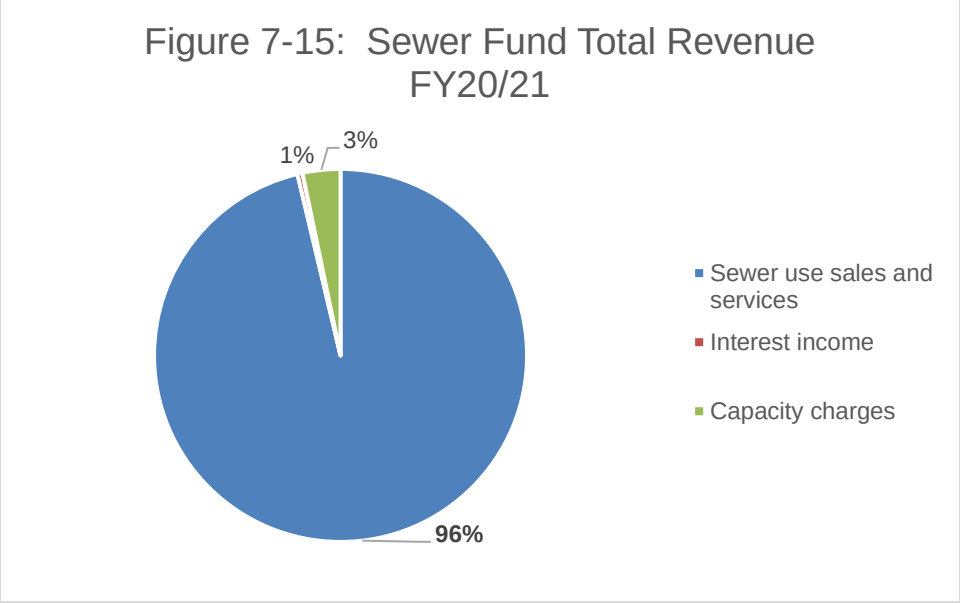
Data Source: TWSD, AFR, 2021d




Data Source: (TWSD, AFR, 2021d)

The revenue that TWSD receives from water sales is dependent on natural water conditions, such as drought. As customers conserve water during a drought, the per-unit cost of water goes up. Many of the costs incurred by a water supplier are independent of the amount of water supplied. This is especially true in rural and semi-rural settings where development densities are lower, and the cost of maintaining each mile of the conveyance system is spread over fewer users. The infrastructure capacity of the entire system (pipe size, treatment size, storage, etc.) is a function of water demand plus fire flow requirements. As the water volume decreases with conservation, the system's infrastructure capacity and related expense do not decrease equally (Butte LAFCO, 2018). Metered water sales for TWSD are based on the quantity charge (i.e., commodity component) and are less than 50% of total water sales income. They are also less impacted by declining per capita water usage and conservation (Butte LAFCO, 2018).

In FY20/21, TWSD's total revenue for the sewer fund was $1,525,997, as shown in Table 7-26. The largest source of revenue was sewer use sales to customers, as shown in Figure 7-15 below (TWSD, AFR, 2021d). Sewer use sales and service revenues increased 5.45% in FY20/21 compared to the previous year. This was primarily because of the pass-through sewer treatment charge from SCOR, which is incorporated into TWSD's billings. SC-OR is currently in Stage 3 of a five-year rate increase. SC-OR's rate increases each July, and TWSD passes it on to the customers. Non-operating revenues, including investment income and capacity charges for the sewer fund were $56,696 in FY20/21 (TWSD, AFR, 2021d).




Data Source: (TWSD, AFR, 2021d)

In summary, TWSD's total revenue (water and sewer combined) for FY20/21 was $4,204,873. TWSD's average revenue per acre amounted to $2,827 in FY20/21.

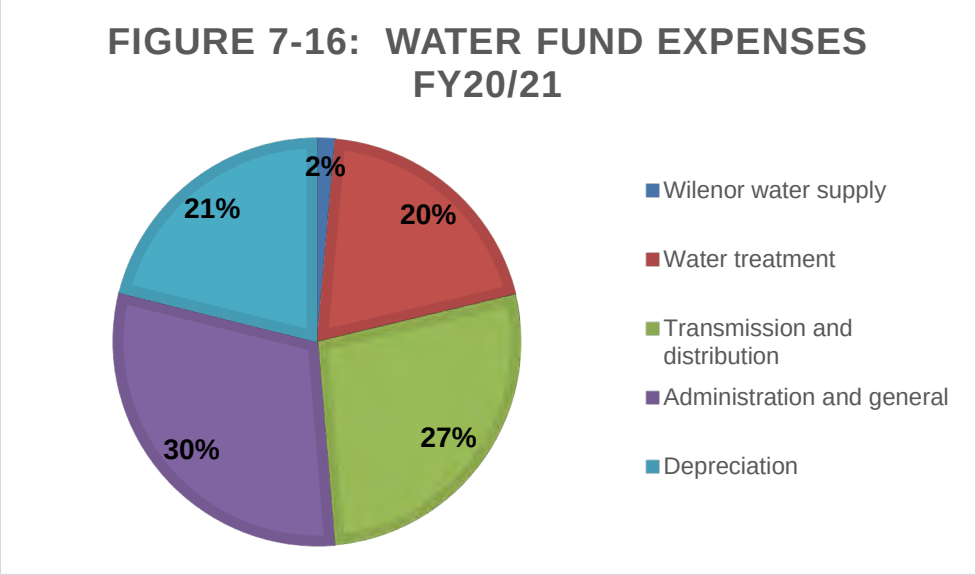
Expenses

In FY20/21, total expenses (including both operating and non-operating) were $2,168,079 for the water utility. The largest expense was Water Administration and General at $655,242, and the second-largest expense was Water Transmission and Distribution at $594,037, as detailed in Table 7-27 and Figure 7-16 below.

**Table 7-27: Total Expenses TWSD FY20/21**

| | Water | Sewer |
|---|---|---|
| Wilenor water supply | $30,473 | $0 |
| Water treatment | $430,562 | $0 |
| Transmission and distribution | $594,037 | $60,909 |
| Administration and general | $655,242 | $358,804 |
| Depreciation | $457,765 | $247,772 |
| Sewerage collection | $0 | $117,923 |
| SC-OR charges | $0 | $554,655 |
| Interest expense | $0 | $45,550 |

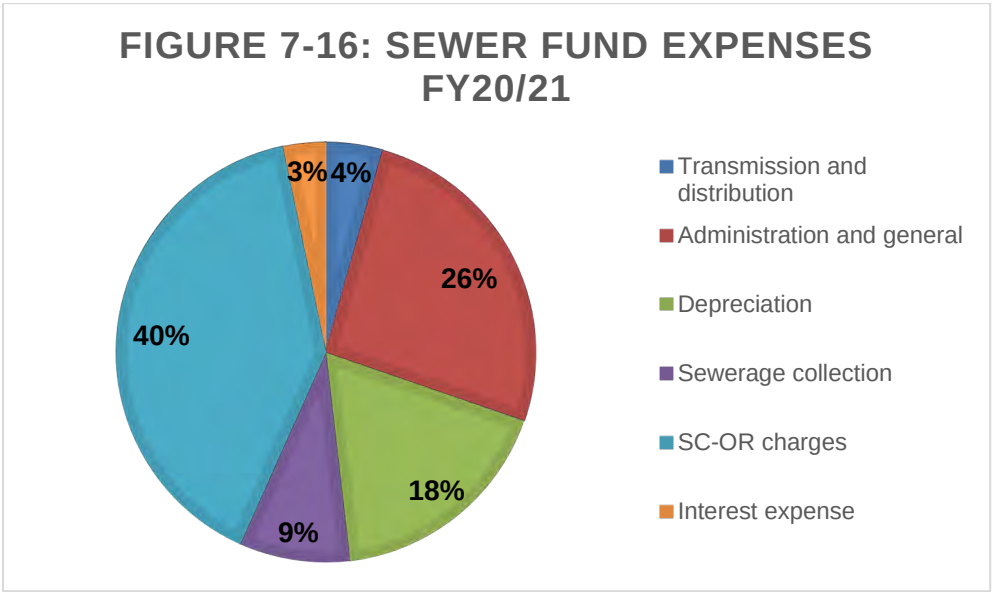
Data Source: TWSD Financial Statement




*Source: TWSD AFR, 2021d*

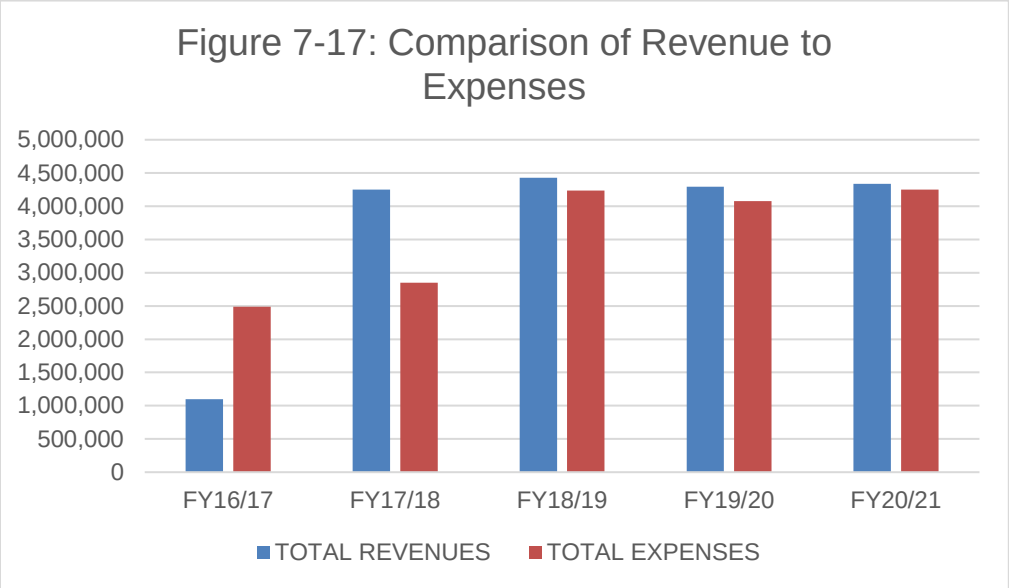
TWSD has low to moderate water expenses because it benefits from efficiencies resulting from the simultaneous operations of water and wastewater systems (Butte LAFCO, 2018). In addition, TWSD has a significant solar field to defray energy costs and has relatively low capital investment expense. These efficiencies are all reflected in their operational costs and ultimately, in their rates (Butte LAFCO, 2018). There are no indications of excessive costs or expenses that may be targeted for significant cost reduction (Butte LAFCO, 2018).

Expenses associated with the sewer fund are shown in Figure 7-16 below. In FY20/21, total expenses (including operating and non-operating) were $1,385,613 for the sewer fund. The largest expense was SC-OR Sewage Treatment Charges at $554,655, and the second-largest expense was Sewer Administration at $358,804, as detailed in Table 7-27 above and shown in Figure 7-16 below.



A comparison of annual total revenue to total expenses, as provided in Figure 7-17, shows that annual revenues exceeded expenses in four of the five years studied (i.e., FY17/18, 18/19. 19/20, and 20/21). Expenses associated with capital improvement projects contributed to the expenditure totals during these years. (Please see the section entitled "Capital Improvement Plan" section 7.8.4 in this Chapter for more information on capital improvements.) This indicates that having sufficient reserve funds is important to TWSD to help it fund capital improvement projects and to help it weather the economically lean years. Please also see the discussion of rates presented in Section 7.8.8 in this Chapter.

Figure 7-17: TWSD Total Revenues & Expenditures




Data Source for Figure 7-17: TWSD, AFR, 2021d and 2018

Net Position

The Government-Wide Net Position includes all of the District's assets and liabilities, with the difference between the two reported as Net Position. Net Position is displayed in three categories:

- Net investment in capital assets;
- Restricted; and
- Unrestricted.

As shown in Table 7-28 below, the total net position of the District's enterprise activities increased by $782,449 from the previous fiscal year (2020 to 2021). The current assets of the District's governmental activities, including restricted cash, increased by $1,142,633 from the previous year, and the capital assets (net of accumulated depreciation) decreased by $249,091. Long-term liabilities increased by $12,944 from the prior year. Unrestricted Net Position is the portion of net position that can be used to finance day-to-day operations without constraints established by debt

covenants or other legal requirements. The Unrestricted Net Position on June 30, 2020, of $4,443,682 compared to the Unrestricted Net Position on June 30, 2021, of $5,250,728, increased by $807,046.

Table 7-28: Statement Net Position, Government-Wide

Thermalito Water and Sewer District
Statement of Net Position

| | 2021 | 2020 | 2019 |
|---|---|---|---|
| Assets | | | |
| Current assets | $ 6,827,364 | $ 5,787,550 | $ 6,229,741 |
| Restricted assets | 1,134,535 | 1,031,716 | 1,048,955 |
| Capital assets, net of accumulated depreciation | 15,901,534 | 16,150,625 | 15,051,098 |
| Total Assets | 23,863,433 | 22,969,891 | 22,329,794 |
| CalPERS pension contributions | 316,829 | 317,268 | 347,528 |
| Total Deferred Outflows of Resources | 316,829 | 317,268 | 347,528 |
| Liabilities | | | |
| Other current liabilities | 348,869 | 226,381 | 471,759 |
| Long-term liabilities | 3,655,675 | 3,642,731 | 3,766,985 |
| Total Liabilities | 4,004,544 | 3,869,112 | 4,238,744 |
| CalPERS actuarial amounts | 52,874 | 77,652 | 96,009 |
| Total Deferred Inflows of Resources | 52,874 | 77,652 | 96,009 |
| Net Position | | | |
| Invested in capital assets, net of related debt | 13,737,581 | 13,864,997 | 12,507,629 |
| Restricted | 1,134,535 | 1,031,716 | 1,048,955 |
| Unrestricted | 5,250,728 | 4,443,682 | 4,785,985 |
| Total Net Position | $ 20,122,844 | $ 19,340,395 | $ 18,342,569 |

*Source: TWSD AFR, FY: 20/21*

Tax Revenues/Service Ratio

LAFCO staff requested that this MSR analyze the Tax Revenues/Service Ratio. Tax revenue is not listed as a line item in the District's Annual Financial Report (TWSD, AFR, 2021d). Therefore, the Tax Revenues/Service Ratio is zero. TWSD does not collect any amount of property taxes.

### *7.8.4 Capital Improvement Plan*

A Capital Improvement Plan (CIP) is a fiscal and planning tool that helps organizations make thoughtful budgeting decisions for large projects and purchases based on goals and objectives. Most capital improvement plans cover multiple-year time periods. Last year (FY20/21), the District completed two large capital improvement projects:

- Pump Rebuild – The existing booster pump was rebuilt, which delivers water from the 1.0 MG Clearwell to the 2.5 MG distribution tank.

- New Intake Pump – A new 150 hp intake pump was installed with a variable frequency drive and connected to the existing Supervisory Control and Data Acquisition (SCADA) system. This provides redundancy for the existing raw water pump and will be utilized for plant expansions in the future (TWSD, AFR, 2021d).

TWSD breaks down its projects in the annual budget such that projects are listed separately for water and sewer, as shown in Tables 7-29 and 7-30. This year, TWSD plans to expend $1,487,450 on water-related capital improvement projects and $303,250 on sewer-related capital improvement projects.

Table 7-29: TWSD Capital Improvement Projects for Water in FY21/22

**Capital Expenditures**

| | |
|---|---|
| **Machinery & Equipment (10-1730-00)** | |
| Genie Model SLC24 | 4,200 |
| Generator | 75,000 |
| Kyocera P3145db Imaging System | 3,250 |
| Phone System | 4,000 |
| Server Upgrade | 10,000 |
| Vactor | 236,000 |
| **Automotive Equipment (10-1760-00)** | |
| F150 4X2 Truck | 20,000 |
| **Building Improvements (10-1775-00)** | |
| Vacant Lot Remodel | 20,000 |
| **Pipeline Improvement (10-1777-00)** | |
| Table Mtn. Pipeline Replacement Project (Bridge to Treatment Plant) | 300,000 |
| Riverbend Apartments Pipeline Replacement | 100,000 |
| Water Main Replacement-Tbl Mt. Blvd/County Center Drive | 350,000 |
| **Source of Supply-Wilenor/Concow** | |
| Streambed Alteration Project | 10,000 |
| **Filter Plant 4MGD (10-1905-00)** | |
| Provide and Install Booster MCC | 270,000 |
| Filter Backwash Tube Replacement | 15,000 |
| **Grp A Improvements (Meters) (10-1930-00)** | |
| Meter Change Out Program | 70,000 |
| **Total Capital Expenditures:** | **$ 1,487,450** |

Data Source: TWSD, 2021a, Budget

Table 7-30: TWSD Capital Improvement Projects for Wastewater in FY21/22

| Capital Expenditures | |
|---|---|
| **Automotive/Sewer Equipment (20-1760-00)** | |
| F150 4X2 Truck | 20,000 |
| Kyocera P3145db Imaging System | 3,250 |
| Phone System | 4,000 |
| Server Upgrade | 10,000 |
| Vactor | 236,000 |
| Nelson Avenue Sewer Realignment Planning and Design | 30,000 |
| **Total Capital Expenditures:** | **$ 303,250** |

Data Source: TWSD, 2021a, Budget

The TWSD Urban Water Management Plan also contains a five-year Capital Improvement Plan (TWSD, RFI, 2021b). TWSD staff noted several significant upcoming capital improvement projects, including the Treatment Plant Capacity Upgrade, Table Mountain Water Main Replacement, and Steel Main Replacement (personal communication, C. Heindell, 2022).

Since TWSD's boundary area encompasses 14,873 acres, its water and sewer infrastructure are complicated. To minimize future rate increases, the TWSD water and sewer departments/utilities aim to control the operating costs associated with infrastructure maintenance, repair, and replacement.

### *7.8.5 Reserves*

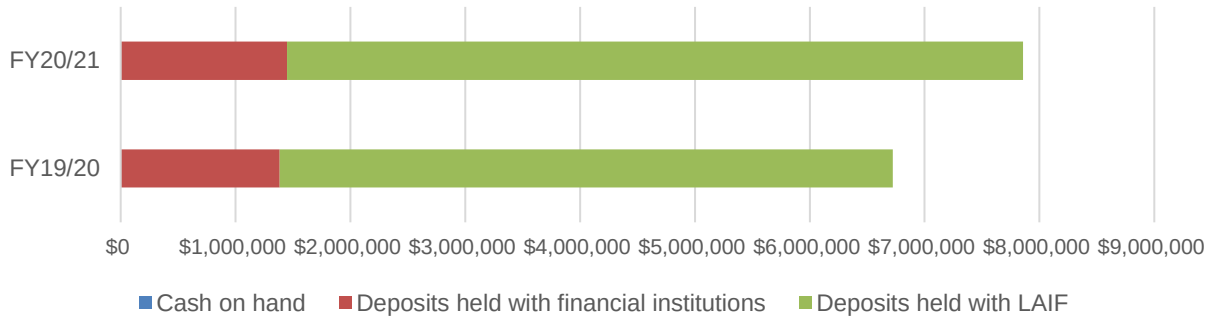
In California, many independent special districts have accumulated reserves. Although there are no rules guiding the size and use of reserve funds, general best management practices suggest that an agency should have a reserve fund that allows for operations of between six months to a year. Reserve funds provide the following benefits:

- allow for the continued operation of the agency even in downturns and unfavorable conditions;
- can contribute towards capital improvement projects which would reduce the potential need to accumulate a high debt load; and
- helps to ensure the continued solvency of the District.

The District's reserve policy is summarized in Table 7-25 as the "Cash and Investment" accounting policy listed in the AFR. The District also has policies that dictate minimum reserve fund allocations and Local Agency Investment Fund (LAIF) accounts. These funds are used to provide emergency funding as needed (TWSD, RFI, 2021b). The California Government Code allows the District to invest, provided the issuers' credit ratings are acceptable to the District and approved percentages and maturities are not exceeded. The District is generally authorized under state statute and local resolutions to invest in demand deposits with financial institutions, savings accounts, certificates of deposit, U.S. Treasury securities, federal agency securities, State of California notes or bonds, notes or bonds of agencies within the State of California, obligations guaranteed by the Small Business Administration, bankers' acceptances, commercial paper, and the Local Agency Investment Fund (LAIF) (TWSD, AFR, 2021d).

TWSD's water and sewer utilities have reserve funds. For FY 19/20, TWSD reported $6,772,651 in restricted and unrestricted reserves (including investments) in its AFR. This increased to $7,857,692 in FY20/21, shown in Figure 7-18 below. TWSD usually retains $600 "Cash on Hand". Since this amount is small, it does not show up visually in Figure 7-18, although it is accounted for in the totals provided previously. Reserve and investment policies are listed in the consolidated financial statements.

Figure 7-18 : Cash and Investments, TWSD




Data Source: TWSD, AFR, 2021d, Note 2: Cash and Cash Equivalents

Ideally, a District would have a multi-year forecast that projects reserve fund amounts into the future; however, TWSD's budget and annual financial report do not contain this information.

### *7.8.6 Outstanding Debts and Liabilities*

For local government agencies, liabilities typically include current liabilities such as accounts payable, salaries payable, bond interest payable, and long-term liabilities such as serial bonds payable, installments payable, and contracts payable. Long-term debt is described in TWSD's AFR's Note 5 and is shown in this MSR as Table 7-31. Long-term liability is listed in three categories: 1) 2014 CA Water Board loan; 2) Accrued Compensation; and 3) Net Pension Liability. The sum total of these liabilities is $3,777,350 for the current fiscal year (FY20/21). In FY19/20, TWSD retired their loan from City National Bank, originally issued in 2012. The final

Table 7- 31: Long-Term Liabilities

## Long-Term Liabilities

The District's long-term liabilities for the year ended June 30, 2021, was as follows:

| | Balance July 1, 2020 | Additions | Deletions | Balance June 30, 2021 | Due Within One Year |
|---|---|---|---|---|---|
| **Long-Term Debt:** | | | | | |
| Sewer Services | | | | | |
| 2014 CA Water Resources | $ 2,285,628 | $ - | $ (121,675) | $ 2,163,953 | $ 124,230 |
| Total Long-Term Debt | $ 2,285,628 | $ - | $ (121,675) | $ 2,163,953 | $ 124,230 |
| **Accrued Compensation:** | | | | | |
| Water | $ 290,287 | $ 82,217 | $ (58,425) | $ 314,079 | |
| Sewer | 72,572 | 20,554 | (14,606) | 78,520 | |
| Total Accrued Compensation | $ 362,859 | $ 102,771 | $ (73,031) | $ 392,599 | |
| **Net Pension Liability:** | | | | | |
| Water | $ 815,280 | $ 96,992 | $ - | 912,272 | |
| Sewer | 178,964 | 7,887 | - | 186,851 | |
| Total Net Pension Liability | $ 994,244 | $ 104,879 | $ - | $ 1,099,123 | |

The District's long-term liabilities for the year ended June 30, 2020, was as follows:

| | Balance July 1, 2019 | Additions | Deletions | Balance June 30, 2020 | Due Within One Year |
|---|---|---|---|---|---|
| **Long-Term Debt:** | | | | | |
| Water Services | | | | | |
| 2012 City National Bank Loan | $ 138,669 | $ - | $ (138,669) | $ - | $ - |
| Subtotal | 138,669 | - | (138,669) | - | - |
| Sewer Services | | | | | |
| 2014 CA Water Resources | 2,404,800 | - | (119,172) | 2,285,628 | 121,675 |
| Total Long-Term Debt | $ 2,543,469 | $ - | $ (257,841) | $ 2,285,628 | $ 121,675 |
| **Accrued Compensation:** | | | | | |
| Water | $ 265,370 | $ 72,970 | $ (48,053) | $ 290,287 | |
| Sewer | 66,342 | 18,243 | (12,013) | 72,572 | |
| Total Accrued Compensation | $ 331,712 | $ 91,213 | $ (60,066) | $ 362,859 | |
| **Net Pension Liability:** | | | | | |
| Water | $ 731,279 | $ 84,001 | $ - | $ 815,280 | |
| Sewer | 160,525 | 18,439 | - | 178,964 | |
| Total Net Pension Liability | $ 891,804 | $ 102,440 | $ - | $ 994,244 | |

payment was made in March 2020, and the balance is now zero. In FY20/21, TWSD has a long-term debt related to wastewater system loaned by CA State Water Resources Control Board in 2014. The remaining amount owed to the State is $2,163,953. This debt is used to finance the East Trunk Line Replacement Project. The current loan balance on June 30, 2021, is $2,163,953. Interest on the loan is 2.1% and payable in annual installments over twenty years. The annual principal payments range from $122,989 to $166,183 (TWSD, AFR, 2021d). The first payment was due on July 17, 2016. The City of Oroville has agreed to fund 75% of the reserve account requirement and pay 75% of all the debt service payments.

### *7.8.7 Pension Payments*

TWSD contributes the pension payments to the California Public Employees Retirement System (CalPERS), a multiple-employer public employee defined benefit pension plan on behalf of its full-time employees. CalPERS provides retirement, disability, and death benefits to plan members and beneficiaries. CalPERS acts as a common investment and administrative agent for participating public entities within the State, including TWSD. Copies of CalPERS' annual financial report may be obtained from its executive office at 400 Q Street, Sacramento, California 95811. The pension contribution requirements of plan members including TWSD) are established and may be amended by the TWSD Board of Directors. For purposes of measuring the net pension liability and deferred outflows/inflows of resources related to pensions and pension expense, information about the fiduciary net position of the California Public Employees' Retirement System (CalPERS) plans (Plans) and additions to/deductions from the Plans' fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value. (TWSD, AFR, 2021d).

As listed in Table 7-31 above, TWSD lists its pension liability as part of its long-term liabilities in its financial statement. Table 7-31 above shows that the net pension liability for the water and sewer fund was approximately $1 million as of June 30, 2021. TWSD made contributions to the CALPERS fund in the amount of $316,829 for FY20/21. TWSD's Schedule of Proportionate Share of the Net Pension Liability for the past seven years is shown in Table 7-32 (next page).

Table 7-32: TWSD's Schedule of Proportionate Share of the Net Pension Liability

| Measurement Date | June 30, 2014 | June 30, 2015 | June 30, 2016 | June 30, 2017 | June 30, 2018 | June 30, 2019 | June 30, 2020 |
|---|---|---|---|---|---|---|---|
| Proportion of the net pension liability | 0.04% | 0.03% | 0.03% | 0.03% | 0.02% | 0.02% | 0.03% |
| Proportionate share of the net pension liability | $953,065 | $806,087 | 1,002,395 | 1,045,648 | 891,804 | $994,244 | $1,099,123 |
| Covered-employee payroll | $619,918 | $613,551 | 710,862 | 655,266 | 725,751 | $811,075 | $858,998 |
| Proportionate share of the net pension liability as a percentage of covered-employee payroll | 153.74% | 131.38% | 141.01% | 159.58% | 122.88% | 122.58% | 127.95% |
| Plan's fiduciary net position | $2,456,620 | $2,617,555 | 2,884,890 | 3,315,658 | 3,540,434 | $3,690,637 | $3,943,173 |
| Plan's fiduciary net position as a percentage of the total pension liability | 72.05% | 74.30% | 74.21% | 76.02% | 79.88% | 78.78% | 78.20% |

Data Source: TWSD, AFR, 2021d

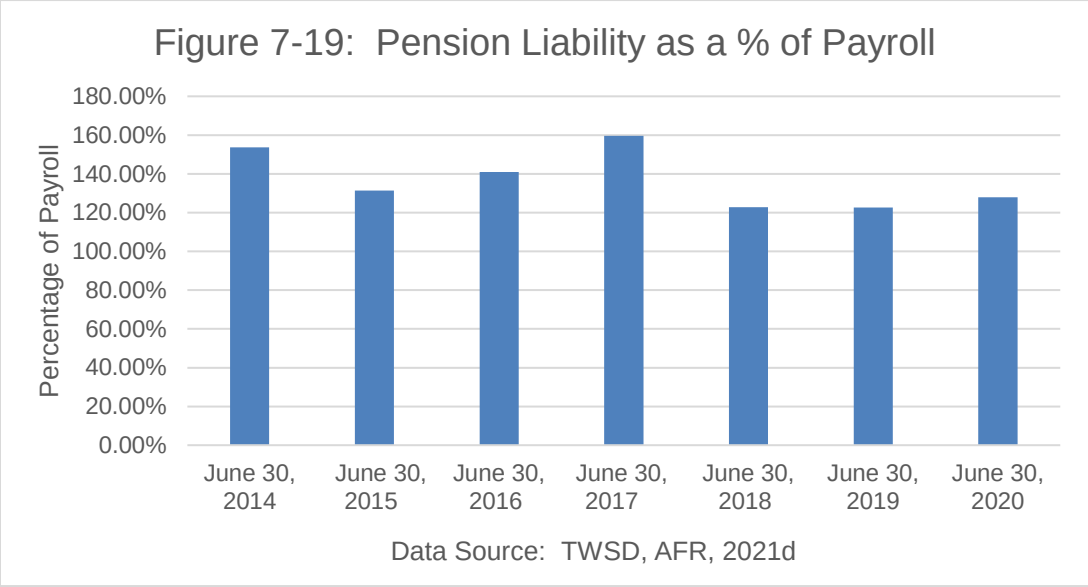


Figure 7-19 depicts the relationship between pension contributions as a percentage of covered-employee payroll. Due to updates to pension reporting requirements enacted in 2014, the Pension Payments indicator shows data for 2015 and beyond. GASB 68 revised and established new financial reporting for pensions effective for 2015. This percentage is calculated using the following formula: contributions in relation to the actuarially determined contribution divided by covered payroll. At 159.58% percent in FY 16/17, the high percentage reflected that a greater percentage of funds was dedicated to pension contributions in comparison to covered-employee payroll. As of June 30, 2020, TWSD had a pension-to-payroll ratio of 127.95%. Ideally, LAFCO will continue to monitor this metric to consider long-term fiscal trends as a longer time series of data becomes available.

CalPers recognizes that the scale and multi-faceted nature of climate change presents a systemic risk to retirement portfolios across the board. The risks include:

- disruption to portfolio companies' supply chains and operations,
- heightened volatility to financial markets,
- reduced economic growth,
- fixed assets (e.g., real estate), and
- impacts on the financial success of existing business models and portfolio companies

CalPers has implemented its Sustainable Investments Program in an attempt to mitigate these systemic risks (CalPers, n.d.)

Other Post Retirement Benefits: The District maintains a Memorandum of Understanding (MOU) with its employees for unused vacation and sick leave. The two major items contained in the MOU are: (1) that, upon the termination of employment, each employee shall be paid an amount in a salary equal to their unused accumulated vacation pay; and (2) that, upon retirement, death, or disability, each employee shall be paid an amount equal to 50% of their accumulated unused sick pay with a maximum payout of 1,000 hours. The District did not have any other post-employment benefit obligations (OPEB) for the fiscal years ended June 30, 2021, and 2020 (TWSD, AFR, 2021d).

### *7.8.8 Rates*

TWSD charges fees for water supply, water treatment, distribution service, capital improvement costs, and sewer service. Similar fees are charged for wastewater collection. TWSD has three policies regarding fees, as listed in Table 7- 33 below.

| Table 7-33: TWSD Policies - Fees | |
|---|---|
| **Policy Number** | **Name of Policy** |
| Policy 1.210 | Water-Sewer Connection Fees |
| Policy 1.220 | Fireline Standby Fees |
| Policy 1.230 | Administrative Fees |
| Data Source: https://www.twsd.info/twsd-policies-fees | |

Since TWSD is an enterprise district, rates cover the costs of service provision with no exceptions. Expanding the water and sewer systems in response to growth in the community is paid by developer fees. Information regarding water and sewer rates is provided on the TWSD's website at: *https://www.twsd.info/twsd-policies-fees*. Thermalito Water and Sewer District (District) provides water and sewer to 3,136 water customers and 2,365 sewer customers.

TWSD must satisfy the requirements of Proposition 218 for rate increases, including nexus documentation. Therefore, TWSD cannot charge more for the water delivered than it costs to produce and supply. The sewer fund has similar rate constraints. The District Board adopted its water rate schedule via Resolution 04-10 on June 23, 2010. The sewer rates were amended twice, by Resolution 02-15 on June 16, 2015, and Resolution 02-16 on May 21, 2019.

Water Service Rates

Residential customers include single-family homes, individual condominium units, and townhouse units. The water and sewer rates apply to dwellings and commercial businesses. The domestic water rates for metered residences consist of two components: a base charge; and a commodity charge, as shown in Table 7-34 below.

| Table 7-34: Metered Water Service | |
|---|---|
| **Meter Size** | **Minimum Charge** |
| ¾" | $28.84 |
| 1" | $32.96 |
| 1½" | $41.20 |
| 2" | $51.50 |
| 3" | $116.39 |
| 4" | $151.39 |
| 6" | $267.80 |
| Data Source: https://www.twsd.info/twsd-policies-fees | |

The commodity fee component is billed at $0.74 per hundred cubic feet, such that one cubic foot equals 7.48 gallons. Multiple Units operating from a common meter are charged $22.66 additional per unit. Charges billed include the prior month's usage and are due and payable upon receipt.

LAFCO's 2018 Oroville Region Water Service Study by Northstar Consultants found that TWSD

delivers approximately 2,800 acre-feet of water annually (Butte LAFCO, 2018). TWSD appears to be well-managed and well-operated (Butte LAFCO, 2018). In 2018, the average annual cost per customer for water service was $798. (i.e., $66.50 per month) (Butte LAFCO, 2018). TWSD must comply with Prop 218 requirements to limit costs to the recovery of services (Butte LAFCO, 2018).

Water Affordability

The State of California Office of Environmental Health Hazard Assessment has assessed various parameters for community water systems throughout the state and posted the information to the online database called the "Human Right to Water Data Tool." The database analysis utilizes a scoring system to assess and rate water affordability. The scores range from 0 – 4, with zero being the best and four (4) being the worst. This database was queried, and the results for the TWSD (PWSID: CA0410008) are that the *Water Affordability Composite Score*: is "3", meaning "Poor" because the average water bill is high relative to the annual median household income of the water system (OEHHA, 2021).

The Water Affordability Composite score is concerning because it indicates that although the rates TWSD charges are reasonable, the median incomes of local residents are low. TWSD has already taken great strides to increase efficiency and reduce costs. Further efforts to increase efficiency risk an unintended tradeoff of reducing resiliency and quality of service and would need careful analysis. Nevertheless, the data still indicates that paying for local public services such as water, sewer, and other services may place a financial burden on local residents. TWSD is in a unique situation because other nearby water providers have a different financial context. For example, SFWPA utilizes funds from hydroelectric service to offset some of the costs associated with water services, as detailed in Chapter 6. The Cal Water Company is a private company and is not obligated to improve the local economic conditions. The MSR Authors recommend that TWSD consider three options to improve the ability of local residents to better afford their water service:

1) Collaborate to improve local economic conditions, thereby improving median household income and the ability of residents to pay for water service. For example, two alternative actions are listed below.
    a. Since TWSD employs engineers and technicians, they are in a good position to advocate for STEM education.
    b. Contribute policy support for local efforts related to economic development.
2) Study the feasibility of future water treatment plant mergers with other nearby water service providers, such as SFWPA and Cal-Water Company, with the aim to reduce long-term costs.
3) Increase alternative revenues.
    a. Consider the feasibility of adding micro-hydro or other electricity generation facilities (i.e., follow the example of the SFWPA) and utilize these revenues to offset some portion of the cost of water service.
    b. Collaborate with SC-OR to create a water recycling program and/or utilization of bio-wastes to create a product such as fertilizer or renewable energy

Sewer Service Rates

Wastewater customers include single-family homes, multiple dwelling units, trailer parks, and commercial establishments. Rates for wastewater customers consist of two components: a base charge for collection by TWSD and a fee for treatment and disposal at the SC-OR wastewater treatment plant. Table 7-35 below shows the wastewater fees charged to customers.

| Table 7-35: Monthly Sewer Rates (7/1/2021) | |
|---|---|
| **Type of Fee** | **Amount** |
| SC-OR Treatment | $17.85 per EDU |
| TWSD ETL Loan | $1.00 per EDU |
| TWSD Operation & Maintenance | $16.42 per EDU |
| **Total Monthly Fee per EDU** | **$35.27** |
| *Data Source: https://www.twsd.info/twsd-* | |

Please note that an EDU is an acronym for Equivalent Dwelling Unit. The monthly wastewater charges apply to each EDU, whether empty or occupied.

Other Fees

In addition to monthly fees, connection charges, and other fees may apply. The connection charge is based upon an asset replacement which determines the amount of each user's share of the cost of replacing the District's capital facilities. The TWSD Board approved the sewer connection fee on September 16, 2014. The Fireline Standby Fees were approved in June 2014, and these fees cover the cost of "reserving" treatment plant capacity to meet fire flow demands.

The Administrative Fees cover charges for several types of public service, including a customer setup fee, closing account fee, late fees, meter removal fees, xerox copies, and backflow testing (among other fees). Overall, TWSD's budgeting approach has resulted in stable rates.

### *7.8.9 Risk Management*

Managing risks is a method special districts commonly utilize to reduce unforeseen costs associated with risks. Insurance policies assist special districts in managing risks. TWSD obtains insurance through the Association of California Water Agencies/Joint Powers Insurance Authority (ACWA/JPIA). The coverage includes property, liability, workers' compensation, and errors and omissions insurance. (ACWA/JPIA**)** is a self-insurance pooled group specific to special districts in CA (*TWSD. RFI, 2021b*).

### *7.8.7 Determinations for Financial Ability to Provide Services*

Based on the information in Section 7.8 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 7-36 are based upon the data presented and are recommended to the Commission for consideration. The Commission's final MSR

determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

Table 7- 36: MSR DETERMINATIONS: TWSD FINANCIAL ABILITY TO PROVIDE SERVICES

| Number | Indicator | Determinations |
|---|---|---|
| TWSD-FIN-1 | Summary financial information presented in a standard format and simple language. | The Consolidated Financial Statement and budgets are prepared annually and clearly and transparently present TWSD's financial information. |
| TWSD-FIN-2 | District has a published policy for reserve funds, including the size and purpose of reserves and how they are invested. | TWSD reserve policy is called the "Cash and Investment Policy" and is described in their Annual Financial Report posted on the District website. |
| TWSD-FIN-3 | Other financing policies are clearly articulated. | TWSD's Annual Financial Report contains a list of its accounting policies. Additionally, specific District finance policies are posted on the District website. However, TWSD does not seem to have an adopted purchasing policy, and this is an item that needs improvement. |
| TWSD-FIN-4 | Compensation reports and financial transaction reports that are required to be submitted to the State Controller's Office are posted on the district website. | The employee wage scale by bargaining unit and the unrepresented employee wage scale are not available on the TWSD website, and this is an item that needs improvement. Required compensation reports are sent to the California State Controller for Government Compensation. |
| TWSD-FIN-5 | Revenues exceed expenditures in 50% of studied fiscal years | Total revenue exceeded total expenditures in four of the five study years.<br><br>For the TWSD water fund: About 95 percent of all revenues for this fund are derived from water sales and associated services. The reliance on the sale of water and service furthers the importance of ensuring sustainable and reliable sources to keep rates at a reasonable level for customers. |
| TWSD-FIN-6 | Increases or decreases in net position | Changes to the Net Position are shown in Table 7-29 and have been relatively stable, with small increases each year. |
| TWSD-FIN-7 | Tax Revenues/Service Ratio | Tax revenue is not listed as a line item in the District's Annual Financial Report. Therefore, the Tax Revenues/Service Ratio is zero. TWSD does not collect any amount of property taxes. |
| TWSD-FIN-8 | Rates were adopted by the Board of Directors | The District Board adopted its water rate schedule during a public meeting via Resolution 04-10 on June 23, 2010. The sewer rates were |

| | | |
|---|---|---|
| | | amended twice, by Resolution 02-15 on June 16, 2015, and Resolution 02-16 on May 21, 2019. |
| TWSD-FIN-9 | Rates are consistent with the requirements of the State Water Resources Control Board, and the process for adopting rates are consistent with Proposition 218 | TWSD must satisfy the requirements of Proposition 218 for rate increases, including nexus documentation. Therefore, TWSD cannot charge more for the water delivered than it costs to produce and supply it. The sewer fund has similar rate constraints. The District Board adopted its water rate schedule via Resolution 04-10 on June 23, 2010. The sewer rates were amended twice, by Resolution 02-15 on June 16, 2015, and Resolution 02-16 on May 21, 2019. |
| TWSD-FIN-10 | Rates are readily available to constituents | Rates for TWSD's water and wastewater service are displayed on the District's website at: <https://www.twsd.info/twsd-policies-fees>. The average TWSD water customer paid approximately $66.50 per month in 2018. An average TWSD wastewater customer in a single-family home will pay $35.27 per month. |

## 7.9 Cost Avoidance & Facilities Sharing

This section highlights cost avoidance practices given necessary service requirements and expectations. Ideally, the proposed methods to reduce costs would not adversely affect service levels. In general, municipal water systems and wastewater systems have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, TWSD pursues an array of cost avoidance techniques that each contributes incrementally towards keeping costs at a reasonable level. Specifically, TWSD carefully utilizes its budgeting processes to serve as one means to avoid unnecessary costs. TWSD participates in two Joint Powers Authority (SC-OR and Wyandotte Creek Groundwater Sustainability Agency (WCGSA).

Facilities Sharing: TWSD actively shares facilities and equipment with neighboring service providers. For example, the WWTP is a shared facility among the members of SC-OR. The District's wastewater collection system has two interconnections with the City of Oroville. These interconnections allow the City of Oroville to transport a portion of its flows to the SC-OR treatment plant via the District's sewer mains. Currently, the City of Oroville is not paying for the capacity used in these pipelines (Butte LAFCO, MSR, 2006). TWSD has an emergency municipal water inter-tie with Cal-Water Company. Specific pieces of equipment related to the sewage system are occasionally shared by TWSD, the SC-OR, and LOAPUD. For example, the purchase of aluminum shoring is coordinated with neighboring agencies to reduce costs. Additionally, there is a discussion of partner projects with the South Feather Water and Power Agency (personal communication, Boucher and Heindell, 2021).

Mutual Aid: The District has mutual aid agreements with surrounding agencies to allow equipment and personnel sharing as needed (TWSD, 2021b).

Information Sharing: The District shares information with the City of Oroville, SC-OR, LOAPUD, and the County Public Works Department. For example, these entities are developing a common building standard for sewer facilities. Additionally, the District has proposed developing a common water building standard with the Paradise Irrigation District and the South Feather Water and Power Agency (Butte LAFCO, MSR, 2006). The District also coordinates with local planning and land development agencies by providing information on the adequacy of its water supply, distribution system, and water rates to meet the area's current and future growth needs. Specifically, TWSD cooperates with the following agencies:

- Butte Local Agency Formation Commission to assist in the development of Municipal Service Review (MSR) Studies;
- respective planning departments of the City of Oroville and the County of Butte in the preparation of CEQA documents and processing applications for subdivisions and commercial developments; and
- other municipal water purveyors and fire departments in Butte County and the City of Oroville to plan for the implementation of new fire safety regulations.

Cost Reduction: TWSD has implemented the following cost reduction actions:

- Invested in multiple solar arrays to offset the utility expense associated with pumping costs and treatment costs.
- Competitive bidding allows for contracts and capital improvement projects to be completed as cost-efficiently as possible.
- Upgrading its wells with telemetry and variable frequency drive to pump water as efficiently as possible (TWSD, 2021b).

Goals and Challenges: California's water and wastewater districts face future challenges and issues due to changing conditions. For example, during the past few years, multiple regulatory changes have affected the District's budgets. Another ongoing challenge is the drought. During the latest drought, conservation mandates from the State caused the District to curtail the watering of lawns and implement other conservation efforts. This reduced the District's water sales by approximately 25% for two years. The California Division of Safety of Dams has recently tightened the rules because of the after-effects of the spillway incident at Lake Oroville. As a result, the permitting costs to operate the Concow Reservoir went from $500 a year to over $10,000 in a single year. The Covid-19 global pandemic has presented unique challenges for the District during the years 2020 through 2022. For example, during the Covid crisis, the District incurred lost revenue due to the inability to shut off water. Numerous accounts stopped paying for water, and the District had no method to recoup the lost revenue due to non-payment (TWSD, RFI, 2021b).

Reorganization: It is sometimes beneficial for an agency to pursue structural and/or jurisdictional reorganizations to save money and avoid future overhead costs. TWSD staff has indicated that there are no functional or structural reorganizations that the District is evaluating to benefit

recipients of the District's services or improve the provision of wastewater collection services at this time (TWSD, 2021b).

Memberships & Resource Sharing

Membership in professional organizations is a way that special districts can leverage their expertise and the expertise of their colleagues in similar districts to efficiently provide mutual assistance, share information, support professional development, and other benefits. TWSD does maintain mutual aid, automatic aid agreements, and/or memberships in the following organizations:

- Association of California Water Agencies, Region 2.]
- Association of California Water Agencies/Joint Powers Insurance Authority
- Informal mutual aid assistance with Lake Oroville PUD, City of Oroville, South Feather Water and Power Agency

### *7.9.1 Joint Power Authorities*

Effective January 1, 2017, Government Code §6503.6 and §6503.8 require LAFCo to be a repository for all Joint Powers Authority Agreements (JPA) within a county related to municipal service provisions. TWSD participates in two JPAs, as listed in the following paragraphs.

- TWSD is part of a JPA with the Wyandotte Creek Groundwater Sustainability Agency. One District board member sits on the Board of WCGSA (TWSD, 2021b). Members of this JPA work together to prepare and submit a Groundwater Sustainability Plan.
- Sewerage Commission – Oroville Region (SC-OR) is administered through a Joint Powers Agreement. Through this agreement, the City of Oroville, Lake Oroville Area Public Utilities District (LOAPUD), and TWSD work together to manage wastewater treatment and disposal. SC-OR's primary purpose is to provide sewage treatment and disposal services to the local government member entities. Each member sends two representatives (one voting, one non-voting) to SC-OR's Board of Directors, which constitutes the entire governing board. No participating member entity has access to SC-OR's resources or surpluses, nor is any participant liable for SC-OR's debts or deficits. Further, the TWSD does not have any equity interest in SC-OR. Each member entity is required to collect and remit SC-OR's sewer treatment and system regional facility charges.
- TWSD is a member of the Association of California Water Agencies/Joint Powers Insurance Authority (ACWA/JPIA**).** This JPIA provides insurance coverage for property, liability, workers' compensation, and errors and omissions insurance. ACWA/JPIA is a self-insurance pooled group specific to special districts in CA (*TWSD. RFI, 2021b*).

### *7.9.2 Determinations for Shared Facilities*

Based on the information included in Section 7.9 above, the following written determinations make statements involving each service factor that the Commission must consider as part of a municipal service review. The determinations listed below in Table 7-37 are based upon the data presented

and are recommended to the Commission for consideration. The Commission's final MSR determinations will be part of a Resolution that the Commission formally adopts during a public meeting.

Table 7-37: MSR DETERMINATION: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES

| Number | Indicator | Determination |
|---|---|---|
| TWSD-SHA-1 | The Agency collaborates with multiple other agencies for the delivery of services within its boundary. | TWSD actively collaborates with multiple other agencies to deliver services within its boundary by implementing the following practices: facility sharing through SC-OR, mutual aid, information sharing, and cost reduction. |
| TWSD--SHA-2 | Agreements for mutual aid or any other appropriate agreement (i.e., Tax Sharing Agreement) are periodically reviewed to ensure fiscal neutrality. | TWSD actively utilizes mutual aid to reduce long-term costs and to receive and provide assistance during emergencies. The District has mutual aid agreements with surrounding agencies to allow for sharing equipment and personnel as needed. It is recommended that TWSD periodically review agreements for mutual aid or any other appropriate agreement (i.e., Tax Sharing Agreement) to ensure fiscal neutrality.<br><br>While the current organization of sewer services between three collection agencies and the wastewater treatment plant (SC-OR) effectively delivers sewer services to the Oroville region, this duplication of services should be evaluated to determine if a reorganization of service providers and/or boundaries would result in a more transparent and cost-effective provision of sewer services. At present, TWSD provides sewage collection services within COOR boundaries. It is |

| | | |
|---|---|---|
| | | (Continued)<br>recommended that the District initiate dialogue with the COOR to consider opportunities for collection system consolidation west of the Feather River that would allow for greater efficiencies, cost savings and offer a more streamlined approach that would benefit not only current users, but new development interests as well. |
| TWSD--SHA-3 | Other practices and opportunities that may help reduce or eliminate unnecessary costs are periodically examined by the District. Ideally, there is a balance between cost efficiency and risk reduction strategies. | In general, municipal water systems and wastewater systems have a fixed cost associated with infrastructure, operations, and maintenance and have a variable cost related to demand. Given these constraints, TWSD pursues an array of cost avoidance techniques that each contributes incrementally towards keeping costs at a reasonable level. Specifically, TWSD carefully utilizes its budgeting processes to serve as one means to avoid unnecessary costs. TWSD participates in two Joint Powers Authority (SC-OR and Wyandotte Creek Groundwater Sustainability Agency. |

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