

# Chapter 8: Cal Water - Oroville



Figure 1: Cal Water Oroville is located at 1905 High Street, Oroville, CA 95965. Photo courtesy of Google maps

This Chapter presents a municipal service review for Cal Water Oroville with details regarding the service area, business 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 are suggested.

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## 8.1 Company Profile & Overview

### 8.1.1: Company Profile

**Type of Organization:** California Water Service is a private investor-owned utility serving the public and regulated by the California Public Utilities Commission

**Principal Act:** Although there is no Principal Act, Cal Water 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](http://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:** Annually, Date tbd

**Meeting Location:** Meeting information available online at <https://bit.ly/3N1NkHN>

**Date of Formation:** 1927

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

**Population** 11,022 persons

**Number of water connections** 3,547

**Principal LAFCO:** Butte LAFCO

**Other LAFCO:** none

### 8.1.2 Organization Overview

California Water Service (Cal Water) is a public utility<sup>1</sup> regulated by the California Public Utilities Commission (CPUC) and owned by private investors as a company. Cal Water provides water service to communities across California, from Chico in the north to the Palos Verdes peninsula in the south. Cal Water’s parent company, California Water Service Group, also has operations in Washington, new Mexico, and Hawaii (Cal Water, Skarb, 2023). Cal Water’s Oroville service area (Cal Water – Oroville) operates a water system serving an estimated 11,022 residents with 3,547 municipal connections that use approximately 2,753 acre-feet of water annually (Cal Water UWMP, 2021 and Cal Water, Lind, 2023). The system includes two storage tanks, six booster pumps, and 59 miles of pipeline (West Yost, 2017). Water is sourced from the west branch of the Feather River and one active groundwater well. In addition, when undergoing maintenance or during an emergency, Cal Water – Oroville can take advantage of a mutual intertie agreement with the Thermalito Irrigation District, which provides access to supplemental water. Cal Water – Oroville provides water services to residential, commercial, industrial, and governmental customers. Taking account of the 8 percent of water lost during distribution, residential customers account for 34 percent of water usage, and non-residential customers account for 58 percent of water use (Cal Water, UWMP, 2021).

During the public comment period for this MSR, Cal Water submitted two public comment letters dated May 30, 2023, as provided in Chapter 9. In their letters, Cal Water articulated several concerns about this MSR chapter. Readers are invited to read about Cal Water’s concerns in Chapter 9.

## 8.2 Organization Formation and Service area

### 8.2.1 Formation

California Water Service (Cal Water) is a public utility regulated by the California Public Utilities Commission (CPUC) and owned by private investors as a company. Cal Water established its service area in Oroville in 1927. Cal Water - Oroville supplies water that derives from the west branch of the Feather River and the local groundwater. Cal Water was formed for the purpose of providing water service to its customers.

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<sup>1</sup> Cal Water’s J. Skarb notes that Article 12, Section 3 of the California Constitution and Section 216(a) of the Public Utilities Code identifies Cal Water as a public utility. Cal Water is identified as a public utility by the California Constitution and California Public Utilities Code. Article 12, Section 3 of the California Constitution declares that “Private corporations and persons that own, operate, control, or manage a line, plant, or system for . . . the production, generation, transmission, or furnishing of . . . water . . . directly or indirectly to or for the public . . . are public utilities subject to control by the Legislature.” Section 216(a)(1) of the California Public Utilities Code defines the term “public utility” to include “every . . . water corporation . . . where the service is performed for, or the commodity is delivered to, the public or any portion thereof.

### 8.2.2 Service Area Boundary and SOI

Cal Water Oroville is the principal water purveyor within the city limits of Oroville. Cal Water serves the portion of the City of Oroville urban area that is not served by either the South Feather Water and Power Agency (SFWPA) or Thermalito Water and Sewer District (TWSD). Cal Water - Oroville generally serves that portion of the City located east of and south of the Feather River and a small unincorporated corridor along Hwy 70. The Cal Water Service Area is generally located approximately 60 miles north of Sacramento and is linked by Golden State Highway (S.R. 99), State Highway 70, State Route 162, and the Union Pacific Railroad. Hydrologically, the Cal Water Oroville service area is located in the Feather River floodplain and watershed, described in Appendix C. Cal Water – Oroville’s service area boundaries are set by the CPUC. The CPUC approved the Cal Water service area boundary in 2014, as shown in Figure 8-1. This new Service Area for Cal Water Oroville encompasses 3,463 acres. Cal Water's Service Area covers approximately 39 percent of the City of Oroville boundaries<sup>2</sup>.

In its 2006 MSR and SOI document, LAFCO showed a spatial configuration of the Cal Water service area boundaries and SOI, as shown in Figure 8-2. LAFCO’s designated boundary and SOI depicted in 2006 are congruent. This indicates that LAFCo did not wish to see the service area be expanded. There are other service providers in the area who can potentially provide water services to unserved areas. Figure 8-2 is helpful to understand the local community’s intention with regard to the service area.

In 2022, the estimated population within the Cal Water Service Area boundary was 11,022 (Cal Water, Lind, 2023). Cal Water Oroville is bounded by SFWPA to the north, and TWSD, to the west. To the south of the Cal Water - Oroville service area is a rural area that relies upon water wells.

There is a geographic overlap in water service between Cal Water – Oroville’s service area and that of SFWPA and TWSD. This overlap is shown in two separate geographic data sources. Figure 8-3 below is a map from the State Water Resources Control Board, and it depicts the geographic overlap between SFWPA and Cal Water-Oroville. The second geographic dataset was provided by Cal Water in the form of a shapefile in January 2023, as shown in Figure 8-4. This map shows more detail in Cal Water’s overlapping service area with TWSD and SFWPA.

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<sup>2</sup> Please note that the tail end City’s Industrial Unit area lies outside Cal Water’s service area. Much of this land is zoned by the City for future industrial use, but currently contains active farmland. These parcels do not currently receive potable water service and likely rely upon wells.

Figure 8-1: Cal Water Service Area Oroville - Service Area Boundary Approved by CPUC in 2014

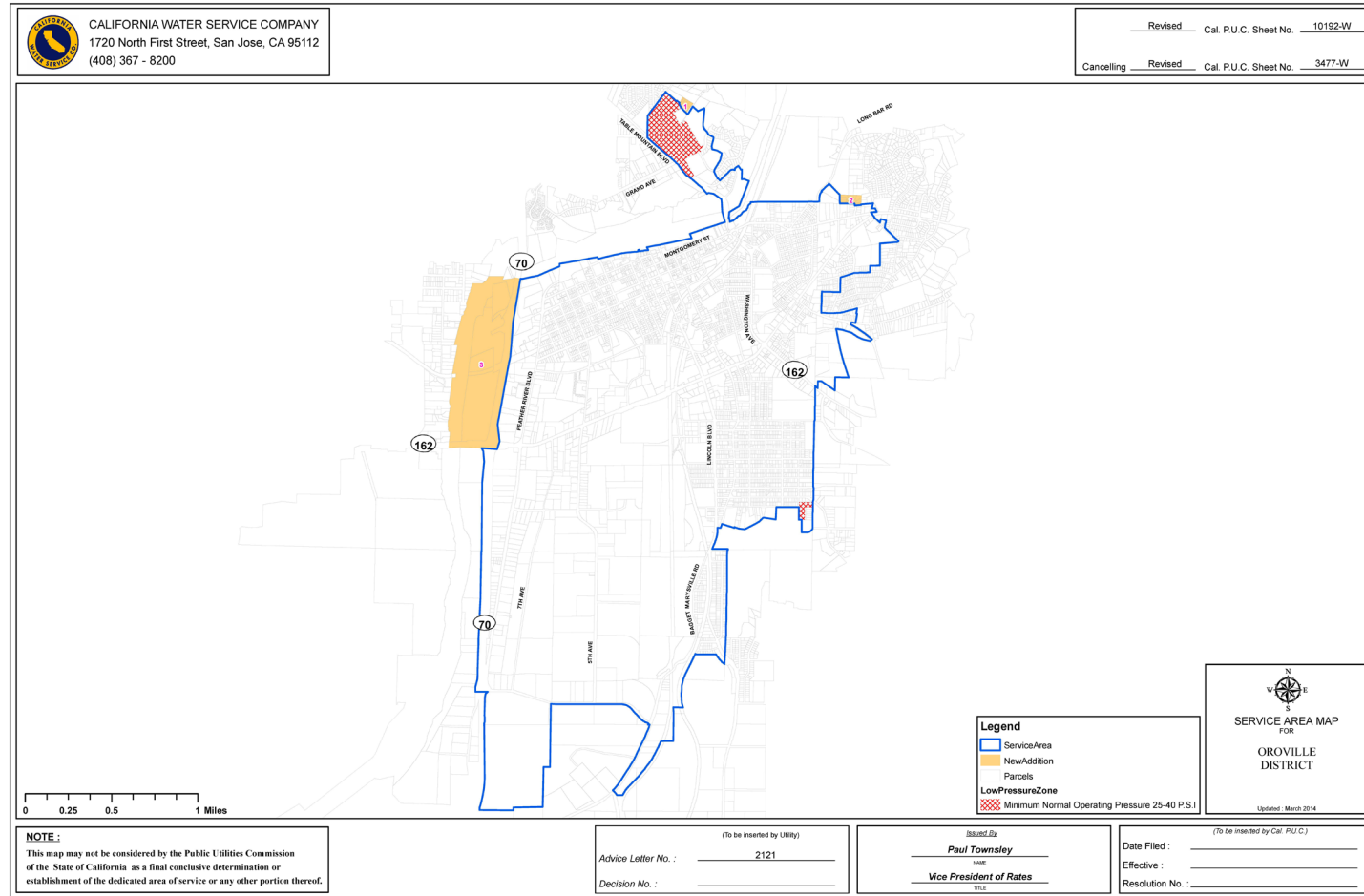


Figure 8-2: 2006 Location and Service Area Boundary as Approved by LAFCO

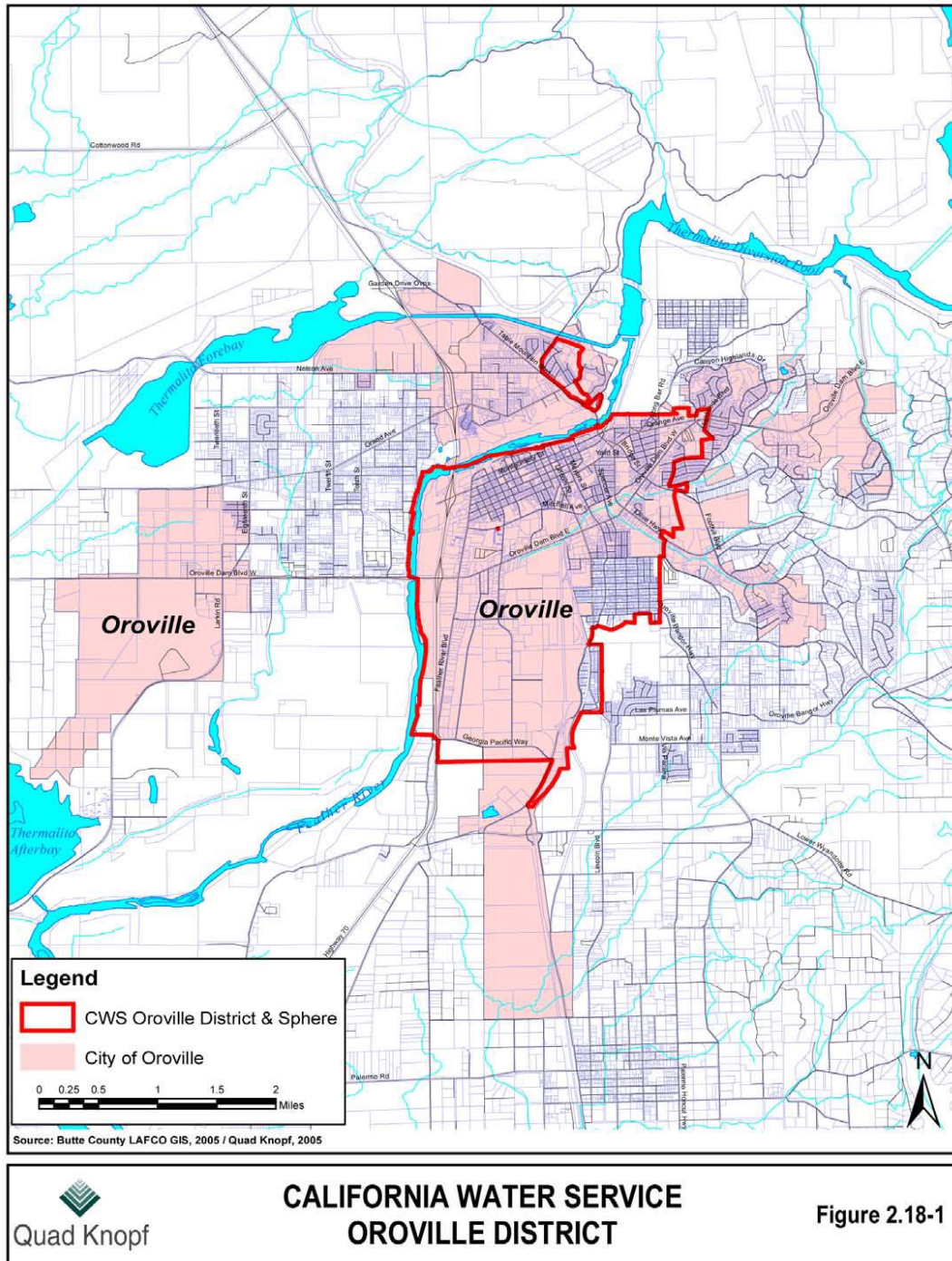
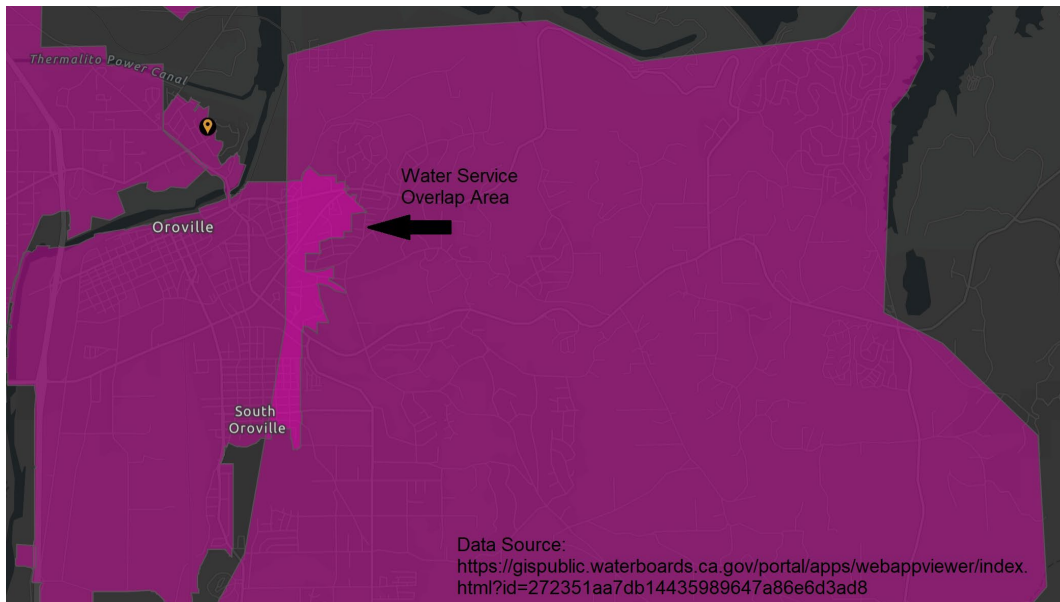
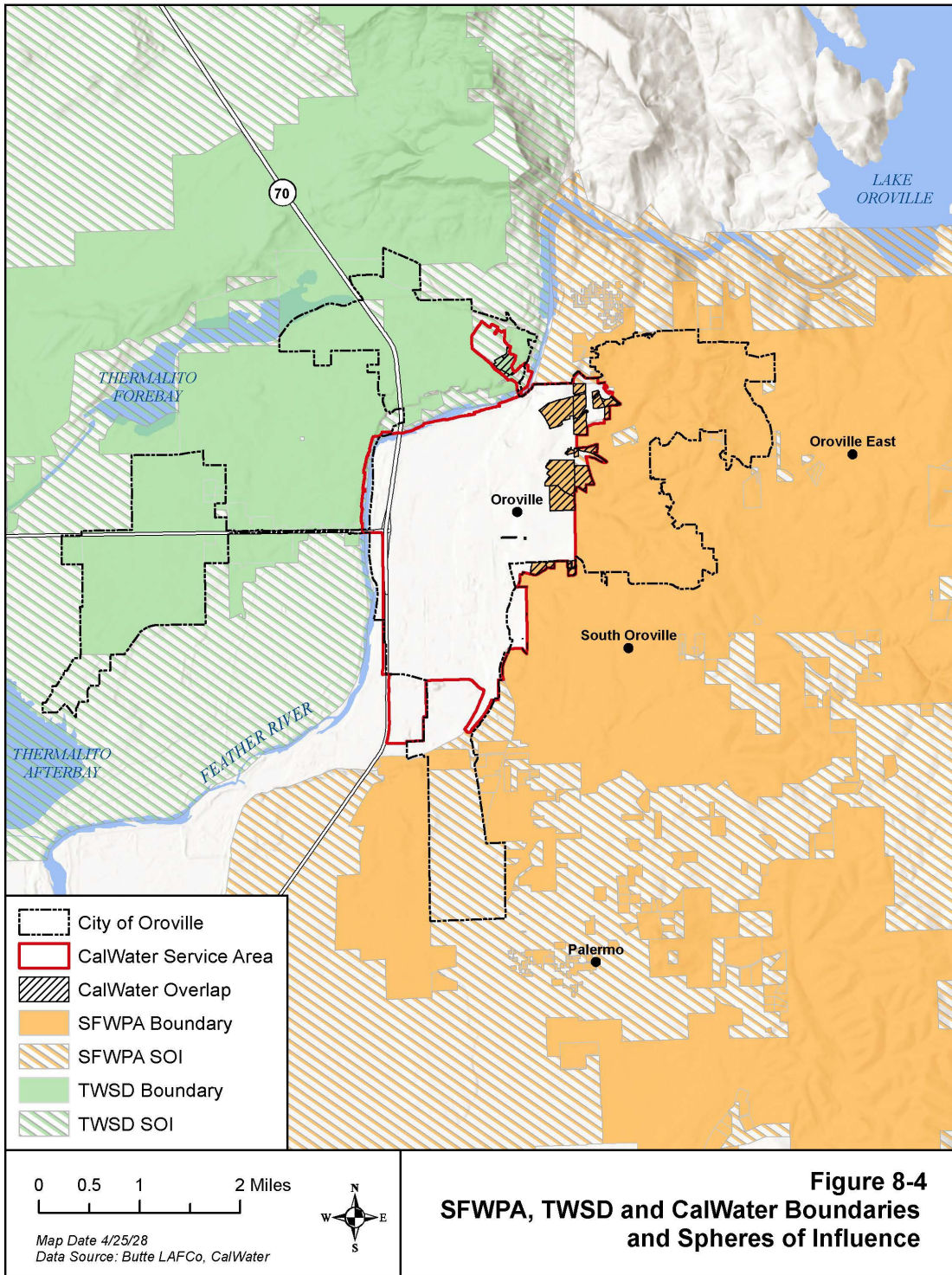


Figure 8-3: Overlapping Service Areas Between SFWPA and Cal Water







Cal Water's and LAFCO's GIS data was utilized to calculate geographic factoids for the overlapped areas as follows:

- SFWPA parcels in Cal Water: 343 parcels (APNs) and 228.5 acres (assessor's acreage)
- TWSD parcels in Cal Water: 17 parcels (APNs) and 19.7 acres (assessor's acreage)

The CPUC's rules regarding overlapping service areas have not been researched as part of this MSR process. Also, Cal Water has explained that their Company was not aware of any overlap between its service area and neighboring service providers (Cal Water, J. Skarb, 2023). 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.

### Consolidation

In 2022 Cal Water Company made a request to the CPUC to consolidate their Chico and Oroville districts in its General Rate Case (GRC) proceeding. In April 2022, the Public Advocate Office staff, Mr. Brian Yu, offered recommendations to the CPUC regarding Cal Water Service GRC A.21-07-002. The Public Advocates found that although the Oroville and Chico districts are not physically connected, the consolidation would create operational economies of scale, improve engineering and systems resilience, and there would be ratepayer benefits without unfair cross-subsidies or unreasonable cost (Public Advocate Office, 2022).

#### *8.2.4 Extra-Territorial Services*

Cal Water Oroville does not provide extra-territorial services outside its Company service area. According to the 2020 UWMP, "Cal Water is not pursuing water transfers involving the Oroville Service Area of Cal Water and other entities at this time" (Cal Water, 2021).

Cal Water's water supply is partially derived from water located outside its service area boundary. Cal Water has two water purchase agreements to support its operations in Oroville. One purchase agreement is with the Pacific Gas and Electric Company (PG&E) to transfer up to 3,000 acre-feet of water per year (AFY). The other is an agreement with Butte County for 150 AFY of surface water. Additional details are described in "Facilities Sharing," Section 8.9.

## 8.3: Company Governance and Accountability

This Section describes how performance, accountability, transparency, and public engagement relate to the public's trust in local government. Because Cal Water is a private investor-owned company, as regulated by the CPUC, its governance structure is somewhat different from other organizations described in this MSR. However, the same performance measures are utilized for consistency to compare Cal Water to the other water service providers studied in this MSR using the determinations prescribed by CKH Act.

### *8.3.1 Government Structure*

The Cal Water - Oroville is structured as an investor-owned utility regulated by the California Public Utilities Commission (CPUC). Corporate headquarters is located in San Jose, CA, and water bill payments are sent to Whittier, CA. Since this privately owned utility provides water service to the public, it has been defined as a “public” utility by the California Constitution (Article 12, Section 3) and the California Public Utilities Code (Section 216(a)). Cal Water – Oroville is one of more than 20 service areas the Company has in California. The CPUC<sup>3</sup> approves the budgets and rates for each Cal Water district every three years in a General Rate Case (GRC) proceeding. The CPUC uses a rate-setting process that an Administrative Law Judge oversees. During the GRC proceeding, the CPUC receives testimony and evidence from Cal Water and others who become formal parties to the proceeding in order to present testimony and evidence. The last General Rate Case covered the three-year period 2020-22; a new GRC covering 2023-25 is presently underway (Cal Water 2020 UWMP, 2021). Please note that Cal Water must prove that its expenses, operations, and proposed infrastructure improvement projects are reasonable. Cal Water – Oroville’s conservation programs and expenditures are reviewed as part of the General Rate Case proceeding so that the California Public Utilities Commission can adjust rates as necessary (Cal Water, May 30, 2023).

Cal Water - Oroville is an urban retail water supplier defined by CWC §10608.12 (t) and §10617. Cal Water Oroville is not a wholesale water supplier. This urban water supplier provides potable water to 3,547 customers, including 778+ commercial accounts and 2,756+ residential accounts (Cal Water UWMP, 2021 and California Drinking Water Watch, 2021). Cal Water recently prepared its Urban Water Management Plan (UWMP) and water shortage contingency plan consistent with state water law and shared the UWMP with the CPUC. It should be noted that Cal Water’s UWMP was deemed complete by the CA Department of Water Resources. This UWMP was utilized as a source of information for this MSR.

### *8.3.2 Company Leadership and Board*

Cal Water - Oroville operates under the direction of its parent company, the California Water Service Group. The California Water Service Group is the third-largest publicly traded water utility in the United States, and its corporate stock is traded on the New York Stock Exchange (NYSE:CWT). The California Water Service Group provides high-quality water and wastewater services to over two million people in over 100 communities. The parent company, the California Water Service Group, is overseen by a 12-member Board of Directors whom company

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<sup>3</sup> The CPUC is an independent agency with five Commissioners who serve six-year terms. The Commissioners are appointed by the Governor and must be confirmed by the California Senate. The current Commissioners and their appointment dates are listed below. As a state agency, the CPUC is required to comply with the Bagley-Keene Act, set forth in Government Code sections 11120-11132. The CPUC holds voting meetings every third Thursday and the public may participate in those meetings, either in-person or remotely. The public may participate remotely by phone (1-800-857-1917; 9899501#) or webcast (<http://www.adminmonitor.com/ca/cpuc>).

stockholders elect. The current Board of Directors members and their term start date are listed below.

- Gregory E. Aliff, Director Since 2015
- Terry P. Bayer, Director Since March 2014
- Shelly M. Esque, Director Since June 2018
- Martin A. Kropelnicki, Director Since 2013
- Thomas M. Krummel, Director Since 2010
- Richard P. Magnuson, Director Since 1996
- Yvonne (Bonnie) A. Maldonado, Director Since 2021
- Scott L. Morris, Director Since 2019
- Peter C. Nelson, Director Since 1996
- Carol M. Pottenger, Director Since 2017
- Lester A. Snow, Director Since March 2011
- Patricia K. Wagner, Director Since 2019

Readers are invited to learn more about each Corporate Board of Directors member on their website at: <<https://www.calwatergroup.com/about-us/>>. This website also allows one to sign up for email alerts and to review investor relations materials. The Corporate Board of Directors has internal policies to guide its work. The policies include a Business Code of Conduct, a Code of Business Conduct and Ethics Policy of the Board of Directors, Bylaws, and more general Corporate Governance Guidelines.

Since Cal Water – Oroville is a private company, it is not required to comply with the Brown Act (or its counterpart, Bagley Keene Act), and Assembly Bill 1234 (Salinas, 2005), which requires ethics training. Since Cal Water – Oroville is a private company, it is not required to hold regularly scheduled public meetings with its Board of Directors<sup>4</sup>. Residents of Oroville are not necessarily notified about meetings of its Board of Directors. Payments and stipends paid to the Board of Directors are not required to be posted to public websites such as <<https://transparentcalifornia.com/agencies/salaries/special-Companys/#water>>. Typically, local government agencies have an elected Board of Directors, and several state laws, such as the Brown Act, etc., are directly binding on the Board of Directors. However, Cal Water's Board of Directors is not subject to these same specific laws. Instead, a different suite of rules applies to Cal Water as an organization and/or to its Board of Directors. For example, payments and stipends to the company's Board of Directors are reported to the Securities and Exchange Commission and are annually disclosed in its Proxy Statement filed pursuant to Section 14(a) of the Security and Exchange Act of 1934. California Water Service Group's most recent Proxy Statement can be found here: <<https://www.calwatergroup.com/investors/financials-filings->

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<sup>4</sup> In its May 30, 2023 letter presented in Chapter 9, Cal Water notes that it is a subsidiary of California Water Service Group, which is governed by its Board of Directors. The leadership of California Water Service Group holds quarterly meetings that are broadcast on the internet and announced on its website. Likewise, California Water Service Group's annual meeting is broadcast on the internet and announced on its website. Additional information about these meetings can be found online at <https://bit.ly/3N1NkHN>.

[reports/annual-reports-proxies](#)>. The water system does comply with other laws and regulations, as detailed in this chapter, on Cal Water’s website, and in Cal Water’s May 30, 2023 letter presented in Chapter 9. A few key rules and regulations that guide Cal Water – Oroville are summarized in the next section, “Accountability and Transparency”.

### *8.3.3 Accountability and Transparency*

LAFCO's 2006 Final MSR on Domestic Water and Wastewater Service Providers specified the following about governance and accountability for Cal Water – Oroville:

Cal Water Oroville has a service area but is not subject to LAFCo oversight in terms of expansion of its boundaries. Given that SFWPA's rates are significantly less than those charged by Cal Water Oroville, that Cal Water Oroville's service area immediately abuts SFWPA's service area, and that the providers' pipes actually overlap in a few isolated locations, something should be done to resolve these discrepancies and inefficiencies in service provision. Similarly, given that TID's rates are significantly less than those charged by Cal Water Oroville, that Cal Water Oroville's service area immediately abuts TID's service area, and that within TID's service area, a small residential area east of Table Mountain Boulevard known as Rancho Golden is provided water by Cal Water Oroville, something should be done to resolve these discrepancies and inefficiencies in service provision (LAFCO, 2006).

#### Political Reform Act

Any political engagement (such as lobbying or donations) by Cal Water is governed by the Political Reform Act. Whereas the board members of local government agencies are bound by the limitations on the receipt of political contributions established in California’s Political Reform Act, the company’s Board of Directors, along with the company itself, is subject to the Political Reform Act’s limitations on the provision of political contributions and lobbying.

#### Corporate Philosophy

Cal Water's operating model enables operations and maintenance control at the local level, supported by centralized services for company-wide functions, including Engineering; Water quality testing and laboratory service; Customer service; Information technology; Finance; Communications; Human resources; and Purchasing.

#### Public Communication

Cal Water – Oroville aims to keep local customers informed of important information regarding water services. Cal Water utilizes various social media platforms to provide its customers with pertinent information regarding their service. The Company has a presence on Facebook, Instagram, Twitter, LinkedIn, and YouTube. Cal Water also has a website at [www.calwater.com](http://www.calwater.com)>. Additionally, Cal Water has previously held meetings for its customers in Oroville on various topics, including water supply planning, water quality, and drought response (Cal Water, Skarb, 2023).

The Special District Transparency Act (SB 929 or California Government Code, §6270.6 and 53087.8) is a state law specifying that websites managed by government water service providers, such as SFWPA and TWSD, must meet specific standards. However, Cal Water – Oroville's website is not required to comply with this state law. Nevertheless, Cal Water – Oroville's website at: <<https://www.calwater.com/community/oroville/>> contains information useful to its customers. For example, the website allows water customers to pay their bills easily online. Water leaks and water waste can be reported. Information about droughts and water conservation is easily accessible on its website. Cal Water's website also allows customers to start and stop service; sign up for email alerts; find information about rates and upcoming infrastructure improvements; and learn about water quality. Specific information about Cal Water – Oroville can be found at: <<https://www.calwater.com/district-information/?dist=oro>>.

Additionally, Cal Water's customers are afforded protections offered in the 2018 Legislature-enacted California Consumer Privacy Act, which gives consumers more control over the collection of their personal information online and establishes new online privacy rights for consumers. However, the protections provided by California Consumer Privacy Act does not extend to government agencies like SFWPA and TWSD (Cal Water, Skarb, 2023).

### General Accountability

As a corporation, Cal Water must meet certain standards or address the regulatory requirements of its business activities and should assume responsibility for the consequences of its actions. Therefore, Cal Water - Oroville is accountable to the California Public Utility Commission, the California State Water Resources Control Board (SWRCB), and its water customers. Drinking water regulations are described in Appendix D. The Company generally works towards compliance with these regulations. Additionally, Cal Water is accountable to its parent company and its stockholders.

Government-managed water providers in California are subject to periodic grand jury<sup>5</sup> investigations. However, private companies, such as Cal Water – Oroville, are typically not subject to grand jury investigations as described on the California Civil Grand Jury website: <<https://www.courts.ca.gov/civilgrandjury.htm>>. Additionally, Government Code sections 12940-12957 require all employers with five or more employees, such as Cal Water, to provide training and education regarding the prevention of sexual harassment (Cal Water, Skarb, 2023).

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<sup>5</sup> The responsibilities of a Grand Jury are detailed on this website: <https://www.courts.ca.gov/civilgrandjury.htm>.

### *8.3.4: Regulation by the California Public Utilities Commission*

Cal Water – Oroville is regulated by the California Public Utilities Commission (CPUC). The CPUC is a state agency that regulates privately owned public utilities, including electric power, telecommunications, natural gas, and water companies. The CPUC has headquarters in the Civic Center district of San Francisco and field offices in Los Angeles and Sacramento. Additional information about the CPUC can be found on its website at: <https://www.cpuc.ca.gov>.

As a state agency, the CPUC complies with the Bagley-Keene Act, as set forth in Government Code sections 11120-11132. The Bagley-Keene Act is the state-level equivalent of the Brown Act and requires state agencies to publicly notice their meetings, prepare agendas, conduct meetings publicly, and allow for public testimony at those meetings. The CPUC holds voting meetings every third Thursday, and the public may participate in those meetings, either in-person or remotely (Cal Water, Skarb, 2023). In addition to the CPUC's regularly scheduled voting meetings, the CPUC hosts local Public Participation Hearings during proceedings in which the costs paid by customers are set by the CPUC. These hearings are held specifically to receive the testimony of customers during the rate-setting process. The most recent public participation hearing for Cal Water – Oroville occurred on April 4, 2022 (Cal Water, Skarb, 2023).

As a public utility regulated by the CPUC, Cal Water – Oroville is subject to different laws and regulations than the other water suppliers covered in this MSR (Cal Water, Skarb, 2023). For instance, CPUC General Order 77-M requires public utilities such as Cal Water to furnish the CPUC with an annual report that documents the names, titles, and duties of all Executive Officers and the compensation received by each; 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; the amount of the expense account, any contingent fees or other money directly or indirectly paid to each such officer and employee named; the names entities receiving dues, donations, subscriptions, and contributions paid by the utility; and the amount of, and for each such payment. These annual reports are posted on the CPUC's website (Cal Water, Skarb, 2023). Similarly, CPUC General Order 104-A requires public utilities under the jurisdiction of the CPUC to file an annual report of its operations. These annual reports include information similar to those provided in financial reports prepared by the other utilities covered by this MSR (Cal Water, Skarb, 2023).

CPUC's rate-setting process aims to allow a process such that customers could potentially influence the rates. For example, individuals may become parties to the CPUC's rate-setting proceedings. The CPUC may award compensation to qualified intervenors who demonstrate they contributed substantially to the proceeding (Cal Water, Skarb, 2023).

The California Public Advocates Office (PAO) is a separate entity, statutorily charged with the responsibility for advocating on behalf of customers before the CPUC. During the rate-setting process, Cal Water Oroville's customers are represented by a consumer advocate from the PAO's office.

**Complaint Process:**

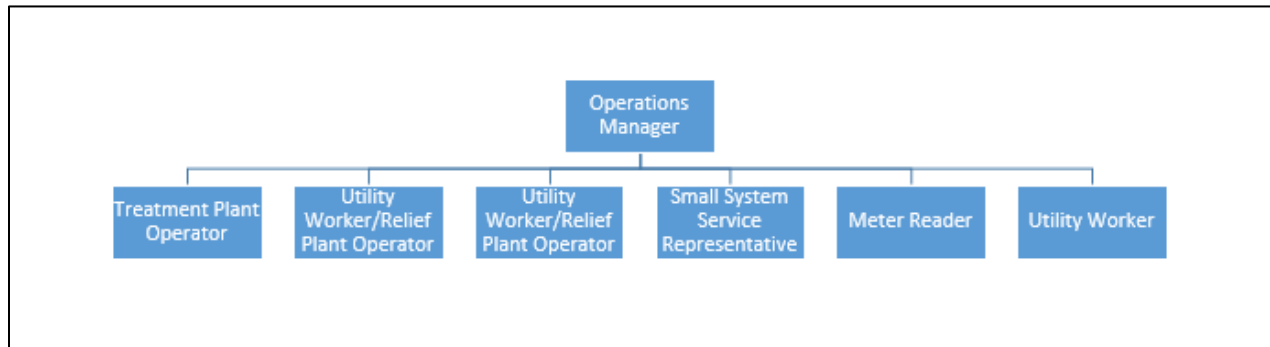
Cal Water's customers may choose to participate in the CPUC's informal and formal complaint processes, through which the CPUC can order corrective action, including adjustments to customers' bills\_(Cal Water, Skarb, 2023).

*8.3.5 Management Efficiencies*

Efficiently managed organizations typically implement benchmarking and monitor performance to improve service delivery, planning efforts, and emergency planning. Management efficiency commonly relates to the ability of an organization to implement plans, improve service delivery, contain costs, eliminate duplications of effort, maintain qualified employees, and build and maintain adequate contingency reserves. This MSR uses a standard methodology to assess management efficiency for public service providers. Cal Water's operations, budgets, and management are reviewed independently every three years by the CPUC (Cal Water, Skarb, 2023). This process is prescribed by CPUC's rules, and it includes a designated challenger. Please see section 8.3.4 above for additional details about the CPUC.

*8.3.6 Staffing and Training*

As of July 30, 2021, Cal Water's Oroville District had seven employees with a combined 53 years of combined service and 13 professional certifications (Cal Water, Lind and Skarb, 2023). Staff includes administration, customer service, and operations (Means Consulting, 2017). Operations staff is available for in-person customer service and can go door-to-door as needed when customers call or email to request service) (Cal Water, Lind, 2023). Staff size seems to have shrunk by two positions since the Means Consulting 2017 report was published. An organizational chart of Cal Water's Oroville employees is depicted below in Figure 8-5.



*Figure 8-5 Cal Water Organization Chart (above)*

LAFCO's 2006 MSR noted, "The ratio of managers to workers is appropriate; the Oroville District is not top heavy in managers. Cal Water Oroville has various policies and procedures related to personnel, provision of services, customer relations, operations, maintenance, and the like" (LAFCo, 2006). This statement remains accurate given the updated information shown in the

Organization Chart, Figure 8-5. Additionally, Cal Water's staff-to-customer ratio is comparable to that of TWSD.

### 8.3.7 Accountability Determinations

Number	Indicator	Determination
CWS-Acc-1	Government/Organizational Structure	<p>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.</p> <p>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.</p>
CWS-Acc-2	A website provides public information and some level of transparency	Cal Water Oroville does currently maintain a website at: < <a href="https://www.calwater.com/">https://www.calwater.com/</a> >.
CWS-Acc-3	Accountability to Oroville Customers	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.
CWS-Acc-4	The ratio of management staff to worker staff in	The number of employees (7) is appropriate, given the operation and size of the Oroville District. In addition to the ratio, Cal Water - Oroville staff have



	relation to the size of the operations	a high level of experience, expertise, and professional certifications, similar to the other service providers included in this MSR.
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## 8.4: Growth & Population Forecasts

This Section provides information on the existing population and future growth projections for Cal Water Oroville. Historical and anticipated population growth is a factor that affects service demand. Appendices A and B provide detailed demographic and socio-economic information for The County of Butte and the City of Oroville. Appendix H provides information about the County of Butte is economy.

### 8.4.1 Existing Population

There are approximately 11,022 residents within the Cal Water service area boundaries, as shown in Table 8-2 below. The Company's 2020 UWMP estimated population by utilizing census tracts to calculate the population. Although census tracts do not directly correspond with service area boundaries, the data provides a close approximation of the existing population. More recently, in 2022, Cal Water Oroville reported on water conservation to the State Water Board. As part of this, the Company estimated<sup>6</sup> it served a population of 11,022, an increase above its 2020 estimate. Given the dynamic variation in population in Oroville, the consultants recommend that when LAFCO next updates an MSR/SOI for services near Oroville, the population within Cal Water's service area be re-evaluated compared to the service capacity. To be consistent with the population estimates of the other agencies in this MSR, both the 2020 data and the 2022 date are shown in Table 8-2 below. Cal Water provides service to 38+ percent of the geographic area of the City of Oroville and 54+ percent of the City's residents.

Name of Company	Population Service area
Cal Water Oroville Service Area <sup>1</sup> in 2020	10,849
Cal Water Oroville Service Area in 2022	11,022
City of Oroville <sup>2</sup>	18,888
<i>Source: <sup>1</sup>Cal Water 2020 UWMP</i>	
<i><sup>2</sup>: California Department of Finance. May 2021. E-1 Population Estimates for Cities, Counties, and the State, January 1, 2020 and 2021. Sacramento, California.</i>	

<sup>6</sup> The Company's population estimate of 11,022 was calculated using census data as well as % of multi-family vs single-family units, and the average size of those units, etc. Cal Water believes this more recent estimate is most accurate (Cal Water, Lind, 2023).

### *8.4.3 Projected Population Growth*

Projecting the future population for the Cal Water Service Area is complicated due to varying annexation rates and census tracts that do not match with the Service Area. For this MSR, data from the California Department of Finance (DOF) was used to project population growth, as shown in Table 8-3 below. The population projections for the City of Oroville are presented in Chapter 3, and these data were utilized to extrapolate population growth rates for the Cal Water Oroville Service Area. By the year 2045, it is estimated that Cal Water Oroville's existing service area will encompass a population of 11,194 persons. This represents an average annual growth rate of 0.13% percent between the years 2020 to 2045.

The addition of 345 or up to 1,068 people to Cal Water Oroville by 2045 is possible as the service area contains underdeveloped areas within existing boundaries that could potentially be available for more intensive residential development.

### *8.4.4 Existing Land Use*

Land use is a factor that affects population growth and, therefore, demand for public services. However, Cal Water Oroville is not a land use authority. Land use within the City of Oroville is described in Chapter 3 of this MSR.

#### Open Space & Agriculture

Butte LAFCO aims to protect open space and agriculture. Since Cal Water provides service to the City of Oroville, the geographic distribution of open space and agriculture is described in Chapter 3 of this MSR.

#### City General Plan

The Company's service area is subject to the land use policies and regulations of the City of Oroville. Most land-use decisions initiated by private property owners over the last decade are secured via entitlements and land-use permits from the City of Oroville and other agencies. The City 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. Planning designations, the Land-Use Element, the Housing Element, and other aspects of the City of Oroville's General Plan are described in Chapter 3.

	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>	<b>Percent Increase 2020 to 2045</b>	<b>Numeric Increase 2020 to 2045</b>	<b>CAGR 2020 to 2045</b>
County of Butte <sup>1</sup>	206,362	230,691	236,874	242,240	246,453	249,457	20.9%	43,095	0.76%
City of Oroville (Moderate) <sup>2</sup>	18,888	21,113	21,679	22,170	22,555	22,830	20.9%	3,942	0.76%
Low Scenario - Cal Water Oroville <sup>3</sup>	10,849	10,918	10,987	11,056	11,125	11,194	3.2%	345	0.13%
High Scenario – Cal Water <sup>4</sup>	10,849	11,022	11,316	11,573	11,774	11,917	9.80%	1,068	0.38%

**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: Cal Water Oroville population projection is from the Cal Water 2020 UWMP (Cal Water, 2021)  
4: Estimated based on City of Oroville's population \* 0.522. 11,022 used as starting value per Cal Water, Lind, 2023.

#### 8.4.5 Potential Future Development

Future population growth within the City of Oroville depends on General Plan policies, zoning, and associated land-use designations in the region. The City General Plan provides a series of goals, policies, standards, and implementation programs to guide land use, development, and environmental quality. Chapter 3 provides tables listing the new major projects in the City's planning and development stages. Additionally, a map of proposed/approved infill development projects within the City boundary is provided in Chapter 3 of this MSR. As described in Chapter 3, there is considerable room within the City boundary for infill development.

#### 8.4.6 Local Hazard Mitigation Plan

Butte County collaborated with five incorporated communities, thirteen special independent government Districts, and one private organization to prepare the November 2019 Local Hazard Mitigation Plan (LHMP) described in Chapters 3 to 7 in this MSR. However, neither Cal Water Oroville nor Cal Water Chico were invited or offered the opportunity to participate in the 2019 LHMP process.

Natural hazard mitigation planning is important because the rising costs associated with disaster response and recovery have become more difficult to pay for. Therefore, prevention, in the form of planning and implementing mitigation measures, is essential to reducing the fiscal and social impact of natural hazard events. For example, natural hazard events can trigger emergency response and recovery costs, loss of life, personal injury, and property damage. Most people who reside in Butte County have been affected by natural hazards and remain vulnerable to drought, wildfire, floods, dam failure, heat waves, and other severe weather events. The government agencies that participated in the LHMP benefited from this planning process because the Plan:

- Updated the list of hazards
- Assessed the likely impacts of natural hazards on the people and physical assets
- Established updated goals
- Prioritized projects to reduce the impacts of future disasters on critical facilities and infrastructure.

Although Cal Water Oroville was not invited to participate in the 2019 LHMP process, the Company has previously studied potential natural hazards in other planning documents, as listed below:

- Urban Water Management Plan,
- Emergency Response Plan and
- America's Water Infrastructure Act (AWIA) analysis, report, and action plan the company executed in 2019-2020. The AWIA analysis identifies hazards and possible long-term risks to infrastructure and reliability of the water system over time, given different projected scenarios.
- (Source: Cal Water, Lind, 2023)

It is recommended that Cal Water Oroville contact the Butte County Office of Emergency Services and ask to be invited to participate in the next update to the LHMP, along with the other municipal water service providers.

#### 8.4.6 Growth and Population Determinations

Table 8-4: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA		
Number	Indicator	Determination
CWS-Pop-1	Existing Service area boundary	Cal Water Oroville's 3,463-acre service area is located in the City of Oroville.
CWS-Pop-2	Existing Sphere of Influence	LAFCO's 2006 MSR/SOI depicts the Cal Water Oroville Sphere as congruent with its boundary.
CWS-Pop-3	Extra-territorial Services/Operations	<p>Cal Water Oroville does not provide extra-territorial services outside its Company service area.</p> <p>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.</p>
CWS Pop-4	Projected population in years 2020 to 2045.	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.
CWS-Pop-5	Service area boundaries contain a sufficient land area to accommodate projected growth.	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.

Table 8-4: MSR DETERMINATION: GROWTH AND POPULATION PROJECTIONS FOR THE AFFECTED AREA

Number	Indicator	Determination
CWS-Pop-6	Effect that the Company's service provision will have on open space and agricultural lands.	<p>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 water services generally has minimal effects on agricultural land and open space.</p> <p>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.</p>

## 8.5 Disadvantaged Unincorporated Communities

LAFCO is required to make determinations regarding "Disadvantaged Unincorporated Communities" (DUCs). Disadvantaged Unincorporated Communities are defined as an inhabited territory that constitutes all or a portion of a community with an annual median household income that is less than 80 percent of the statewide annual household income (MHI). The requirement for LAFCO to consider DUCs results from Senate Bill 244, legislation passed in 2011 and incorporated into the CKH Act. Cal Water – Oroville's service area mostly extends to areas within the City of Oroville's boundary. However, there are two small unincorporated areas within Cal Water's boundary. As shown in Figure 6-7, one of the unincorporated areas may be a DUC. When LAFCo prepares the next MSR update for Cal Water, it is recommended that a higher-resolution map be prepared. In the meantime, the DUC discussion in Chapter 6 (SFWPA) is also applicable to Cal Water.

Chapter 3 also 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. 12 census tracts lie within the City of Oroville's boundary and sphere of influence, as listed in Table 3-13. Eleven of the 12 census tracts have a median household income below \$60,188, classifying them as disadvantaged communities.

Water affordability relates to the monthly fee for domestic water compared 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 on-going concern which is discussed in more detail in the Finance section of this Appendix.

Number	Indicator	Determination
CWS-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 Organization's service area is described.	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.
CWS-DUC-2	Potential DUCs are considered. The provision of adequate water, wastewater, and structural fire protection services to DUCs is considered.	The Cal Water Service area extends mostly 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.

## 8.6: Water Services

### 8.6.1.1: Existing Water Supply, Conservation, and Treatment

This Chapter evaluates the efficiency of services provided by Cal Water Oroville. 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. This Chapter addresses the provision of the services directly provided by Cal Water Oroville, including water supply, conservation, and treatment.

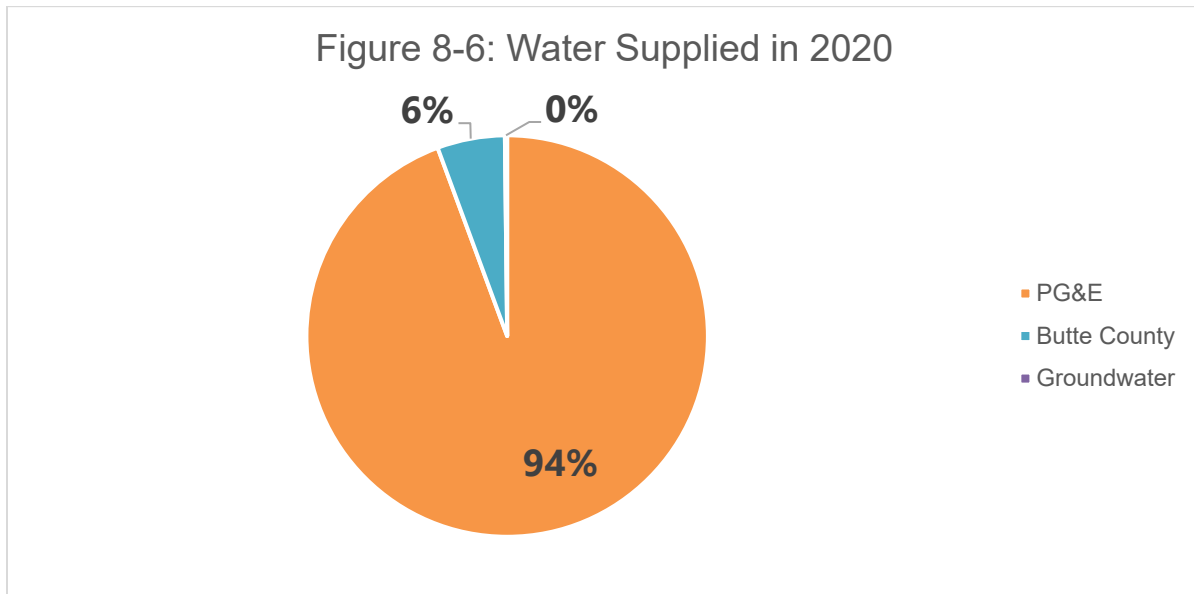
Cal Water Oroville supplies water to 38.9 percent of the City of Oroville's geographic boundary, including that portion located south of the Feather River, the Historic Downtown, the closest portion of the eastern foothills, and South Oroville. Cal Water Oroville estimates the number of

customers served is 3,547 connections, as listed in Table 8-6 below. Cal Water Oroville operates Water System Number CA0410005.

Table 8-6: Number of Customers for Key Municipal Services	
Service	Number of Customers in 2020
Water	3,547 connections
Data Source: Cal Water, 2020 UWMP (2021)	

### Water Supply

Cal Water's 2020 Urban Water Management Plan (UWMP) indicates that the Oroville District derives its water supply from a combination of purchased surface water and groundwater. In 2020 Cal Water supplied a total of 2,753 acre-feet of water to its customers. 94 percent of the water utilized in 2020 was purchased from PG&E, six percent was purchased from Butte County, and less than one percent was derived from Cal Water's groundwater well(s), as shown in Figure 8-6 below.



Data source for Figure 8-6: Cal Water, 2020 UWMP, 2021

### PG&E Water

Water is purchased from Pacific Gas and Electric Company (PG&E) through an agreement that allows the transfer of up to 3,000 acre-feet per year (AFY) to Cal Water - Oroville. The purchased PG&E water originates from the Coal Canyon Power Plant (COOR, 2015). The Coal Canyon Powerhouse was retired due to the 2002 rupture of its penstock and has never been repaired due to a lack of cost-effectiveness. Some powerhouse equipment was left in place. However, the powerhouse cannot generate electricity without a working penstock (Butte County BOS, 2021). The purchased water from PG&E is conveyed from the west branch of the Feather River into Lake Oroville and delivered to Cal Water's Treatment Plant via the Thermalito Power Canal at Station 14. This supply was previously delivered via the Upper Miocene Canal, but due to fire damage, the canal is not currently operational (Cal Water, 2020 UWMP, 2021). The Butte County Board of



Supervisors has considered several alternatives to protect the water supply associated with PG&E's and Cal Water's use of the Miocene Canal, as described in the staff report provided in Appendix N (Butte County BOS, 2021). In 2020, Cal Water purchased 2,598 AF of water from PG&E, which represents 94 percent of its total water utilized, as shown in Figure 8-6 above and Table 8-7 below. PG&E holds pre-1914 water rights for this water (Application ID S001251), as shown in Table 8-8 (on page 8-21). Additional information about water rights is provided in Appendix D. PG&E's water rights have an assigned "Place of Use," a geographic area. Cal Water staff indicate that this water supply is highly reliable in normal and dry years (Cal Water, K. Jenkins, 2023).

### Butte County Water Purchase

Cal Water has a contract with Butte County for 150 AFY of Table A surface water supply from the California State Water Project (SWP) (Cal Water 2020 UWMP, 2021). This represents six percent of the water utilized by Cal water Oroville during the year 2020, as shown in Figure 8-6 above. Additionally, Cal Water can request an increase in SWP supply from Butte County up to 3,000 AFY if necessary. Cal Water considers this a potential "back-up" source of supply that may be utilized in the event of unforeseen supply interruptions or increased demands (Cal Water 2020 UWMP, 2021). Typically, contracts with the SWP include a disclaimer that acknowledges that if there is not enough natural precipitation to create a water supply, there is a risk that contracted water might not be delivered or delivered on a reduced basis.

Table 8-7: Cal Water Oroville Water Supplies Per UWMP<sup>7</sup>

Table 6-8. Water Supplies – Actual (DWR Table 6-8)

Water Supply	Additional Detail on Water Supply	2020		
		Actual Volume	Water Quality	Total Right or Safe Yield ( <i>optional</i> )
Groundwater (not desalinated)	Wyandotte Creek Subbasin (b)	5	Drinking Water	
Purchased or Imported Water	Pacific Gas and Electric Company and/or Butte County (c)	2,747	Drinking Water	3,150
<b>Total</b>		<b>2,753</b>		
NOTES: (a) Volumes are in units of AF. (b) The Wyandotte Creek Subbasin is not adjudicated, and the projected groundwater supply volumes are not intended to and do not determine, limit or represent Cal Water's water rights or maximum pumping volumes. Any determination of Cal Water's water rights, as an overlying owner, appropriator, municipal water purveyor or otherwise, is beyond the scope of this report and the UWMP statutes and regulations. (c) The "Total Right or Safe Yield" of purchased water for the District is equal to the sum of its two contractual agreement volumes, 3,000 AFY from PG&E and 150 AFY from Butte County. However, the District has the ability to request to increase its purchase quantity from Butte County up to 3,000 AFY.				

*Data Source for Table 8-7: Cal Water, 2020 UWMP, 2021*

<sup>7</sup> The Water supply data provided in Table 8-7, which is also called Table 6-8 in the UWMP, includes several disclaimers described by the UWMP as follows: Data do not represent the total amount of purchased water and groundwater supply that may be available to the District in a given year, but rather reflect the fact that the combination of available purchased water and groundwater supply sources has always been sufficient to meet demands in normal years, and is projected to continue to be sufficient to meet demands in the future. It should also be noted that the Wyandotte Creek Subbasin is not adjudicated, and the projected groundwater supply volumes are not intended to and do not determine, limit or represent Cal Water's water rights or maximum pumping volumes. Any determination of Cal Water's water rights, as an overlying owner, appropriator, municipal water purveyor or otherwise, is beyond the scope of this report and the UWMP statutes and regulations.

Table 8-8: Pacific Gas and Electric - List of Water Rights Associated with the Miocene Hydroelectric Projects

Statement of Water Diversion and Use #	Priority date	FERC Project #	River System	Direct Diversion Amount (cfs)	Description (Facility)	Point of Diversion	Primary Place of Use	Water Right Class
892	1865	NA	West Branch Feather	75	Upper Miocene Canal	West Branch Feather River	Lime Saddle & Coal Canyon Powerhouses	Pre-1914
916	1865	NA	West Branch Feather	3	Upper Miocene Canal feeder	At Station 285 + 73	Lime Saddle & Coal Canyon Powerhouses	Pre-1914

Data Source: Pacific Gas and Electric (PG&E) website at: [https://www.pge.com/pge\\_global/common/pdfs/safety/electrical-safety/safety-initiatives/desabla/Summary-of-Butte-Water-Rights.pdf](https://www.pge.com/pge_global/common/pdfs/safety/electrical-safety/safety-initiatives/desabla/Summary-of-Butte-Water-Rights.pdf). Provided by PG&E for informational purposes only. PG&E makes no representations as to the completeness or accuracy of the information provided herein.

## Groundwater

Cal Water - Oroville supplements its surface water supply with local groundwater. The groundwater used by the Oroville District is extracted from the underlying Wyandotte Creek Subbasin ((DWR Basin No. 5-021.69). The service area has a total of one active and two stand-by wells, as listed in Table 8-9 below (Cal Water 2020 UWMP, 2021). As shown in Table 8-7 above, in 2020, groundwater comprised only 0.18 percent of the total water supplied by Cal Water Oroville. Before 2020, groundwater was a slightly larger percentage of water supplied.

Well #2 and Well #5 are out of service due to per- and polyfluoroalkyl substances (PFAS) impacts (Cal Water 2020 UWMP, 2021). PFAS are commonly known as "forever chemicals" because they are long-lasting chemicals that break down very slowly over time and persist in the environment (EPA, n/d). A new well is proposed to replace Well #2. The proposal for the new well is contingent upon approval by the CPUC as part of Cal Water – Oroville's 2021 General Rate Case proceeding (Cal Water, May 30, 2023). Until the new well comes online, the Company will increase purchased surface water supplies to make up the difference (Cal Water 2020 UWMP, 2021). A proposed total budget of \$218,912 for the Oroville Service area was requested as part of the Well Infrastructure Renewal Program. Additional funds were requested for the design of a new well (CPUC, 2022).

In July 2001, the California Water Service Company submitted a report entitled "Drinking Water Source Assessment," which identified protection Zones for Well 05-01 and Well 10-01. The Protection Zone has three tiers, A, B, and C, based on the travel time of water to the well calculated as a distance (Cal Water, 2001). The Protection Zone is intended to protect water quality in the wells. There does not appear to be any direct management or enforcement of the identified Protection Zones by a state agency.

## Emergency Water Supply

Cal Water and Thermalito Irrigation District maintain an emergency intertie, which allows them to access supplemental water during emergencies (i.e., the emergency intertie could provide a temporary alternative water source). Aside from replacing the well listed in Table 8-9, Cal Water does not have new water supply sources currently planned in their UWMP (Cal Water 2020 UWMP, 2021). However, Cal Water does regularly study the potential for new water supplies as part of its Infrastructure Improvement Plans (Cal Water. Jenkins, 2023).

Table 8-9: Cal Water Oroville Groundwater Wells and WTP				
Name	Type Code	2019 State Status	2020 UWMP Status	2023 Notes from Cal Water <sup>3</sup>
Oroville Treatment Plant - Raw XCLD	IN	Active <sup>1</sup>	Active <sup>2</sup>	None
Well 05-01	WL	Active <sup>1</sup>	Active <sup>2</sup>	Well 5-01 is currently Standby (inactive, except in case of fire emergency). DDW can verify - a permit was issued in December.
Well 10-01	WL	Active <sup>1</sup>	Standby <sup>2</sup>	Well 10-01 was brought back to Active status in 2022 with the addition and commissioning of Granular Activated Carbon filtration on-site to remove PFAS.
Well 02-01 - Stand-by	WL	Inactive <sup>1</sup>	Standby <sup>2</sup>	Well 2-01 is currently Standby (inactive, except in case of fire emergency).
West Pacific Well	WL	Inactive <sup>1</sup>	Inactive <sup>1</sup>	The Western Pacific Well was Inactive and has since been destroyed by its owners (it had been leased).
<ol style="list-style-type: none"> <li>1. Data Source: SWRCB, CA Drinking Water Watch, <a href="https://sdwis.waterboards.ca.gov/PDWWW/JSP/WaterSystemDetail.jsp?tinwsys_is_number=97&amp;tinwsys_st_code=CA&amp;wsnumber=CA0410005">https://sdwis.waterboards.ca.gov/PDWWW/JSP/WaterSystemDetail.jsp?tinwsys_is_number=97&amp;tinwsys_st_code=CA&amp;wsnumber=CA0410005</a></li> <li>2. Data Source: Cal Water 2020 UWMP, 2021</li> <li>3. Cal Water, Lind, 2023</li> </ol>				

## Water Conservation

The Water Conservation Act of 2009 (Senate Bill X7-7) was enacted in November 2009 and requires the state of California to achieve a 20 percent reduction in urban per capita water use by December 31, 2020. To achieve this, each urban retail water supplier was required to establish water use targets for 2015 and 2020 using methodologies established by DWR (Cal Water 2020 UWMP, 2021). LAFCo's 2006 MSR noted that "Cal Water Oroville has implemented several conservation measures. These include retrofitting plumbing, public education, toilet rebates, and more. Cal Water Oroville also has an aggressive program to reduce unaccounted water within its systems" (LAFCO, 2006).

The Oroville District met its 2020 water use target of 261 gallons per capita per day (GPCD) since water use was reduced in 2020 to 227 GPCD. Cal Water Oroville participates in a "Regional Alliance" for purposes of SB X7-7 compliance. The 227 GPCD in 2020 represents a decrease of 39% when compared to the 372 GPCD in 2000. The Regional Alliance's 2020 water use is 178 GPCD, less than (i.e., better than) its 2020 target of 226 GPCD. (Cal Water 2020 UWMP, 2021). Excluding commercial and industrial water use, the residential-only per-capita water use in May 2022 was 88 (gpcd) (SWRCB, 2022). The California Water Service Company Oroville posts updated conservation data regularly to the California State Water Resources Control Board Water Conservation Reports at:

[https://www.waterboards.ca.gov/conservation/conservation\\_reporting.html](https://www.waterboards.ca.gov/conservation/conservation_reporting.html) (SWRCB, 2022).

Conservation Master Plan: Cal Water prepared a Conservation Master Plan as part of its 2020 Urban Water Management Plan (UWMP). The Conservation Master Plan helps to ensure that Cal Water is providing the right mix of conservation programs in the most cost-effective manner possible. The Conservation Master Plan guides the Company's staff and stakeholders by informing annual conservation activities, such as program levels, staffing, and budget needs. Additionally, the Conservation Master Plan summarizes the mix of conservation measures that Cal Water plans to implement, including the estimated water savings, costs, and effects on water demand (Means Consulting, 2017). Additional information on water conservation can be found in the 2020 Urban Water Management Plan available on CA DWR's website at: <https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans>. A summary of the customer assistance, plumbing fixture replacement, irrigation equipment replacement, and landscape upgrade elements that Cal Water offers in the Oroville District is provided in the Means Consulting Report (2017) available online at:

<https://www.calwater.com/community/oroville/docs/>.

### *8.6.2.2: Water Supply Planning*

Protecting water quality and maintaining an adequate water supply are critical for the future of the Oroville region. Given this importance, Cal Water Oroville (along with other regional and statewide agencies) prepare a range of water resource management plans as 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 adequate water supplies are available to meet existing and future water demands. The Urban Water Management Planning Act (C6WC §10610 – 10656 supplemented by CWC §10608 et seq) specifies the requirements for UWMPs. Cal Water Oroville adopted a 2020 Urban Water Management Plan in June 2021. This UWMP describes Cal Water Oroville's existing water facilities, system water use, baselines, water system supplies, contingency plan, and water demand management measures. Their UWMP is 312 pages in length and can be viewed on the following website: <[https://www.calwater.com/docs/uwmp2020/ORO\\_2020\\_UWMP\\_FINAL.pdf](https://www.calwater.com/docs/uwmp2020/ORO_2020_UWMP_FINAL.pdf)>. This UWMP is an update to the previous 2015 UWMP and discloses information that remains relevant (Cal Water, 2021). Cal Water utilizes the UWMP as a long-range planning document for water supply and system planning; and as a source for data on population, housing, water demands, water supplies, and capital improvement projects. Cal Water's final UWMP was formally adopted by Cal Water's Vice President, Customer Service, and Chief Citizenship Officer on June 20, 2021, and was submitted to the California Department of Water Resources (DWR) within 30 days of approval.

#### ***Water Supply and Facilities Master Plan and Water Supply Reliability Study***

Cal Water - Oroville is developing a Water Supply Reliability Study (WSRS) and updating the existing Water Supply & Facilities Master Plan (WSFMP) for Cal Water Oroville in 2023 and 2024. The WSRS is evaluating the reliability of existing water supplies and assessing supply and demand options to enhance future reliability. The Study will consider water supply project recommendations for the facilities' master planning process. The WSFMP is informed by the WSRS and forecasts potential infrastructure needs to support long-term operational reliability (Cal Water, Jenkins, 2023).

#### ***Integrated Regional Water Management Plan***

Cal Water participated in the development of the Northern Sacramento Integrated Regional Water Plan (NSV-IRWMP), which covers Butte County plus five other counties in the Northern Sacramento Valley. The Northern Sacramento IRWMP partners 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, 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 IRWMP 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/>. Cal Water played a supporting role in developing and providing information for the IRWMP. In addition, Cal Water has been diligent in supporting and pursuing a number of the goals and objectives outlined in the IRWMP (Means Consulting, 2017).

### ***Sustainable Groundwater Management Act***

Cal Water - Oroville participates in the California Sustainable Groundwater Management Act (SGMA) by collaborating with its partners to prepare a management plan in conjunction with the Wyandotte Creek Groundwater Sustainability Agency (WCGSA), as detailed on their website at [www.wyandottecreekgsa.com](http://www.wyandottecreekgsa.com). A Cal Water Oroville employee actively participates in meetings for the WCGSA. The GSA meets all the current milestones, and a Draft Groundwater Sustainability Plan is available for public review per the SGMA regulations. The Wyandotte Creek Groundwater is hydrologically connected to the Sacramento Valley groundwater Basin. Cal Water Oroville utilizes a well(s) to extract groundwater from the Wyandotte Creek Basin. This Basin is not adjudicated. DWR's recent evaluation of California groundwater basins determined that the Basin is not in a critical overdraft condition. DWR has prioritized the Basin as "medium" (Cal Water 2020 UWMP, 2021).

### ***Other Water Planning Efforts***

Cal Water coordinates plans with the Butte County Department of Water and Resource Conservation.

### **Future Water Supplies**

Table 8-10 below shows that Cal Water has projected its future water supplies. Between the years 2025 to 2045, the "Reasonably Available Volume" of water is expected to decrease by 68 acre-feet per year. Cal Water – Oroville's Urban Water Management Plan details the ways in which this decrease will be managed and offset by water conservation efforts and improvements made at its water treatment plant. This MSR considers whether future supplies will be sufficient to meet future demand on the following pages. Cal Water staff indicate that available supplies are expected to be able to serve demands in all year types through 2045 (Cal Water, Jenkins, 2023). Cal Water – Oroville's Urban Water Management Plan indicates that available water supplies will be sufficient to meet projected demands in all hydrologic conditions, including a five-year drought period and other potential variability (Cal Water, 2020 UWMP, 2021).

Table 8-10: Future Water Supplies Projected to Year 2045

Water Supply	Additional Detail on Water Supply	Projected Water Supply									
		2025		2030		2035		2040		2045	
		Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)
Groundwater (not desalinated)	Wyandotte Creek Subbasin (b)	106		104		104		103		103	
Purchased or Imported Water	Pacific Gas and Electric Company and/or Butte County (c)	2,548	3,150	2,495	3,150	2,490	3,150	2,484	3,150	2,483	3,150
<b>Total</b>		<b>2,654</b>		<b>2,599</b>		<b>2,594</b>		<b>2,587</b>		<b>2,586</b>	

## NOTES:

- (a) Volumes are in units of AF.
- (b) The Wyandotte Creek Subbasin is not adjudicated, and the projected groundwater supply volumes are not intended to and do not determine, limit or represent Cal Water's water rights or maximum pumping volumes. Any determination of Cal Water's water rights, as an overlying owner, appropriator, municipal water purveyor or otherwise, is beyond the scope of this report and the UWMP statutes and regulations.
- (c) The "Total Right or Safe Yield" of purchased water for the District is equal to the sum of its two contractual agreement volumes, 3,000 AFY from PG&E and 150 AFY from Butte County. However, the District has the ability to request to increase its purchase quantity from Butte County up to 3,000 AFY.

Source for Table 8-10 above: Cal Water 2020 UWMP, 2021



## *Water Demand*

### Existing Water Demand

Cal Water's 2020 UWMP indicates that the Company delivers water to residential, commercial, industrial, and governmental customers at the percentages listed in Table 8-11 below.

Type	Percent of Overall Water Demand
Residential customers	34 percent
Industrial customers	21 percent
Other Non-residential water uses	37 percent
Distribution system losses	8 percent

*Data Source: Cal Water 2020 UWMP, 2021*

In 2006, LAFCO's MSR noted that the maximum day demand in the Oroville service area of 6.3 MGD." (LAFCO, 2006). In addition, water demand within the Oroville service area was 2,436 acre-feet per year (AFY) on average between 2016 and 2020 (Cal Water 2020 UWMP, 2021).

### Existing Groundwater Demand

Groundwater use is important to Cal Water Oroville because the groundwater well water is pumped to storage structures during non-peak demand periods. The stored groundwater is then drawn down to provide peak day demand. With the proposed replacement well installation previously discussed, Cal Water Oroville indicates it can maintain sufficient production capacity to supply all of the current annual average day and maximum day demand (Cal Water 2020 UWMP, 2021). The amount of groundwater utilized by Cal Water Oroville in past years is shown in Table 8-12 below.

### Demand Related to Fire Suppression & Impacts

In the recent past, Butte County areas experienced the devastating Camp and North Complex Fires, which destroyed nearly 17,000 structures, including more than 14,000 homes, and displaced many more residents. Therefore, the importance of functional fire hydrants is understood. In 2006, LAFCO's MSR noted, "The El Medio Fire Protection District has apparently reported that turning on a hydrant too quickly is sufficient to blow a water line" (LAFCO, 2006). 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. El Medio once served a population of approximately 6,000 persons within a geographic area of approximately 1,500 acres. EMFPD has experienced staff shortages and budget shortfalls over the last decade, resulting in its ultimate closure in December 2020. Since then, Oroville Fire Department and CAL FIRE have taken over coverage for their respective territory. The MSR consultants do not have data indicating which agency is responsible for maintaining fire hydrants throughout the City. Sufficient water pressure is needed to support emergency fire suppression needs. However, Cal Water's staff did indicate that in recent years Cal Water has completed water pipeline replacement

projects in South Oroville to address pressure issues (Cal Water, Skarb, 2023). Due to time and information constraints, this MSR does not analyze the supply/demand situation in relation to fire suppression needs within the Cal Water service area. Therefore, it is recommended that when a MSR for Cal Water is next updated in approximately five years, LAFCO should ask Cal Water’s engineers to verify sufficient water supply for fire-fighting purposes.

A related but slightly different situation exists concerning potential future impacts associated with a wildland fire in Cal Water’s surface water source watershed. The risks that wildland fires could pose to the water source from PG&E and to Cal Water Oroville’s overall system are not well documented. However, Cal Water’s 2022 Watershed Sanitary Survey Report acknowledges that “a fire in the watershed could contribute large loads of suspended solids and organic matter to the water supply during and immediately after a fire and for some time until the fire area is stabilized” (Cal Water, 2022). This took place, in fact, following the North Complex and Dixie Fires in 2020. The storm event in October 2021 washed large amounts of ash and debris into the water. Cal Water’s local treatment operators were able to successfully treat water that was more than twice as turbid as any water they had previously been required to treat at the plant. Lessons were learned from that instance, and new procedures and equipment were put in place to help address similar scenarios in the future (Cal Water, Lind, 2023).

Table 8-12: Groundwater Utilized by Cal Water Oroville in Past Years

All or part of the groundwater described below is desalinated.						
Groundwater Type	Location or Basin Name	2016	2017	2018	2019	2020
Alluvial Basin	Wyandotte Creek Subbasin	134	432	126	145	5
<b>TOTAL</b>		134	432	126	145	5
<p>NOTES:</p> <p>(a) Volumes are in units of AF.</p> <p>(b) The Wyandotte Creek Subbasin is not adjudicated, and the projected groundwater supply volumes are not intended to and do not determine, limit or represent Cal Water’s water rights or maximum pumping volumes. Any determination of Cal Water’s water rights, as an overlying owner, appropriator, municipal water purveyor or otherwise, is beyond the scope of this report and the UWMP statutes and regulations.</p>						

Source for Table 8-12 above: Cal Water 2020 UWMP, 2021

Future Water Demand (Projected)

Considering historical water use, expected population increase and other growth, regular climatic variability, and other assumptions, water demand is projected to be 2,654 AFY in 2025 and decrease to 2,586 AFY by 2045, a change of 6 percent compared to the 2016-2020 average. 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 (Cal Water, 2020 UWMP, 2021).

Cal Water's 2020 UWMP indicates that based on historical data and projected demands and the planned construction of a new well in 2021, it is assumed that groundwater will comprise approximately four percent of future supplies (Cal Water, 2020 UWMP, 2021). Cal Water's 2020 UWMP indicates that the available supply is expected to be sufficient to meet the projected future demands of the service area in normal and multiple dry-year periods through 2045. It should be noted that the Wyandotte Creek Subbasin is not adjudicated, and the projected groundwater supply volumes are not intended to and do not determine, limit, or represent Cal Water's water rights or maximum pumping volumes (Cal Water, 2020 UWMP, 2021).

There are no planned future water supply projects or programs that are expected to provide a quantifiable increase to the Oroville District's water supply (Cal Water, 2020 UWMP, 2021). New supplies are regularly assessed as part of the Cal Water Oroville Infrastructure Improvement Plans (Cal Water, Jenkins, 2023).

#### Water Recycling

The SC-OR Wastewater Treatment Plant receives domestic wastewater derived from showers, dishwater, toilets, kitchen sinks, and storm runoff. SC-OR's wastewater treatment plant utilizes a complex process to provide advanced secondary treatment, as described in Chapter 5. Recycled water is the concept of utilizing treated wastewater for a beneficial purpose, such as irrigating local landscapes. Cal Water Oroville's 2020 UWMP indicates that implementing a recycled water program at the treatment plant would require upgrades for tertiary treatment and a new distribution infrastructure between the treatment plant and potential District customers. Based on these conditions, a recycled water system in the area is not planned at this time (Cal Water, 2020 UWMP, 2021). Additionally, Cal Water Oroville does not expect to meet future demand with recycled water (Cal Water, 2020 UWMP, 2021).

#### Summary Comparison of Water Supply and Demand

LAFCO's 2006 MSR determined that "Cal Water Oroville can provide adequate water supplies to meet the demand in the Oroville District. The Oroville District's water supply is sufficient to accommodate the projected growth. Cal Water Oroville should continue utilizing conservation measures and should continue its program to reduce unaccounted water" (LAFCO, 2006). However, since 2006, new information has become available, including Cal Water Oroville's 2020 UWMP, the Means Consulting Report, the Butte County Board of Supervisors' October 26, 2021 report on the Miocene Canal, and various other reports and databases. These reports have been briefly analyzed in this MSR and listed in the Bibliography.

Typically, when comparing water supply to water demand, the ideal situation is to have water supply exceed demand such that the excess supply provides a buffer that can serve in case of unforeseen events or hazards. Cal Water's UWMP and Table 8-7 on page 8-27 show that currently, in typical water years, the available water supply (2,753 AFY) matches the existing water demand (2,753) (Cal Water, 2020 UWMP, 2021). However, as previously noted, Cal Water

could have the ability to purchase additional surface water supplies from Butte County (up to 3,000 AFY) or increase the pumping of groundwater. Cal Water Staff would like readers to note that the Company’s “Total Right or Safe Yield” of purchased water for the District is equal to 3,150 AFY, which is the sum of its two contractual agreement volumes, 3,000 AFY from PG&E and 150 AFY from Butte County as listed in Table 8-7 above (Cal Water, 2020 UWMP, 2021).

In the future, the UWMP indicates that demand for water will potentially decrease from 2,753 AF in 2020 and 2,654 AF in 2025 to 2,586 AF in 2045 (Cal Water, 2020 UWMP, 2021). Additionally, the UWMP describes water conservation measures that will facilitate this projected decrease in demand. The Plan indicates that water conservation measures will likely improve in the future, thereby securing a balance in the year 2045 with a supply of 2,586 AFY, meeting the demand of 2,586 AFY (Cal Water, 2020 UWMP, 2021). However, in dry-year periods, water demands are expected to be somewhat higher, potentially up to 2,833 AFY by 2025, during an extended five-year drought (Cal Water, 2020 UWMP, 2021). The drought demand of 2,833 AFY exceeds projected 2045 supply (2,586 AFY) (Cal Water, 2020 UWMP, 2021). However, Cal Water’s staff has noted that the drought demand is projected to be less than the 3,150 AFY of “Total Right or Safe Yield.”

The UWMP relies upon a large-scale model for the southwestern United States based on data from 2013 to consider the effect of climate change on water demand (Cal Water, 2020 UWMP, 2021). Specifically, the local effect of climate change on Cal Water-Oroville’s primary water source, PG&E supply from the Feather River, is not described in the UWMP. However, the UWMP does note that Cal Water is studying climate change. Cal Water provides additional information about its research and programs related to climate change in Chapter 9 as part of its public comment letter dated May 30, 2023.

The population in Oroville and the associated water demand will likely rise in the future. Additionally, it is possible that Cal Water may receive approval from the CPUC to expand its service area or to merge/consolidate with a different water service area, and this introduces the potential for future population and water demand variability. 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, given the data gaps identified in this paragraph. This long-term water demand question would ideally be hydrologically modeled by a hydrologist.

### *Drinking Water Quality*

This Section focuses on one aspect of water quality: drinking water quality. When drinking a glass of water, it is essential 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. Cal Water Oroville’s water quality monitoring program includes taking raw and treated water samples throughout the year.

LAFCO's 2006 MSR found the following: "The water delivered to Cal Water Oroville's customers currently meets all federal and state water quality regulations. According to Cal Water Oroville's 2004 water quality report, the samples tested were well below the MCL (maximum contaminant level) for all contaminants. The arsenic levels detected ranged from none to 2 ppb (parts per billion). The new MCL for this constituent that went into effect on January 23, 2006, is 10 ppb. Therefore, the Oroville District is below the new arsenic MCL. In addition, both surface water and groundwater are treated with chlorine and fluoride prior to distribution" (LAFCO, 2006).

In 2017 Means Consulting prepared a report entitled "Report on California Water Service's Oroville District an Evaluation of Service Offerings" (listed in the Bibliography), which found the following points about the quality of water provided by Cal Water Oroville:

- In Cal Water's case, its Oroville service area has not had any water quality violations in at least the last decade (i.e., from 2007 to 2017).
- The water Cal Water provided to its customers in Oroville in 2016 met every primary and secondary state and federal water quality standard, and it achieved similar results in 2013, 2014, and 2015 (Means Consulting, 2017).

Cal Water Oroville's 2020 UWMP noted that Groundwater Well #2 had been closed due to the presence of per- and polyfluoroalkyl substances (PFAS) (Cal Water, 2020 UWMP, 2021). The U. S. EPA reports that PFAS persist in the environment and can also be found in the blood of people and animals worldwide. PFAS are found in water, air, fish, and soil at locations across the nation and the globe. Scientific studies have shown that exposure to some PFAS in the environment may be linked to harmful health effects in humans and animals (EPA, n/d). Therefore, the closure of Well #2 by Cal Water Oroville was an important step in reducing exposure to PFAS. Well #5 has also been removed from service due to the detection of PFAS. Well #10 has had Granular Activated Carbon treatment added to the wellhead to remove PFAS before sending to customers. (Cal Water, Lind, 2023)

California Drinking Water Watch

Cal Water Oroville's water system was queried on the C.A. Drinking Water Watch (Safe Drinking Water) online database. Over the past twenty-six years, Cal Water Oroville has received only two water quality violations for the Water Treatment Plant (Water System No. CA0410005). The most recent violation occurred in January 2022, when lab results showed an issue related to the Revised Total Coliform Rule (California Drinking Water Watch, 2022). The treatment plant's compliance with the Rule was documented in March 2022. Details are listed in Table 8-13 below.

Water System Number	System Name	Type	Mx Treatment Class	Primary Source Water Type
CA0410005	Cal Water Service Company	C	T4	Surface Water

Data Source: C.A. Water Board Drinking Water Division Database Query Result

Table 8-14: Water Quality Violations Listed in Database for Cal Water - Oroville

Violation No.	Status	Violation Type	Violation Name	Analyte Code	Analyte Name
2022-9621002	V	3A	MONITORING, ROUTINE, MAJOR (RTCR)	8000	REVISED TOTAL COLIFORM RULE (RTCR)
1996-9621001	V	22	MCL (TCR), MONTHLY	3100	COLIFORM (TCR)

Data Source: C.A. Drinking Water Watch.

[https://sdwis.waterboards.ca.gov/PDWW/JSP/Violations.jsp?tinwsys\\_is\\_number=97&tinwsys\\_st\\_code=CA](https://sdwis.waterboards.ca.gov/PDWW/JSP/Violations.jsp?tinwsys_is_number=97&tinwsys_st_code=CA)

## 8.7: Infrastructure

### Existing Infrastructure

Cal Water Oroville currently operates two storage tanks, six booster pumps, and 59 miles of pipeline to deliver roughly 2.5 million gallons of water daily (West Yost, 2017 and Cal Water, 2020 UWMP, 2021). Back in 2006, LAFCO's MSR noted that "Cal Water Oroville's infrastructure consists of four wells," and the wells are properly maintained and monitored through a telemetry system" (LAFCO, 2006). However, three of the wells have been taken out of operation since then. Cal Water currently has one operational groundwater well (Cal Water Consumer Confidence Rpt, 2021). The water pipes in the Cal Water Oroville District are constructed of wrought iron, cast iron, steel, concrete, and PVC. Cal Water currently has an aggressive pipe replacement program through which over 1,000 feet of distribution pipelines are replaced every year. When unaccounted water in the system reaches a level of 10% or higher, a full-scale system audit is performed, and repairs are made where necessary. The pipeline infrastructure within the Oroville District is generally well-maintained. In 2006, LAFCO's MSR found that some areas of pipeline were old and deteriorated (LAFCO, 2006). However, more recently, in 2021, the State Water Resources Control Board Division of Drinking Water completed an Inspection Report which found that the Cal Water Oroville "water system is in general compliance with regulatory requirements and is professionally operated and maintained. Minor deficiencies were found during the inspection" (SWRCB, 2021). Cal Water Oroville may also utilize a connection with Thermalito Irrigation District during emergencies or treatment plant maintenance (Cal Water Consumer Confidence Report, 2021).

Recent improvements to infrastructure include, but are not limited to:

- Installation of a 20-inch pipe from the Cherokee Reservoir in place of the former raw water ditch,
- Installation of a new hydropneumatic tank for the Ranch Golden Zone (replaced an old tank), and
- Removal/destruction of Well 901 during the summer of 2020,
- The diversion at Gold Run Creek was rebuilt,
- Plant Control system was replaced with a programmable logic controller to facilitate automating the filter backwash recycling system,
- A particle counter was installed that can monitor either raw or treated water,
- Two 50-pound-per-day (PPD) chlorine generators were replaced with two 100 ppd generators.
- (Data Source: SWRCB, 2021 and Cal Water, 2022)

#### Water Treatment Plant

The raw surface water purchased from PG&E and from Butte County is processed through a 7 MGD conventional water treatment plant (LAFCO, 2006). The treatment process includes coagulation-sedimentation, fluoridation, filtration, and disinfection (SWRCB, 2021). The rapid mix and flocculation processes are not strictly conventional as they lack an engineered rapid mix chamber (high shear rate) and flocculation paddle wheels (low energy addition). However, the treatment plant does receive credits for the removal of Giardia and the inactivation of viruses.

Cal Water's Oroville Treatment Plant currently operates with approximately 10 percent losses (i.e., if 100 AFY is treated at the plant, 90 AFY is produced) (Cal Water 2020 UWMP, 2021). The water treatment plant is located near the Thermalito Power Canal. Cal Water Oroville has not reported any plans to expand its water treatment plant (LAFCO, 2006). Recent improvements to the water treatment plant include installing three electrical panels (SWRCB, 2021).

A January 2003 report by Cal Water entitled "Drinking Water Source Assessment, Cal-Water Service Co-Oroville in Butte County regarding the Oroville Treatment Plant – RAW" recommended a "Protection Zone" around the water treatment plant intake with a 2,500-foot radius called "Zone B." The Assessment also recommends a Protection Zone "A" of 400 feet from a reservoir or primary stream boundaries and 200 feet from tributaries (Cal Water, 2003).

#### Water Storage

Cherokee Reservoir stores raw water. Oroville Reservoir functions as a sedimentation basin. A Clearwell Tank and a High Duty Reservoir are also utilized (SWRCB, 2021).

### 8.7.1. Infrastructure Needs and Deficiencies

Cal Water's website states: *"Every three years, Cal Water submits an Infrastructure Improvement Plan to an independent state agency and separate state watchdog, the Office of Ratepayer Advocates, for review and approval. This process helps to ensure that we are able to continue providing a reliable supply of high-quality water for customers' everyday needs and sufficient resources for firefighters. Our most recent Infrastructure Improvement Plan for years 2019-2021 was submitted on July 2, 2018, kicking off a typically 18-month review process. With a delay due in part to the coronavirus pandemic, final approval was given near the end of 2020 and included revised budgets that reflect the actual cost of operating, maintaining, and upgrading our water system. Customers' February 2021 bills will reflect these new rates"* (Cal Water, n.d.).

The SWRCB 2021 Inspection Report noted that several stations are scheduled for future improvements. However, planned and needed improvements that were not addressed in Cal Water's approved 2018 infrastructure improvement plan are still subject to as-yet unrealized approval by the CPUC. Proposed future improvements may include work along the following stations:

- Station 1: will be removed, and the existing structure will be used for storage only.
- Station 2: currently on stand-by and will possibly be destroyed due to PFOA/PFOS contamination.
- Station 3: New booster pumps, new electrical, and a backup generator will be installed.
- Station 10: Well is active (as of 2022) with GAC filtration, a new backup generator, and an 800 gpm well.
- (Data Sources: SWQCB, 2021 and Cal Water, Lind, 2023)

The Oroville service area currently has several pressure zones supported by associated booster/lift stations (SWQCB, 2021). Overall, Cal Water provides sufficient water pressure in the pipelines to serve routine customer needs. Cal Water has identified the neighborhoods where the minimum water pressure is available, as shown in Figure 8-7. Water pressure sufficiency for local fire hydrants was not studied in this MSR. Cal Water does not have any current plans for major system upgrades or expansions (COOR, 2022). However, Cal Water's 2021 GRC was still under review by the CPUC at the time this report was compiled. Cal Water will submit a new infrastructure improvement plan to the CPUC in 2024 and every three years subsequently (Cal Water, K. McCusker, 2023).



Figure 8-7: Neighborhoods with Minimum Water Pressure

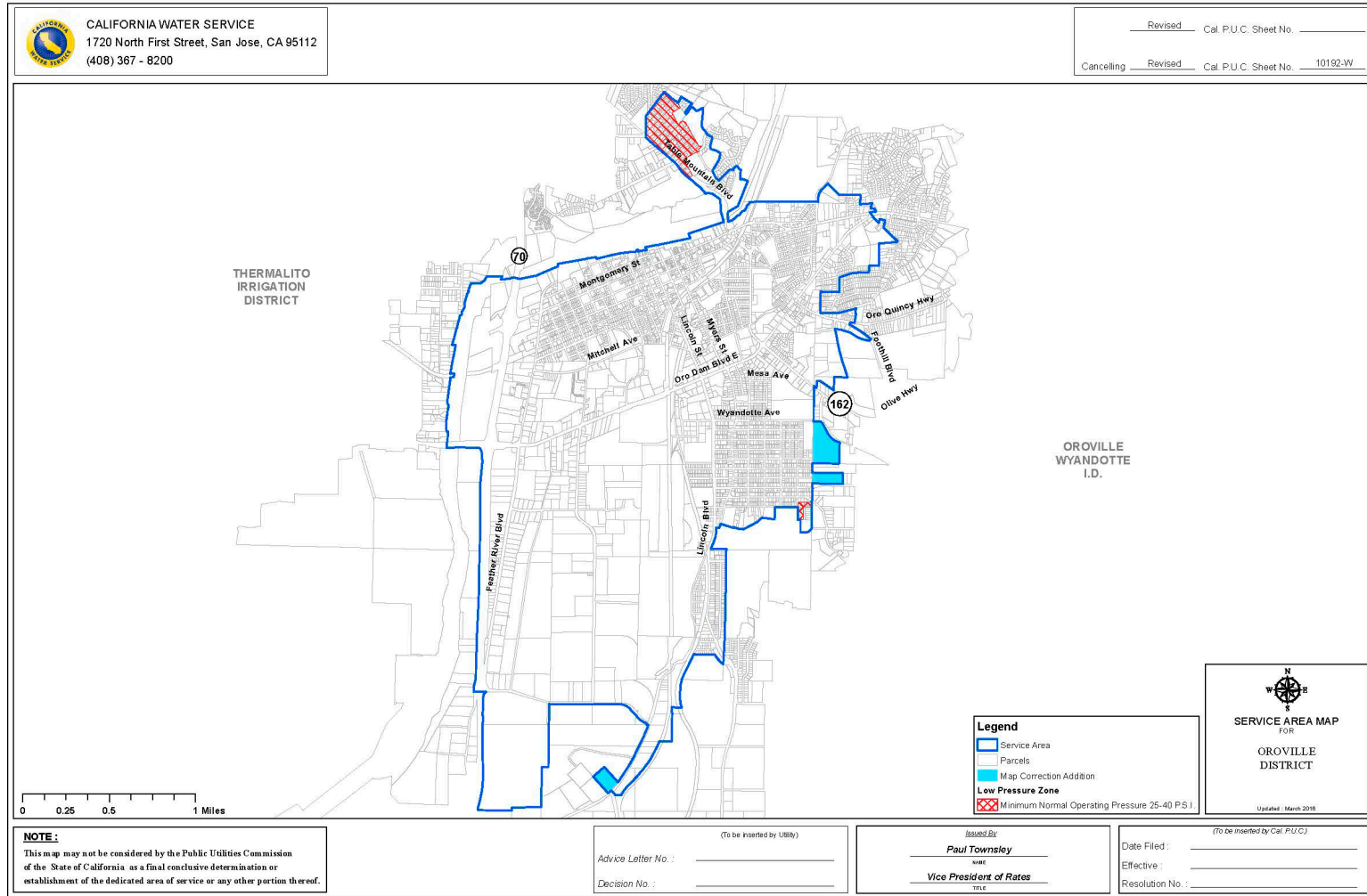


Table 8-15: MSR DETERMINATION: PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES, INCLUDING INFRASTRUCTURE NEEDS OR DEFICIENCIES

Number	Indicator	Determination
CWS PUB-1	<p>Has the Organization been diligent in developing plans to accommodate current and future constituents' infrastructure and service needs? Regularly reviews and updates its service plans to help ensure that infrastructure needs and deficiencies are addressed in a timely manner.</p>	<p>Regarding water quality, Cal Water Oroville meets current state and federal requirements. Cal Water Oroville submits regular reports to Calif. Public Utilities Commission.</p> <p>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."</p> <p>The 2020 UWMP notes that Cal Water continues to study the climate change issue and potential effects on infrastructure, watersheds, and 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.</p>
CWS PUB-4	<p>The Company meets infrastructure needs for the provision of water service.</p>	<p>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.</p>

CWS PUB-5	Is there duplicate infrastructure by other agencies nearby?	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.
CWS PUB-6	The Organization has preventative maintenance measures and has planned for replacement of aging infrastructure.	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.
CWS-PUB-7	Evaluation of the Organization's capacity to assist with and/or assume services provided by other agencies.	<p>Cal Water Oroville has demonstrated an ability to collaborate professionally as follows:</p> <ul style="list-style-type: none"> <li>• Participated in the development of the Northern Sacramento Integrated Regional Water Plan (NSV-IRWMP),</li> <li>• Participates in the regional WAC/SGMA</li> <li>• Maintains water inter-tie infrastructure with TWSD.</li> </ul> <p>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.</p>

## 8.8: Finances

Financial analysis for Cal Water Oroville is presented in this Section. Cal Water Oroville is part of a private company that serves the City of Oroville urban area that either SFWPA or TWSD does not serve. In 2006 LAFCO's MSR determined that "Cal Water Oroville's rates (metered and flat) are significantly more than the corresponding rates charged by Cal Water Chico. Cal Water Oroville's rates are also significantly more than the rates charged by SFWPA and TID [TWSD]" (LAFCO, 2016). As a private company, California Water Service charges rates that allow it to cover the costs of providing water service and make a profit. Since the 2016 MSR, new information has been provided to the public concerning Cal Water Oroville's rates as follows:

- 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.
- West Yost Associates. May 2017. Oroville System Report. Prepared for California Water Service. 30-pages.
- Butte LAFCO. May 3, 2018. Oroville Region Water Service Study. 23-pages. Prepared by Northstar Engineering.

### Water Rates

The 2018 Service Study by Northstar Engineering found that as a private corporation, Cal Water is not required to comply with Prop 218. Instead, the California Public Utilities Commission (CPUC) reviews applications from Cal Water for rate increases. The CPUC's general proceeding is a formal review process that considers how projects could affect utility ratepayers. The CPUC's general proceedings include a public participation hearing where local customers can provide written or oral input. Additionally, stakeholders may register as formal participants in the proceedings. Registered customers receive copies of all filings, legal briefs, formal testimonies, and other documents related to the general proceeding. (LAFCO, 2018). CPUC's review aims to ensure that necessary improvements are made to the water system, that the system is operated efficiently, that the rates are based upon "cost of service," and that the Company only earns a modest return on the funds it invests in water system infrastructure. This return on investment is typically paid out to stockholders in the form of an annual cash dividend. All large water companies regulated by the CPUC are required to file a General Rate Case every three years. The 2018 Service Study by Northstar Engineering contains detailed information on the six steps involved with the rate-case process (LAFCO, 2018).

In 2016, the average monthly water bill for a Cal Water Oroville District customer was \$58.00 (Analysis Group, Inc., 2017). This rate increased slightly in 2018 to \$62.07 average monthly, given that typical monthly residential usage of 10 CCF is for Cal Water per "Notice of California Water Service's Request to Increase Rates for the Cost of Capital Application (A.17-04-006) Oroville" where 1 CCF = 748 gallons (LAFCO, 2018). In 2023, Cal Water's K. McCusker shared unpublished rate data indicating that the median consumed amount of water in 2017 was 7 ccf, and the median bill was \$43.73. In 2018, the median consumption was also 7 ccf, with a median bill of \$50.07. And \$52.12 in 2019, and \$51.97 in 2020, which is the last year for which data was available at the time this report was compiled (Cal Water, K. McCusker, 2023).

The 2018 Service Study by Northstar Engineering noted the following financial details about Cal Water<sup>8</sup>:

- Distribution expenses account for 4.9% (\$3.01) of a typical monthly water bill.
- Administration expenses account for 29.4%, \$18.27 of a typical monthly water bill.
- Capital Spending expenses are a little harder to relate directly since they are a significantly different business model where depreciation and rate of return come into play. Capital Spending is estimated at 23.3%, \$14.48 of a typical monthly water bill.
- Depreciation expenses account for 11.2%, \$6.96 of a typical monthly water bill.
- Tax expenses account for 6.7%, 4.16 of a typical monthly water bill.
- Earnings expenses account for 10.8%, \$6.69 of a typical monthly water bill.

Water sales income for Cal Water is heavily weighted toward the Quantity Charge for actual metered water sales, with roughly 2/3 of their water sales income from this source and 1/3 from the Monthly Meter Charge (LAFCO, 2018). Since Cal Water conforms most closely to an industry standard of 70% for water sales and 30% for the monthly service charge, they are most impacted by water conservation, which can result in reduced water sales (LAFCO, 2018).

Pursuant to Article 12 of the California Constitution, the CPUC regulates Cal Water's rates, operations, terms of service, budgets, financing, and water quality. Every three years, Cal Water must submit an application to the CPUC to have its rates, budgets, expenses, and proposed infrastructure improvements approved. Cal Water provides an application to the CPUC to prove that its expenses, operations, and proposed infrastructure improvement projects are just and reasonable (Means Consulting, 2017).

### Requested Rate Increases

On July 1, 2021, California Water Service (Cal Water) filed its 2021 Infrastructure Improvement Plan, also known as a General Rate Case (GRC), Application (A.21-07-002) with the California Public Utilities Commission (CPUC). As part of the application, Cal Water requested the rate increase to fund needed infrastructure improvements, water system maintenance, water quality initiatives, safety measures, business operations and to keep pace with inflation. Cal Water – Oroville submitted an application with the CPUC to initiate the statutorily required review of the water utility's operations, budgets, rates, and proposed water system improvements. As part of the application, Cal Water – Oroville proposed \$6 million in infrastructure improvements over the three-year cycle, which covers the years 2023, 2024, and 2025. In its application, Cal Water also proposed the consolidation of rates between its Oroville and Chico service areas. If the proposal

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<sup>8</sup> In 2023 Cal Water's staff provided an alternative distribution of expenses as follows: Capital improvements comprise 44% of costs; Centralized services comprise 19% of costs; Personnel comprise 18% of costs; Water production comprises 9% of costs; Other O&M comprises 8% of costs; Conservation comprises 2% of costs (Cal Water, K. McCusker, 2023).

is approved by the California Public Utilities Commission, Cal Water’s customers in Oroville would see their bills increase from \$47.82 (as of 2021) to \$51.73 in 2025. Information about Cal Water – Oroville’s application is available on Cal Water’s website at: <<https://www.calwater.com/rates/iip-2021/>>.

### Water Affordability

Water affordability relates to the monthly fee for domestic water compared 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. The Public Policy Institute of California’s (PPIC) website at: <<https://www.ppic.org/publication/water-affordability/>> describes water affordability throughout the state. Classifying water affordability is complicated because it is not yet precisely defined. However, the PPIC recommends using a threshold of 1.5 percent to determine whether residents experience affordable water rates for basic needs like cooking, washing, and drinking. This 1.5 percent threshold is utilized for an affordability calculation in Table 8-16 below.

The results in Table 8-16 below show that, on average, many community residents may not be able to afford to pay the current water rates in the Cal Water Service Area. This should not be interpreted to imply that the water rates are either too high or too low. The calculations only relate to the ability of customers to pay the charges based on what is known about the average household income in the area. Equations typically have at least two parts; in this case, the parts are: 1) prices and 2) ability to pay the price. The 2018 Water Service Study by Northstar Engineering found that "There are no indications of excessive costs or expenses that may be targeted for significant cost reduction" in relation to each of the three water service providers in the Oroville Area (LAFCO, 2018). The 2018 report indicates that water rates for Cal Water Oroville reflect the cost of providing the service. Table 8-16 utilizes the water rate information from the The 2018 Water Service Study. However, current rates may be lower if customers conserve and utilize less water, as detailed by Cal Water in their May 30, 2023 letter provided in Chapter 9. Table 8-16 shows that, on average, many community residents may struggle financially to pay the current water rates.

<b>Census Tract</b>	<b>Median Household Income (2019)</b>	<b>1.5 Percent Calculation</b>	<b>Annual Average Water Rate (2018)</b>	<b>Affordable?</b>
25	\$37,054	556	\$744.84	no
27	49,029	735	744.84	no
28	27,031	405	744.84	no
29	48,897	733	744.84	no
30.01	29,235	439	744.84	no
30.02	41,377	621	744.84	no
32	40,318	605	744.84	no

37	Not in Cal Water boundary			
26.01	Not in Cal Water boundary			
26.02	48,090	721	744.84	no
31	52,258	784	744.84	yes
33	47,411	711	744.84	no
<p>Source: U.S. Census, 2019 American Community Survey 5-Year Estimates and Chapter 3 of this MSR  Water rate data from LAFCO, 2018, calculated as <math>62.07 * 12 = 744.84</math>.  *Note #1: Census Tracts correspond to the map provided in Chapter 3 for the City of Oroville DACs.  *Note #2: Cal Water has a Customer Assistance Program that could assist customers by making water service more affordable. The CAP rates are not reflected in this Table.  *Note #3: Cal Water disagrees with the rates presented and the calculations utilized in this Table. Cal Water has presented alternative data in their May 30, 2023 letter provided in Chapter 9.</p>				

Water affordability is the subject of the Human Right to Water Data Tool authored by the State of California, Office of Environmental Health Hazard Assessment. This Water Data Tool assesses various parameters for community water systems throughout the state. The Tool's website (<https://oehha.ca.gov/water/report/human-right-water-california>) provides extensive documentation of its data sources and references, including the U.S. Census. This Water Data Tool was queried for the Cal Water – Oroville District, and the results are shown in bullet points below and on the map in Figure 8-8:

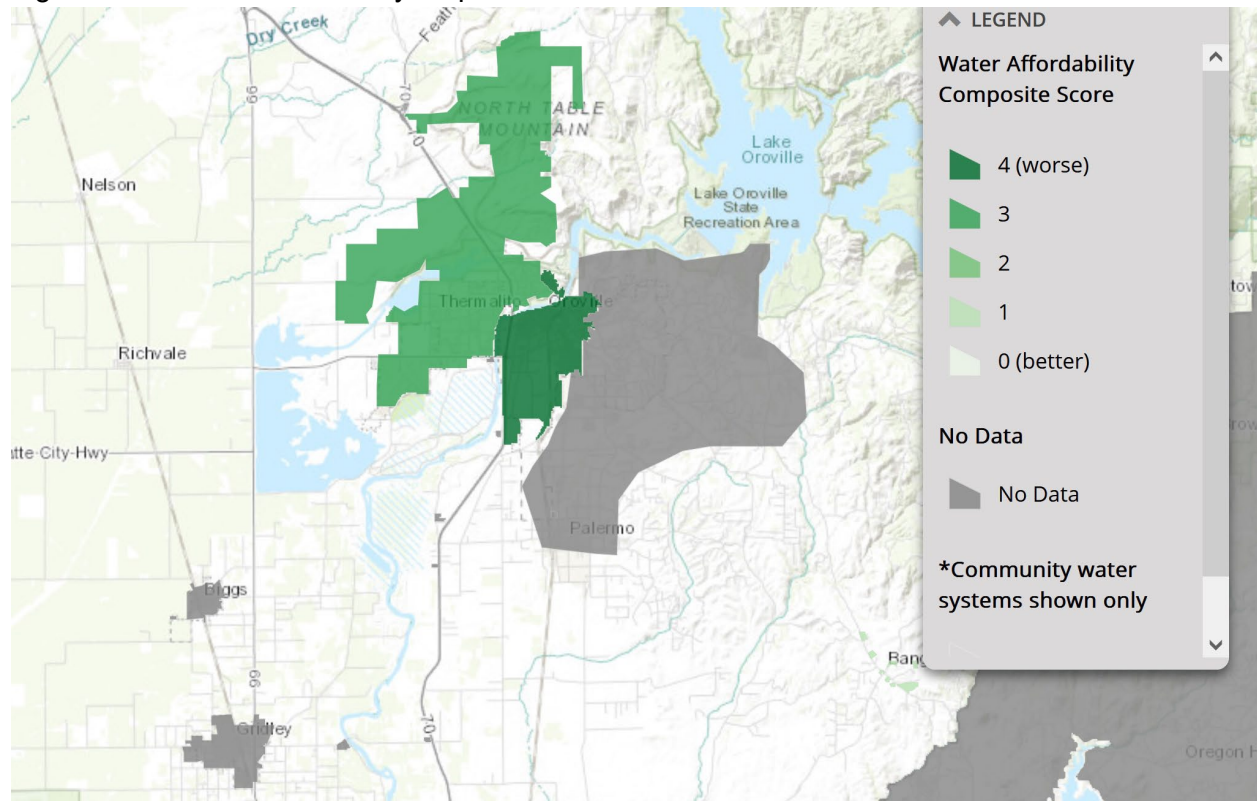
- Cal-Water Service Co.-Oroville (PWSID: CA0410005)
- This system serves 10,556 people.
- The Water Affordability Composite Score is: 4 - Worst

These results indicate that relative to other water service providers in the State, Cal Water's customers have water bills that may not be affordable to them, given their income levels.

Addressing water affordability is an important issue that is being considered in California. For example, the state legislature<sup>9</sup> is working to address water affordability issues. Additionally, several organizations are studying water affordability (Pacific Institute, 2013). Cal Water's 2020 UWMP also describes household incomes within the customer base (Cal Water 2020 UWMP, 2021). More relevantly, Cal Water has a Customer Assistance Program (CAP) to help with water service affordability. CAP offers a discount on the monthly service charge. When LAFCO next prepares an MSR or SOI Update in the Oroville area, it is recommended that the MSR or SOI 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

<sup>9</sup> For example, Sen. Bill Dodd from Napa authored SB-222, a bill that hoped to facilitate the provision of some financial assistance to low-income water customers. Cal Water supported SB-222, stating that all Californians should have access to bill assistance like that available to their customers through their Customer Assistance Program (CAP). However, the bill was not signed by Governor Newsom.

Figure 8-8: Water Affordability Map



Data Source for Figure 8-8: Human Right to Water Data Tool authored by the State of California, Office of Environmental Health Hazard Assessment, via the website (<https://oehha.ca.gov/water/report/human-right-water-california> )

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.

### Expenses

An average of the expenses over three fiscal years was calculated to be approximately \$5.4 million, as shown in Table 8-17 below. Raw water supply costs Cal Water about \$125 per acre-foot (LAFCO, 2018). Cal Water pays taxes, generates earnings, and invests in assets (LAFCO, 2018).



Table 8-17: Water Use and Costs – Cal Water – Oroville

<b>District</b>			<b>Cal Water</b>
<b>Number of Customers</b>			3600
<b>Annual Water Use</b>	<b>Total Water Use (Acre-feet)</b>		2300
	<b>Water Use Per Customer</b>	<b>Acre-feet</b>	0.64
		<b>CCF</b>	278.3
<b>Expenses</b>	<b>Total Expenses</b>		\$ 5,415,136
	<b>Per Unit Expenses</b>	<b>Per Customer</b>	\$ 1,504.20
		<b>Per Acre-foot</b>	\$ 2,354.41
		<b>Per CCF</b>	\$ 5.40
<b>Revenue</b>	<b>Total Revenue</b>		\$ 4,441,777
	<b>Per Unit Revenue</b>	<b>Per Customer</b>	\$ 1,233.83
		<b>Per Acre-foot</b>	\$ 1,931.21
		<b>Per CCF</b>	\$ 4.43

(Data Source for Table 8-17 above, LAFCO, 2018)

### Capital Improvement Projects

Cal Water's staff has noted that since 2011, Cal Water - Oroville has invested more than \$7.2 million in infrastructure improvements. Cal Water submits triennial Infrastructure Improvement Plans to the CPUC<sup>10</sup> every three years to ensure the needs of its customers are met, and its rates reflect the actual cost of providing service. In 2021, Cal Water submitted its triennial Infrastructure Improvement Plan to the CPUC for review and approval. As part of its application, Cal Water has proposed completing more than \$4,000,000 in improvements to the water system between 2023 and 2026 (Cal Water, J. Skarb, 2023). However, the CPUC has not yet made a decision on this request for funding (an associated rate increase) as of April 27, 2023.

<sup>10</sup> Section 455.2 (c) of the California Public Utilities Code mandates that the California Public Utilities Commission "establish a schedule to require every water corporation subject to the rate case plan for water corporations to file an application pursuant to the plan every three years.

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 (West Yost, 2017). These improvements are listed in Table 8-18 below.

Table 8-18: Capital Expenditure Summary for 2009 through 2016

Program Area	Capital Cost
Water Supply	\$1,250,000
Water Treatment	\$1,140,000
Wells	\$230,000
Booster Pump Stations	\$125,000
System Storage	\$750,000
Distribution System Pipelines	\$3,815,000
Other System Improvements	\$393,000
<b>Total</b>	<b>\$7,703,000</b>

Data Source for Table 8-18 above, West Yost, 2017

During the seven-year timeframe from 2009 to 2016, Cal Water invested a total of \$7.7 million, which averages to approximately \$1.1 million per year (West Yost, 2017). More recently, Cal Water plans to expend 34,328 on a water meter replacement program (CPUC, 2022)

In 2022 Cal Water Company requested that the CPUC allow rate increases to fund various capital improvement projects in the combined Oroville/Chico districts, including the following proposed projects:

1. Water Treatments – PFAS, Carbon Tetrachloride
2. Design Only Projects – Station rebuild, Storage
3. Capital Project Contingency (Removed)
4. Previously Funded Incomplete Project

It is not clear whether the CPUC allowed a rate increase to cover the costs of these capital improvement projects. However, by making these requests, Cal Water is demonstrating a willingness to invest in physical assets associated with water service provision.

#### Other Financial Details

Typically, MSRs study an organization's debt, outstanding litigation, risk management, and insurance. However, these issues are not studied herein due to information and time constraints.

Table 8-19 below lists the determinations for Cal Water - Oroville's financial policies and fiscal sustainability.

Table 8-19: MSR DETERMINATIONS FOR CAL WATER - OROVILLE FINANCIAL ABILITY TO PROVIDE SERVICES

	Indicator	Determinations
CWS-FIN-1	Summary financial information presented in a standard format and simple language.	<p>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: <a href="https://bit.ly/3IQ40Ah">https://bit.ly/3IQ40Ah</a>. Although this 2021 Cal Water Oroville report does not appear to have been audited, it is similar to financial reports provided by government-owned utilities per Cal Water staff. Cal Water’s most recent proposed Infrastructure Improvement Plan is available on its website at: <a href="https://www.calwater.com/rates/iip-2021">https://www.calwater.com/rates/iip-2021</a>.</p> <p>Pursuant to federal securities laws, California Water Service Group, of which Cal Water is a subsidiary, prepares and submits comprehensive annual financial reports. These reports are publicly available on the organization’s website at: <a href="https://ir.calwatergroup.com/financial-reports/annual-reports">https://ir.calwatergroup.com/financial-reports/annual-reports</a>.</p> <p>Additional financial information has been shared with the public concerning Cal Water - Oroville's rates, finances, and operations in several recent reports, including:</p> <ul style="list-style-type: none"> <li>▪ Analysis Group, Inc. January 2017. A Comparison of Residential Water Bills: Cal Water Oroville and South Feather Water &amp; Power Agency. Contributions from David Sosa. Commissioned by Cal Water. 15-pages.</li> <li>▪ Butte LAFCO. May 3, 2018. Oroville Region Water Service Study. 23-pages. Prepared by Northstar Engineering.</li> <li>▪ West Yost Associates. May 2017. Oroville System Report. Prepared for California Water Service. 30-pages.</li> </ul>
CWS-FIN-2	Other financing policies are clearly articulated.	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

		<p>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: <a href="https://bit.ly/3QJZ4i8">https://bit.ly/3QJZ4i8</a>. 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.</p>
CWS-FIN-3	Rates are adopted consistent with requirements of the State of California.	<p>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.</p>
CWS-FIN-4	Water affordability factors in relation to disadvantaged communities are considered.	<p>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.</p>
CWS-FIN-5	Capital Improvement Projects which serve to enhance system reliability are funded.	<p>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</p>

		<p>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.</p>
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## 8.9: Cost Avoidance & Facilities Sharing

LAFCO's 2006 MSR found that "Cal Water Oroville is part of a private company which serves the City of Oroville urban area that is not served by either SFWPA or TID [now TWSD]. Accordingly, specific cost avoidance and facilities sharing opportunities were not evaluated in the 2006 MSR.

Currently, Cal Water Oroville implements the following cost-saving actions:

- Communicates with nearby municipal service providers.
- Participates in regional planning efforts such as the IRWMP and SGMA.
- Has a connection with Thermalito Irrigation District, which can be used during emergencies or treatment plant maintenance (Cal Water 2020 UWMP, 2021).
- Is considering a future consolidation with Cal Water Chico (CPUC, 2022).

Additionally, Cal Water staff noted the following cost-avoidance activities:

- Cost-sharing with Cal Water's central services, including engineering services, water quality services, electrician services, customer services and bill paying, equipment purchase negotiation, IT, and human resources.
- Coordinates with other Cal Water districts.
- Shared staff (clerk) between Cal Water's Oroville District and its Chico district for doing the requisite contracting paperwork to install water at the new Dutch Bros and Hampton Inn as efficiently as possible.
- Moved the much of water pumping to off-peak hours, saving power costs and supporting the electric grid.
- Customer Assistance Program.
- Coordination with PG&E and Butte County regarding water in the canal.
- Shared information with other local service providers about where to find best-priced local materials, etc. (Cal Water, L. Lind, 2023)

It is important for Cal Water Oroville to seek out future cost-saving opportunities because the Company has recently requested water rate increases (CPUC, 2022) and because water affordability is an issue for local disadvantaged communities.

**Reorganization:**

To save money and avoid future overhead costs, it is sometimes beneficial for an organization to pursue structural and/or jurisdictional reorganizations. For example, Cal Water has proposed consolidating its Oroville and Chico Districts (CPUC, 2022).

This Chapter contains several recommendations for hydrologic and socio-economic studies, and the results of those studies may yield potential future reorganization ideas. Additionally, as the Oroville region sees new development and population growth in the future, it is possible that water infrastructure constraints or water affordability may need to be evaluated in more detail. Also, Butte County's Board of Supervisors continues to study the Miocene Canal Acquisition issue. The County also supplies raw water to Cal Water Oroville. Therefore, it is possible that the County's input or study results may include recommendations for reorganization of the local water resource infrastructure or service areas. In the future, specific recommendations for reorganization may become necessary to address the issues of geographic overlap between service areas, boundaries, and SOIs.

Table 8-20: MSR DETERMINATION: STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES		
Number	Indicator	Determination
CWS-SHA-1	The Organization collaborates with multiple other agencies for the delivery of services within its service area.	Cal-Water Oroville collaborates with multiple other agencies for the delivery of services within its service area. Specifically, Cal Water Oroville: <ul style="list-style-type: none"> <li>• Sustains a level of communication with nearby municipal service providers.</li> <li>• Participates in regional planning efforts such as the IRWMP and SGMA.</li> <li>• Maintains a physical infrastructure connection with Thermalito Irrigation District, which can be used during emergencies or treatment plant maintenance.</li> <li>• Is considering a future consolidation with Cal Water Chico.</li> </ul>
CWS SHA-2	Agreements for mutual aid or any other appropriate agreement (i.e., Tax Sharing Agreement) are periodically reviewed to ensure fiscal neutrality.	Cal Water Oroville has a physical infrastructure connection with Thermalito Irrigation District, which can be used during emergencies or treatment plant maintenance.

CWS SHA-3	<p>Other practices and opportunities that may help to reduce or eliminate <u>unnecessary</u> costs are examined by the Company periodically. Ideally, there is a balance between cost efficiency and risk reduction strategies.</p>	<p>Currently, Cal Water Oroville implements several cost-saving actions, including the four examples listed below:</p> <ul style="list-style-type: none"> <li>• Sustains a level of communication with nearby municipal service providers.</li> <li>• Participates in regional planning efforts such as the IRWMP and SGMA.</li> <li>• Has a connection with Thermalito Irrigation District, which can be used during emergencies or treatment plant maintenance.</li> <li>• Customer Assistance Program</li> </ul> <p>It is important for Cal Water Oroville to seek out future cost-saving opportunities because the Company has recently requested water rate increases (CPUC, 2022) and because water affordability is an issue for local disadvantaged communities.</p>
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