Ventura Local Agency Formation Commission

# Calleguas Municipal Water District Municipal Service Review



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# **Table of Contents**

Introduction	1
Maps	3
Profile	4
Growth and Population Projections	6
Review of Municipal Services	7
Sphere of Influence	28
Written Determinations	29

# Introduction

# Purpose of the Municipal Service Review

Local Agency Formation Commissions (LAFCos) exist in each county in California and were formed for the purpose of administering state law and local policies relating to the establishment and revision of local government boundaries. According to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (California Government Code § 56000 et seq.), LAFCo's purposes are to:

- discourage urban sprawl;
- preserve open space and prime agricultural land;
- ensure efficient provision of government services; and
- encourage the orderly formation and development of local agencies.

To achieve these purposes, LAFCos are responsible for coordinating logical and timely changes in local government boundaries (such as annexations), conducting special studies that identify ways to reorganize and streamline governmental structure, and determining a sphere of influence for each city and special district over which they have authority.

A **sphere of influence** is a plan for the probable physical boundaries and service area of a local agency, as determined by LAFCo (Government Code § 56076). Beginning in 2001, each LAFCo was required to review, and as necessary, update the sphere of each city and special district on or before January 1, 2008, and every five years thereafter (Government Code § 56425(g)). Government Code § 56430(a) provides that in order to determine or update a sphere of influence, LAFCo shall prepare a **Municipal Service Review (MSR)** and make written determinations relating to the following seven factors:

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

MSRs are not prepared for counties, but are prepared for special districts including those governed by a county Board of Supervisors. Additionally, while LAFCos are authorized to prepare studies relating to their role as boundary agencies, they have no investigative authority.

LAFCo staff prepared this MSR for the Calleguas Municipal Water District (CMWD or District) using information obtained from multiple sources, including, but not limited to:

- **MSR Questionnaire:** A questionnaire supplied by LAFCo elicited general information about the District (e.g., contact information, governing body, financial information), as well as service-specific data;
- **Budget:** The adopted budget provided information regarding services and funding levels;
- **General Plans:** General Plans of Ventura County, and the cities of Camarillo, Moorpark, Oxnard, Port Hueneme, Simi Valley, and Thousand Oaks provided information regarding land use, populations, and service levels;
- **District Documents:** Various District documents provided supplementary information relating to service provision;
- **Historical MSR:** The 2004 MSR provided certain data that remain relevant and accurate for inclusion in the current MSR;
- **District Website:** The District's website provided supplementary and clarifying information; and
- **District Staff:** District staff provided supplementary and clarifying information.

# Organization of the MSR

This report is organized into several sections, as follows:

- Maps: A general location map and the official LAFCo map of the District;
- **Profile:** Summary profile of information about the District, including contact information, governing body, summary financial information, and staffing levels;
- **Growth and Population Projections:** Details of past, current, and projected population for the District;
- **Review of Municipal Services:** Discussion of the municipal services that the District provides;
- **Sphere of Influence:** Discussion of the existing sphere of influence of the District and potential modifications to the sphere; and
- Written Determinations: Recommended determinations for each of the seven mandatory factors for the District.

The Commission's acceptance of the MSR and adoption of written determinations will be memorialized through the adoption of a resolution that addresses each of the seven mandatory factors based on the Written Determinations section of the MSR.

#### Maps



Figure 1: Location Map for Calleguas Municipal Water District



Figure 2: Official LAFCo Map

#### Profile

The District's mission is provided as follows:

To provide our service area with a reliable supplemental supply of regional and locally developed water in an environmentally and economically responsible manner.

The Calleguas Municipal Water District was formed in 1953 in response to recurring droughts and an expanding population to establish a reliable supply of water for southeast Ventura County that would supplement local potable water supplies (e.g., surface water coming from rainfall and seasonal drainages, as well as groundwater). The District primarily fulfills its mission by importing and distributing water obtained from the Metropolitan Water District of Southern California (MWDSC). In 1960, Calleguas became a member agency of the MWDSC, which provides a significant portion of the urbanized southern California region with imported water from the Colorado River via the Colorado River Aqueduct and from northern California via the State Water Project (SWP).

Contact Information	
District Manager	Anthony Goff
District Office	2100 Olsen Road, Thousand Oaks, CA 91360
Mailing Address	2100 Olsen Road, Thousand Oaks, CA 91360
Phone Number	(805) 526-9323
Website	<u>calleguas.com</u>
E-mail Address	tgoff@calleguas.com
Governance Information	
Formation Date	December 10, 1953
Legal Authority	Water Code Section 71000 et seq. (Municipal Water District Law
	of 1911)
Type of District	Independent
Board of Directors	Five members
	Elected by voting district to staggered, four-year terms of office
	(elections held in even-numbered years)
Board Meetings	1 <sup>st</sup> and 3 <sup>rd</sup> Wednesday of most months, beginning at 5:00 p.m.,
	located at 2100 Olsen Road, Thousand Oaks, CA 91360

#### Services Provided

The Calleguas Municipal Water District is authorized to provide wholesale water, water treatment, recycled/reclaimed water, agricultural water, groundwater management, water replenishment, water conservation, and waste water disposal services.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> "Waste water" is distinct from untreated sewage/"wastewater" and consists of salty brine generated by groundwater desalting facilities as well as excess recycled water (i.e., treated wastewater).

Population and Area Information						
	Populatio	n	Area (square miles)			
Jurisdictional Area	644.441 <sup>2</sup>	2	399.23			
Sphere of Influence Area	634 598 <sup>3</sup>	3	413.00			
sphere of innuence , acu	001,000		110.00			
Staffing <sup>4</sup>						
Executive/Management	Professional/Support	. Operational	Total			
8	22	43	73			
U		13	70			
Revenues		Expenditures				
Primary Revenue Sources		Primary Expenses				
Water Sales		Water Purchases				
Readiness to Serve <sup>5</sup>		Salaries and Bene	ofits			
Capacity Charge <sup>6</sup>		Readiness to Serv	/P			
EV 2022-23 Revenues (Bur	laot)	FV 2022-23 Expendi	itures (Budget)			
\$124 176 670		\$111 006 050	itures (budget)			
\$124,170,070		\$111,030,030				
Public Agencies with Over	lanning lurisdiction					
Bardsdale Cemetery District		Oxnard Harbor District				
Bell Canyon Community Services	District	Price Public Cemetery District				
Blanchard/Santa Paula Library D	istrict	Pleasant Valley County Water District				
Camarillo Health Care District		Pleasant Valley Recreation and Park District				
Camarillo Sanitary District		Rancho Simi Recreation and Park District				
Camrosa Water District		Triunfo Water and Sanitation District				
Channel Islands Beach Community Services District		United Water Conservation District				
City of Camarillo		Ventura County Air Poliution Control District				
City of Moorpark City of Oxpard		Ventura County Pre Protection District				
City of Port Hueneme		Ventura County Service	Area No. 4			
City of Simi Valley		Ventura County Service	Area No. 14			
City of Thousand Oaks		Ventura County Service	Area No. 30			
Conejo Recreation and Park Dist	rict	Ventura County Service	Area No. 32			
El Rancho Simi Cemetery District	:	Ventura County Service	Area No. 34			
Fillmore-Piru Memorial District		Ventura County Transpo	rtation Commission			
Fox Canyon Groundwater Manag	gement Agency	Ventura County Watersh	red Protection District			
GOID COAST I FANSIT DISTRICT Hiddon Vallov Municipal Water District		Ventura County Waterworks District No. 1				
Lake Sherwood Community Services District		Ventura County Waterworks District No. 8 Ventura County Waterworks District No. 17				
Metropolitan Water District of S	outhern California	Ventura County Waterworks District No. 17				
Oxnard Drainage District No. 1		Ventura County Waterworks District No. 38				
Oxnard Drainage District No. 2		Ventura Regional Sanitation District				

<sup>&</sup>lt;sup>2</sup> Source: 2020 CMWD Urban Water Management Plan

<sup>&</sup>lt;sup>3</sup> Source: 2021 CMWD Redistricting Study

<sup>&</sup>lt;sup>4</sup> Source: 2022 CMWD Organizational Chart

<sup>&</sup>lt;sup>5</sup> The "Readiness-to-Serve Charge" is a charge intended to recover the principal and interest payments on MWDSC's non-tax supported debt service that had been or would be issued to fund capital improvements necessary to meet the continuing reliability and water quality needs associated with current and projected demands. The charge is collected by the CMWD and paid to the MWDSC.

<sup>&</sup>lt;sup>6</sup> The "Capacity Charge" is a charge imposed on each of the District's member agencies and is designed to recover the cost of providing peaking capacity within the distribution system.

#### **Growth and Population Projections**

*LAFCo is required to project the growth and population for the affected area (Government Code §* 56430(*a*)(1)).

Growth estimates for the District are estimated using data produced by the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (adopted by the Southern California Association of Governments in 2020). The 2020 Metropolitan Water District of Southern California UWMP (June 2021) estimates the population within the portion of its service area that lies within Ventura County (i.e., the area within the CMWD service area) to be 630,000 as of July 2020. The 2020 Calleguas Municipal Water District UWMP (June 2021), estimates a 2020 population of 644,441 and projects that the population will increase to 679,367 by 2030 and to 699,089 by 2040.

#### **Review of Municipal Services**

The review of the District's services is based on provisions of state law which require LAFCo to make determinations regarding the present and planned capacity of public facilities, the adequacy of public services, infrastructure needs and deficiencies, and the District's financial ability to provide these services (Government Code § 56430(a)(3)).

#### **Potable Water Services**

#### Water Service History

According to the District's 2020 UWMP, the CMWD was formed in 1953 in response to recurring droughts, declining groundwater supplies, and a growing population that resulted in the urbanization of areas previously dominated by agricultural uses. The purpose of the District's formation was to establish a reliable supply of water for southeastern Ventura County that would supplement local potable water supplies (e.g., surface water coming from rainfall and seasonal drainages, as well as groundwater).

In 1960, the CMWD became a member agency of the MWDSC, which provides the southern California region with imported water from northern California by means of the State Water Project (SWP) and from the Colorado River through the Colorado River Aqueduct (CRA), as described in detail later in this report. In the years that followed, the CMWD constructed the necessary infrastructure to transport and deliver imported water to its service area. The District's 2020 UWMP states that due to the location of its service area, under normal circumstances the District receives exclusively SWP water. Water delivered through the CRA is typically used to address variability of the SWP supply; however, due to constraints within the

MWDSC distribution system, CMWD is considered a "SWPdependent" agency and can only meet a small portion of its demands from the CRA. Of MWDSC's 26 member agencies, the District currently ranks fourth in terms of annual imported water delivery volume.<sup>7</sup> A map depicting the CMWD as it relates to the MWDSC service area is provided in Figure 3.



Figure 3: Metropolitan Water District of Southern California Service Area (Source: 2020 MWDSC UWMP)

<sup>&</sup>lt;sup>7</sup> Source: MWDSC 2021 Annual Report

The District operates under the Municipal Water District Law of 1911 (Division 20 of the Water Code). Part 5 of the Municipal Water District Law contains the "Powers and Purposes" of a municipal water district. Specifically, Chapter 2 (Water) identifies the water-related services that a municipal water district is authorized to provide, including:

- A municipal water district may "acquire, control, distribute, store, spread, sink, treat, purify, recycle, recapture, and salvage any water, including sewage and storm waters, for the beneficial use or uses of the district, its inhabitants, or the owners of rights to water in the district" (Water Code § 71610).
- A municipal water district may undertake water conservation programs (Water Code § 71610.5).
- "A district may sell water under its control, without preference, to cities, other public corporations and agencies, and persons, within the district for use within the district. As used in this part, the term 'water' includes potable water and nonpotable water" (Water Code § 71611).

The District is authorized to provide wholesale water, water treatment, recycled/reclaimed water, agricultural water, groundwater management, water replenishment, water conservation, and waste water disposal services.

# <u>Service Area</u>

The service area of the District encompasses approximately 400 square miles, covering much of southern and eastern Ventura County, including portions or all of the cities of Simi Valley, Moorpark, Thousand Oaks, Camarillo, Oxnard, and Port Hueneme, and surrounding unincorporated areas (e.g., Bell Canyon, Lake Sherwood, Oak Park, Santa Rosa Valley, Somis, and Naval Base Ventura County). The CMWD supplies water to approximately 75 percent of Ventura County's population, and water distribution consists of municipal and industrial customers (95 percent) and agricultural customers (5 percent).

# Retail Water Purveyors of the District

The CMWD distributes potable water strictly on a wholesale basis to 19 retail water purveyors, who in turn deliver water to area residents, businesses, and agricultural customers. The District's retail customers consist of both public and private water purveyors, as listed in Table 1 below and depicted in Figure 4 on the following page:

Table 1: Calleguas Municipal Water District Retail Customers				
Berylwood Heights Mutual Water Company	Golden State Water Company			
Brandeis Mutual Water Company	Pleasant Valley Mutual Water Company			
Butler Ranch Mutual Water Company	Solano Verde Water Company			
California American Water Company	Triunfo Water and Sanitation District			
California Water Service Company	Ventura County Waterworks District No. 1			
Camrosa Water District	Ventura County Waterworks District No. 8			
City of Camarillo	Ventura County Waterworks District No. 19			
City of Oxnard	Ventura County Waterworks District No. 38			
City of Thousand Oaks	Zone Mutual Water Company			
Crestview Mutual Water Company				



Figure 4: CMWD Retail Purveyors (Source: Calleguas Municipal Water District 2020 UWMP)

#### Water Delivery System

The District imports water through a system of infrastructure (i.e., transmission pipelines, purveyor turnouts, flow and pressure regulating facilities, reservoirs, pump stations, and hydroelectric generating stations) that delivers water to southeastern Ventura County. The imported water consists exclusively of supply from the MWDSC that is delivered primarily through the SWP.

Water delivered to the District is treated at the MWDSC's Joseph Jensen Filtration Plant in Granada Hills and is delivered to the District through MWDSC's West Valley Feeder No. 2 Pipeline to the 1.3-mile long, 96-inch diameter Santa Susana Tunnel<sup>8</sup> completed in 1962. The tunnel transports the water from Chatsworth into Simi Valley where it enters the District's distribution system for immediate use by its customers, is stored in Lake Bard (where it is treated at the Lake Bard Water Filtration Plant prior to distribution), or is injected into the Las Posas Groundwater Basin for future use, as discussed in more detail later in this report.

The District's service area is separated into a total of five distinct regions within the "Upper Zone" (i.e., Simi Valley, Conejo Valley, and Oak Park) and the "Lower Zone" (i.e., Las Posas and Camarillo), as depicted in the 2020 UWMP (provided below in Figure 5). The District operates and maintains approximately 130 miles of major transmission pipelines that range from 14 inches to 78 inches in diameter, 12 enclosed reservoirs with a total storage capacity of

<sup>&</sup>lt;sup>8</sup> The West Valley Feeder No. 2 has the capability to deliver a maximum of 300 cubic feet per second (cfs) to the East Portal of the District's Santa Susana Tunnel.

approximately 59 million gallons, six pump stations, groundwater injection wells, pump and pressure regulating stations, and hydroelectric generators. In addition, at its headquarters located between the cities of Thousand Oaks and Simi Valley, the District owns and operates Lake Bard (discussed in more detail below).



Figure 5: CMWD Distribution System (Source: CMWD 2020 UWMP)

The District does not have access to a secondary source of imported water supply. To address this limitation, the District established Lake Bard, a reservoir located at its headquarters which can store up to 10,500 acre-feet (AF)<sup>9</sup> of water and is used as a water source when imported supplies are shut down for scheduled maintenance or emergencies. Lake Bard and its related facilities are discussed in more detail below.

# Water Storage

The 2020 UWMP documents that the District has 12 enclosed potable water storage reservoirs which have a capacity of approximately 59 million gallons. Additionally, the District owns Lake Bard and operates the Las Posas Aquifer Storage and Recovery (Las Posas ASR) Project, discussed below. In combination, water deliveries made to storage in Lake Bard and the Las Posas ASR was 1,729 AF during 2020. Deliveries to storage are estimated to be 1,255 acre-feet per year (AFY) from 2025 into the foreseeable future (i.e., at least through 2045). The CMWD typically utilizes this storage during planned supply outages from the MWDSC.

<sup>&</sup>lt;sup>9</sup> An acre-foot is defined as the volume of water that would cover a one-acre area in one foot of water, or approximately 326,000 gallons.

# • Lake Bard

Lake Bard, an earthen open-surface reservoir that was constructed in the 1960s, is located in the unincorporated area between the cities of Thousand Oaks and Simi Valley, adjacent to the CMWD headquarters on Olsen Road, as shown in Figure 6, below. Lake Bard does not impound surface waters; rather, it is composed entirely of stored imported water.



Figure 6: Location of Lake Bard (Source: 2022 County of Ventura GIS data)

The lake has a storage capacity of 10,500 AF, of which 7,500 AF is available for treatment at the Lake Bard Water Filtration Plant and distribution as potable water, and the remaining 3,000 AF may be used as an unfiltered, disinfected, non-potable emergency supply. According to the 2020 UWMP, water stored in Lake Bard is re-treated at the Lake Bard Water Filtration Plant, which has a treatment capacity of 65 million gallons per day (mgd). The CMWD generally maintains Lake Bard at capacity in order to maintain maximum levels of emergency water supply.

Originally, water stored in Lake Bard could provide enough storage for redundancy and emergency supply for the service area for a one-year time period. By the early 1990s, water demands increased such that the volume of water stored in Lake Bard is no longer reliable to provide emergency water supply for a sustained period, and the lake's water supply could be depleted between 5.5 weeks (at high flow) and four months (at low flow). This concern was realized most dramatically following the January 17, 1994, Northridge Earthquake, which caused pipeline separations and cracked joints to the CMWD's distribution system; as a result, imported supplies were only available sporadically for three months and Lake Bard was nearly depleted.

#### • Las Posas Aquifer Storage and Recovery (Las Posas ASR) Project

The Las Posas ASR located in the East Las Posas Basin (west of the City of Moorpark) has the capacity to support approximately 50,000 AF of water supplies underground for future use. The Las Posas ASR, developed in the 2000s, consists of 18 dual-purpose wells that accommodate both injection of imported water into the Las Posas Groundwater Basin for storage of water supply and extraction of stored water when needed. The Las Posas ASR is expanded upon in more detail later in this report in the discussion of water supply and groundwater storage projects. The Grandsen Pump Station enables water extracted through the Las Posas ASR to be delivered to the District's entire service area.

#### Water Supply and Demand Volume

According to the 2020 UWMP, water supply within the CMWD was 89,687 AF (consisting of 89,630 AF of imported water supplied by MWDSC and 57 AF of recycled water provided to Ventura County Waterworks District No. 8) in 2020. The 2020 UWMP estimates a minimum combined water supply (imported water plus a minimal amount of recycled water) to be 96,888 AF in 2022 and 88,248 AF in 2023. Imported water supply is expected to be 86,607 AFY by 2025, increasing incrementally into the foreseeable future, reaching 87,720 AFY by 2030, 89,880 AFY by 2035, 91,326 AFY by 2040, and 91,784 AFY by 2045. During the same period, recycled water supply is anticipated to remain constant at 80 AFY, and supply from storage (i.e., reasonably available "outage supplies" consisting of 7,500 AF from Lake Bard and 20,000 AF from the Las Posas ASR) is anticipated to remain constant at a total of 27,500 AF, for a grand total supply of 114,187 AFY by 2025, 115,300 AFY by 2030, 117,460 AFY by 2035, 118,906 AFY by 2040, and 119,364 AFY by 2045.

District staff reports that it delivered 89,666 AF in 2017, 91,338 AF in 2018, and 82,236 AF in 2019. Pursuant to the 2020 UWMP, water demand within the District was 91,940 AF in 2020. The 2020 UWMP further states that the District anticipates relatively stable imported water demand for the foreseeable future: 87,461 AFY by 2025, 88,585 AFY by 2030, 90,766 AFY by 2035, 92,227 AFY by 2040, and 92,689 AFY by 2045. These estimates include a constant 1,255 AFY of demand for replenishment water (i.e., water used for injection into the District's Las Posas ASR and storage at Lake Bard). District staff attributes these projected demand figures (which are lower than those estimated in the District's previous UWMPs) to a demand hardening effect resulting from the implementation of ongoing water use efficiency measures and conservation programs.

According to Table 7-2 of the 2020 UWMP, the District estimates that through at least 2045, water supply during normal years (i.e., demand under average hydrologic conditions, based on the historical average year conditions from 1922 through 2004) will exceed demand. As demonstrated below, during normal years, the District anticipates maintaining more than 26,000 AFY in excess supply for the foreseeable future:

Table 2: Normal Year Supply and Demand Comparison (in AF)					
	2025	2030	2035	2040	2045
Supply	114,187	115,300	117,460	118,906	119,364
Demand	87,541	88,665	90,846	92,307	92,769
Difference	26,646	26,635	26,614	26,599	26,595

The 2020 UWMP provides an estimate of supply and demand for single dry years (i.e., demand under the single driest hydrologic year, based on 1977 conditions) through 2045 in Table 7-3. As compared with normal years, supply and demand are reduced by approximately 1,000 AFY, resulting in an excess of supply that is nearly identical to that anticipated for normal years:

Table 3: Single Dry Year Supply and Demand Comparison (in AF)					
	2025	2030	2035	2040	2045
Supply	113,080	114,190	116,346	117,791	118,244
Demand	86,435	87,556	89,734	91,193	91,651
Difference	26,645	26,634	26,612	26,598	26,593

In multiple dry year conditions (i.e., demand under five consecutive drought year conditions, based on 1988 through 1992 conditions), estimated difference in supply and demand is expected to remain stable, despite fluctuations in supply and demand projections during the five-year period covered by such an estimated period. Table 7-4 of the 2020 UWMP provides the following:

Table 4: Multiple Dry Years Supply and Demand Comparison (in AF)						
		2025	2030	2035	2040	2045
Year 1	Supply	117,282	117,293	119,045	120,784	121,644
	Demand	90,679	90,690	92,460	94,216	95,085
	Difference	26,603	26,603	26,585	26,568	26,559
	Supply	124,402	124,414	126,305	128,182	129,111
Year 2	Demand	97,871	97,883	99,793	101,688	102,626
	Difference	26,531	26,531	26,512	26,494	26,485
Year 3	Supply	125,797	125,809	127,727	129,631	130,573
	Demand	99,279	99,291	101,229	103,152	104,103
	Difference	26,518	26,518	26,498	26,479	26,470
Year 4	Supply	102,480	102,489	103,952	105,404	106,123
	Demand	75,729	75,739	77,216	78,683	79,408
	Difference	26,751	26,750	26,736	26,721	26,715
Year 5	Supply	111,027	111,036	112,608	114,167	114,938
	Demand	84,331	84,341	85,928	87,503	88,282
	Difference	26,696	26,695	26,680	26,664	26,656

In all cases, supply totals do not consider system losses, which are estimated to be 1 percent of supply. Based on the evaluation contained in the 2020 UWMP, estimated water supply from MWDSC is expected to be sufficient to meet projected demands within the CMWD through at

least 2045. Peak capacity at the East Portal of the District's Santa Susana Tunnel is 300 cfs. In 2021, the District's average day peak demand flow was 190 cfs, which totaled 378 AF for that peak demand day.<sup>10</sup>

#### Imported Water Supply Sources

The CMWD's potable supply to its retail customers consists entirely of imported water that it receives from the MWDSC. The CMWD operates as a member agency of the MWDSC within Ventura County. Water provided by the MWDSC is sourced through the SWP and CRA; however, the District relies almost exclusively on water from the SWP with only limited supply from the CRA.

• State Water Project (SWP)

SWP water originates in northern California where it is captured and released into rivers and streams that reach the Sacramento-San Joaquin River Delta. The water is then transported

south through the California Aqueduct to SWP contractors (including the MWDSC) by means of a 500-mile conveyance network that includes reservoirs, aqueducts, and pump stations. The MWDSC filters and disinfects SWP water at the Joseph Jensen Filtration Plant in Granada Hills in Los Angeles County, located as shown in Figure 7, to the right.

SWP facilities were designed in the 1970s to meet the needs of SWP contractors at that time, with the idea that additional facilities would be added later to support supply reliability, according to the 2020 UWMP. As additional facilities were not constructed, and environmental



Figure 7: Location of Joseph Jensen Filtration Plant Source: Google Maps (December 2022)

regulations<sup>11</sup> have limited the export of water from the delta, the California Department of Water Resources (DWR), through the SWP, does not routinely deliver full amounts of contracted water to its contractors.

Since 2005, the DWR, together with the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and Bureau of Reclamation Act, has been pursuing a project intended to restore the

<sup>&</sup>lt;sup>10</sup> Source: MWDSC Water Information System - Summary Hi/lo/Avg Daily Flows

<sup>&</sup>lt;sup>11</sup> Native fish reliant on the Delta include the Delta smelt, Chinook salmon, and splittail, which are listed as threatened or endangered by the federal and state Endangered Species Acts. Protections for these species result in limitations on the SWP's water delivery system.

ecosystem and make improvements to reliability of potable water for human use, including the correction of "reverse flows" that redirect fish from their migratory paths. This effort, consistent with the Delta Protection Act of 1992, was prompted by concerns about the existing water system as it relates to inefficiencies in freshwater capture, lack of redundancy in the conveyance infrastructure, trapping of endangered fish in pumping equipment, potential levee failure and saltwater contamination, and climate change. The project was split into two in 2015, consisting of the Bay Delta Conservation Plan (BDCP) (the habitat restoration component) and California WaterFix (the water delivery infrastructure component).

In 2019, California Governor Newsom issued Executive Order N-10-19, which altered the scope of the project to include the modernization of conveyance facilities within the Bay Delta, including new intake facilities in the north Delta along the Sacramento River and a single main water pipeline (i.e., conveyance tunnel) would transport the diverted water to pumping plants and ultimately through the SWP and potentially Central Valley Project (CVP) infrastructure to end users. The proposed project, now known as the Delta Conveyance Project (DCP), would have the ability to convey a maximum of 6,000 cubic feet per second (cfs) from the Sacramento River to SWP facilities.

• Colorado River Aqueduct (CRA)

The MWDSC provides water from the Colorado River to its service area by conveying it through the 242-mile CRA (constructed in the 1930s) from a pumping facility in Lake Havasu which is

located at the California/Arizona border. The CRA includes 92 miles of tunnels, 63 miles of concrete canals, 54 miles of concrete conduits, 29 miles of siphons, and five pumping stations. Using electricity generated at Hoover Dam, Parker Dam, and other sources, pumps lift water over 1,600 feet so the aqueduct can convey the water to Southern California. MWDSC's F.E. Weymouth Treatment Plant in the City of La Verne was the first treatment plant built by the MWDSC in 1940 to treat CRA supplies, located as shown in Figure 8, to the right.



Figure 8: Location of F.E. Weymouth Treatment Plant Source: Google Maps (December 2022)

# Water Supply and Groundwater Storage Projects

While the District is able to provide water to its customers to meet demand, it recognizes the importance of broadening its reach to ensure long-term reliability of potable water service within its service area. CMWD is actively pursuing and implementing a variety of projects that are intended to either directly or indirectly augment water supply within the District's service area and regionally. Despite these investments, a combination of MWDSC's existing

conveyance infrastructure deficiencies and critically low SWP allocations demonstrate that improvements at the regional and local levels of the existing imported distribution system are necessary. The discussion that follows provides a summary of projects completed or to be developed to support water reliability.

#### City of San Buenaventura State Water Project Interconnection Project

According to the 2020 UWMP, the District projects that imported water will be wheeled through its system to the City of Ventura through the SWP interconnection starting in 2025 and has the potential to provide a long-term average of 5,400 AFY. This project would enable the City of San Buenaventura to take delivery of its SWP entitlement (i.e., rights to a maximum of 10,000 AFY, which the City has owned since 1971) through the construction of a pipeline connecting existing CMWD infrastructure in the City of Camarillo to the City of San Buenaventura, located as shown in Figure 9, below. As designed, SWP water would be wheeled through MWDSC and CMWD infrastructure to reach the City. Such a project would improve opportunities for system redundancy for both agencies and would enable the City to expand its water supply portfolio beyond its currently limited local sources.

Government Code Section 56133(a) requires that a city or district may provide new or extended services by contract or agreement outside its jurisdictional boundary only if it first requests and receives written approval from LAFCo. In the case of the interconnection project, LAFCo approval under Government Code Section 56133 is not necessary because: (1) the treatment by MWDSC of the City's SWP water pursuant to the wheeling statutes does not constitute a new service because the service is required by the wheeling statutes, particularly Water Code section 1810, which applies "[n]otwithstanding any other provision of law," and (2) the construction of the new pipeline and the conveyance of water through the pipeline from the District to the City of San Buenaventura (and indirectly to the Casitas Municipal Water District and United Water Conservation District) is intended to compensate for reduced supplies, such as during severe drought conditions, and to provide access to a replacement supply source for water supplies that have been reduced or have otherwise become less available. It should be noted that provision of water through the pipeline beyond that required to either compensate for reduced supplies or provide a replacement water supply would constitute an extended service under Government Code section 56133 that would not be covered by the exemption set forth in subdivision (e)(1).



Figure 9: State Water Interconnection Project Map (Source: 2020 UWMP)

• Calleguas Municipal Water District-Las Virgenes Municipal Water District Interconnection

Together with the Las Virgenes Municipal Water District (LVMWD; which provides service in western Los Angeles County, including the cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village, and surrounding unincorporated areas, and receives nearly all of its water supply from the MWDSC), the CMWD is working to improve regional system reliability through a project known as the Calleguas-Las Virgenes Interconnection. This project, which has completed environmental review and design and is currently under construction, will allow both involved agencies to transfer and receive potable water in the event of a complete or partial supply outage as well as during normal operating conditions (e.g., during droughts, natural disasters, and required system maintenance). The project traverses the Oak Park area of unincorporated Ventura County and the City of Thousand Oaks in eastern Ventura County, and the City of Westlake Village in western Los Angeles County. It involves the development of more than 11,000 feet of 30-inch-diameter potable water pipeline for the interconnection between the water districts, as well as an underground pump station/pressure regulating station located near the Ventura County boundary and other ancillary improvements to support the interconnection. In addition, LVMWD will concurrently install more than 2,000 feet of new and replacement recycled water pipeline for Yerba Buena Elementary School and Canyon Oaks Park to provide recycled irrigation water. While implementation of the project would not result in the generation of new water supply, it would establish supply redundancy that is intended to benefit both agencies. Additional potential water supply includes indirect potable reuse of water produced at the LVMWD/Triunfo Water & Sanitation District's planned PureWater Plant, as well as any additional future local supplies that either agency develops.

The interconnection is intended to ensure that both scheduled and unscheduled interruptions in water delivery to either agency would not result in the inability of either to continue to provide water service to its customers, in cases where one agency is impacted and the other is not. In the event of a sudden or large-scale drawdown event of the LVMWD's Westlake Reservoir, due to existing system capacity, the LVMWD would be limited in its ability to refill the reservoir in an expeditious manner. Therefore, the interconnection could facilitate the LVMWD's filling of its Westlake Reservoir during an off-peak period, such as during the winter months. Therefore, it appears that the proposed interconnection is consistent with Government Code Section 56133 (which addresses the ability of agencies to provide services outside their jurisdictional boundaries).

# • Crestview Mutual Water Company Interconnection

The Crestview Mutual Water Company (Crestview) is a private domestic water supplier that serves the western portion of the City of Camarillo. Its water supply is derived from groundwater and imported water from the CMWD. In 2020, Crestview and the CMWD completed an interconnection project that allows for a maximum flow rate of 5 cfs when needed by the CMWD in the event of an imported supply outage. Crestview Well No. 8 and the Agreement to Deliver Water During an Outage essentially enables Crestview to deliver water to the CMWD for use within the District's service area. In exchange for CMWD's financial support of development of Well No. 8, Crestview is obligated to supply a minimum of 3 cfs when

needed by CMWD. CMWD compensates Crestview for the water and resupplies Crestview at a later date with imported water.

• Los Angeles Department of Water and Power Lease of West Valley Feeder Pipeline from MWDSC

The Los Angeles Department of Water and Power (LADWP) leases West Valley Feeder No. 1 Pipeline from the MWDSC. When water is unavailable to CMWD through the West Valley Feeder No. 2 Pipeline, the LADWP can provide the CMWD with an average of 40 cfs of water through West Valley Feeder No. 1, treated at the Los Angeles Aqueduct Filtration Plant in Granada Hills. This arrangement is not documented as part of a formal agreement.

• Las Posas Aquifer Storage and Recovery (ASR) Project (Groundwater Storage)

The CMWD Las Posas ASR Project is located in the East Las Posas Basin (west of the City of Moorpark). The project, which became operational in 1994, has a total storage capacity of about 50,000 AF.<sup>12</sup> The Las Posas ASR consists of 18 dual-purpose wells that accommodate both injection of imported water into the Las Posas Groundwater Basin for storage of water supply and extraction of stored water when needed. The Grandsen Pump Station enables water extracted through the Las Posas ASR to be delivered to the District's entire service area.

The 2020 UWMP documents that groundwater use within Ventura County over the last more than 100 years has resulted in overdraft of groundwater basins and seawater intrusion into the basins. A portion of water used by customers of CMWD retailers is treated at wastewater treatment facilities and discharged into the Calleguas Creek Watershed, eventually percolating into aquifers where it supports groundwater recharge. Groundwater within local aquifers has become progressively saline as a result of the introduction of imported water and deep-aquifer pumped groundwater, wastewater discharges, urban and agricultural runoff, applied irrigation, and native marine sediments.

While the District does not pump native groundwater, it stores and extracts imported water supplies via the Las Posas ASR program. The 2020 UWMP states that direct injected storage in the Las Posas ASR Wellfield is approximately 20,926 AF as of December 2020. The MWDSC implements a Cyclic Storage Program, which enables purchase of surplus water when available to be stored for future use, and involves a suspension of MWDSC capacity charges. In 2019, the District injected approximately 8,300 AF, including almost 6,000 AF under the Cyclic Storage Program.

The District is also involved in groundwater storage programs. In the early 1990s, the District pursued an in-lieu water storage strategy involving District supply to well operators to reduce groundwater pumping demand. Storage credits accumulated in this way are transferred to the District. Additionally, the District accumulated groundwater storage credits by means of the Conejo Creek Diversion Project, which diverts water from Conejo Creek (which consists of

<sup>&</sup>lt;sup>12</sup> Source: FCGMA Groundwater Sustainability Plan for the Las Posas Valley Basin (p. 1-21).

recycled wastewater generated by the City of Thousand Oaks' Hill Canyon Wastewater Treatment Plant) for agricultural and landscaping irrigation purposes primarily within the Camrosa Water District's service area and secondarily within the Pleasant Valley County Water District's service area. The CMWD currently holds 23,453 AF of credits in its Conejo Creek Project storage account. The use of these credits is subject to the FCGMA's approval. The CMWD stopped accruing credits when the project was transferred to the Camrosa Water District, and these credits were all accrued prior to 2014.

# • Salinity Management Pipeline (SMP)

As discussed in greater detail below in the section of this report regarding waste water disposal services (distinct from "wastewater" disposal) provided by the District, the CMWD operates the regional Salinity Management Pipeline (SMP) that collects brine generated by groundwater desalting facilities and conveys that water for safe discharge to the Pacific Ocean. The SMP supports use of local groundwater resources and diversification of water supply within southeastern Ventura County by creating new opportunities for development of groundwater treatment facilities, resulting in the encouragement of use of local groundwater supplies to support existing and future development.

#### Water Conservation Measures and Efforts/Demand Management

The District developed a Water Shortage Contingency Plan (WSCP), discussed in more detail below, in preparation for potential reductions in imported water deliveries by the MWDSC resulting from severe water shortage conditions or catastrophic interruption of water supply conditions. The CWMD's WSCP is closely tied to the contents of MWDSC's WSCP, given that the District is entirely reliant on the MWDSC for its water supply; however, the CMWD has developed its own water shortage contingency measures. All measures related to water shortage conditions assume continued reliance on (i.e., no catastrophic failure of) the Santa Susana Tunnel. The District has established the following shortage levels and corresponding responses:

- Shortage Level 1: Up to 10 percent required reduction
- Shortage Level 2: Up to 20 percent required reduction
- Shortage Level 3: Up to 30 percent required reduction
- Shortage Level 4: Up to 40 percent required reduction
- Shortage Level 5: Up to 50 percent required reduction
- Shortage Level 6: Greater than 50 percent required reduction

Water demand reductions for Shortage Levels 1 through 5 would be met by existing storage, flexible supplies, voluntary demand reductions, and MWDSC's Water Supply Allocation Program (WSAP) or Emergency Water Conservation Program (EWCP) supply allocations (as applicable). In addition to the responses outlined for Shortage Levels 1 through 5, Shortage Level 6 involves potential prohibition of outdoor water use. All shortage levels include demand reduction actions that include an expanded public information campaign; offer of rebates on water-saving plumbing fixtures, devices, landscaping irrigation efficiency, and turf replacement; a

moratorium or net zero demand increase requirement on new connections; implementation or modification of drought rate structure or surcharge; and/or reduction of system water loss.

Mandatory reductions in water consumption may include any of the following: restrictions on irrigation hours to evening and early morning hours; prohibition of non-essential irrigation; restrictions on all irrigation; prohibition of filling of ornamental lakes, ponds, pools, and fountains; prohibitions on washing vehicles, streets, or outdoor paved surfaces; restrictions on the use of water from fire hydrants for construction purposes; and implementation of a rate structure for charges and penalties for water use restriction violations.

Since 2015, the CMWD Board of Directors has taken several actions related to water shortages:

- On April 15, 2015, the Board declared a Stage 4 water shortage and implemented a water supply allocation program consistent with a plan adopted by the MWDSC in an effort to manage water demand in response to reductions in available water supplies;
- On May 18, 2016, as a result of increased rainfall, runoff, and reservoir levels, the Board declared a Stage 3 water shortage, and suspended enforcement of previously-developed water supply allocations;
- On May 17, 2017, the Board rescinded the Stage 3 water shortage condition, thereby eliminating the shortage condition;
- On August 18, 2021, in response to the recurrence of dry conditions in 2020, the Board declared a Stage 2 water shortage condition throughout the District's service area, immediately following MWDSC's August 17, 2021, declaration of a water supply alert regarding severe drought conditions; and
- On April 6, 2022, the Board declared a Stage 3 water shortage condition throughout the District's service area.

Shortly after the April 6, 2022, declaration of a Stage 3 water shortage condition, on April 26, 2022, the District adopted an Emergency Water Conservation Program that mandated its retail providers implement a 1-day per week outdoor watering restriction or receive a strict allocation of imported water supplies.

# Water Shortage Contingency Planning

The District has developed a WSCP that establishes a set of actions for the District to take during water shortage conditions.<sup>13</sup> The WSCP is consistent with that of the MWDSC as a result of the District's reliance on the MWDSC for its water supply, and builds on that plan by including additional water shortage contingency measures. The District's WSCP includes the MWDSC's Water Surplus and Drought Management Plan, the MWDSC's 2014 Water Supply Allocation Plan, and an Imported Water Outage Protocol (IWOP), which details potential methodologies for supply allocation to CMWD's retail water providers during a catastrophic interruption of imported water. The 2020 UWMP states that except for a catastrophic failure of

<sup>&</sup>lt;sup>13</sup> The District's WSCP was prepared in compliance with California Water Code Section 10632, which requires that every urban water supplier prepare and adopt a WSCP as part of its UWMP.

the Santa Susana Tunnel or other critical infrastructure, the imposition of allocations is unlikely if not required by the MWDSC. In 2021, the District completed the Seismic Risk Mitigation Measures and Repair Options Study of Seismic Impacts to the Santa Susana Tunnel (Phase 2), which evaluated the seismic risks to the Santa Susana Tunnel and identified additional actions to further investigate, prevent, and mitigate that potential. The District is pursuing and implementing those additional actions. The components of the CMWD's water shortage planning are discussed below.

#### • Water Supply Alternatives Study (WSAS)

In February 2022, the District completed the WSAS, which evaluated 123 potential approaches to meet demands within the District's service area during a 6-month imported water supply outage. The District is implementing several of the projects, including (1) the Fairview Well Rehabilitation Project, which could supply a maximum of 1.69 cfs and (2) Lake Bard Pump Station, which would allow the District to treat for potable use the 3,000 AF within the lake that is current unavailable for potable use. Additionally, the District is pursuing a number of other potential projects identified from the WSAS.

#### • Imported Water Outage Protocol (IWOP)

The IWOP discusses the allocation of outage supplies in the case of catastrophic interruption of imported water, including conditions such as regional power outages, earthquakes, or other emergency events. Because the District takes delivery of imported water through a single connection that consists of a 1.5-mile, 8-foot diameter tunnel through the Santa Susana Mountains, any interruption of service of that connection would require that the CMWD rely on its own supply until restoration of the connection occurs.

Several formulas are available to establish reduced supply allocations. Options include: (1) allocation proportional to historical deliveries; (2) allocation to achieve equal demand reductions; and (3) allocations to achieve equal reductions from efficient demand. The IWOP documents that an estimated minimum of a 50 percent reduction in system demand would be necessary to navigate a 6-month outage event. Any implementation of supply allocation reductions would occur together with a call to eliminate outdoor water use in order to preserve finite supplies for health and safety purposes only, and include an aggressive public outreach effort to inform end users of supply reduction circumstances.

#### • Capital Improvement Projects

The CMWD's website states that the District's capital improvement projects are focused on the rehabilitation and replacement of aging infrastructure, improvement of local water supply reliability, and extension of the SMP to enable the development of local water supply projects. The District's FY 2022-23 adopted budget identifies a list of capital improvement projects, categorized as follows including costs of \$135,025,710 to fully implement the identified projects: (1) Salinity Management Pipeline Phases 3 and 4 (\$1,846,023), (2) Emergency Water Supply Reliability (\$104,366,687), (3) Improvements to Existing Facilities (\$10,102,000), (4) Rehabilitation, Replacement and Relocation (\$16,911,000), and (5) Unplanned System Repairs (\$1,800,000). All capital improvement projects listed include figures related to total dollar amount spent, budget requests (\$0 in all cases), and remaining budget. A summary of current capital improvement projects is provided below:

#### • Salinity Management Pipeline

The District is working to complete Phase 3 (i.e., approximately 27,000 lineal feet of 18- to 24inch pipeline from the intersection of Upland Road and Las Posas Road in Camarillo to Santa Rosa Road and Hill Canyon Road in the Santa Rosa Valley) and Phase 4 (i.e., approximately 49,000 feet of 12- to 24-inch pipeline from the end of Phase 3 to the intersection of Tierra Rejada Road and Madera Road in Simi Valley). The SMP Phase 3 and 4 extensions would accommodate connection of additional dischargers to the SMP. Additionally, the District is constructing a discharge station for metering and sampling of brine generated at the North Pleasant Valley Groundwater Treatment Facility in the City of Camarillo.

#### • Emergency Water Supply Reliability

Planned capital improvements related to emergency water supply reliability include projects described above in this report such as the interconnections involving the City of San Buenaventura, the Las Virgenes Municipal Water District, and the Crestview Mutual Water Company. In addition, the District is working to complete the following projects: (1) emergency diesel generators and well rehabilitation to support the Las Posas ASR; (2) pumping infrastructure to support the Grandsen Pump Station; (3) development of monitoring wells and a groundwater model in support of the Las Posas ASR; (4) construction of a 6.5-million-gallon concrete storage reservoir in eastern Simi Valley; and (5) installation of pumps at Lake Bard.

#### • Improvements to Existing Facilities

Improvement projects to support existing infrastructure include modifications and replacements of equipment for the Oxnard-Santa Rosa Feeder, pipeline enhancements at the Santa Susana Tunnel, modification and expansion of the existing crew building, and relocation of the Networking Center near the Control Room.

#### • Rehabilitation, Replacement, and Relocation

The District is implementing projects to replace and rehabilitate a variety of equipment for the Conejo Pump Station, upgrade and updated programmable logic controllers throughout the system, Lindero Pump Station No. 2 (also known as Toe of Dam or TOD Pump Station), Lake Sherwood Pump Station, Lindero Pump Station, and Calleguas Conduit North Branch in the Simi Valley Area.

#### • Unplanned System Repairs

Invariably, system and equipment issues will arise that will require prompt attention, including emergency repairs to pumps, hydroelectric generators, wells, and general water distribution components.

#### <u>Water Master Plan</u>

The 2017 Potable Water Master Plan Update, which replaced the 2006 Master Plan, includes a comprehensive plan by which the CMWD can accommodate projected retail purveyor demands and changing operating conditions, while continuing to provide a reliable water supply to its 19 purveyors. The Master Plan's focus is the identification of potential infrastructure needs to improve reliability and operational flexibility of the system during supply disruptions. The Master Plan includes updates to the District's facility inventory and data provided through implementation of the Turnout Automation Project in 2011 (which provides real-time monitoring and control of turnout flows related to service to the District's purveyors).

The Master Plan includes an evaluation of existing and future water supplies and demands, and the means to address future operational scenarios. A recommended capital improvement contained in the Master Plan is the addition of a reservoir on the east end of Simi Valley to accommodate 6 million gallons of storage, which would improve the ability for the District to meet peak demands under both normal and high demand conditions. As a result of further modeling, the project was modified and now includes 4.6 million gallons of total storage in two 2.3-million-gallon tanks. The estimated construction cost of \$11.1 million is expected to be funded through the District's capital improvement project budget. Among the completed projects that were recommended in the Master Plan are: (1) strengthening of the Moorpark Feeder to modify the hydraulic grade to allow the Conejo Pump Station and Grandsen Pump Station to operate near maximum capacities, (2) implementation of the Crestview Interconnection Project, and (3) the preparation of a water supply alternatives study. The District is currently focusing its efforts on strategic planning for local supply reliability and development of projects as recommended in the WSAS.

#### **Recycled Water Services**

According to the 2020 UWMP, the District in 1990 adopted a resolution in support of reducing demand for potable water by means of expanding use of recycled water. Specifically, "recycled water shall be used, whenever feasible, to displace the use of potable water for new

construction landscape and turf irrigation." The District provided recycled water at a wholesale rate that is 80 percent of the potable rate. Currently, the District's focus on support of recycled water is in the form of operation of the SMP, which enables purveyors to develop their own recycled water systems.

The District has been involved in several recycled water delivery projects, but does not treat recycled water that it purchases and delivers to its customers:

- In the 1990s, the District constructed recycled water delivery systems within the Conejo Valley. The District owned and operated recycled water systems in the Oak Park, North Ranch, and Lake Sherwood areas using recycled water generated at the Tapia Wastewater Treatment Plant that is owned and operated by the Las Virgenes Municipal Water District and Triunfo Water & Sanitation District. The District's recycled water customers consisted of the Triunfo Water & Sanitation District, the California Water Service Company, and Hidden Valley Municipal Water District. The District transferred the recycled water system to the Triunfo Water & Sanitation District in 2017.
- Also in the 1990s, the District developed a recycled water system within Simi Valley. While the CMWD provides recycled water produced at the Simi Valley Water Quality Control Plant to Ventura County Waterworks District No. 8 (VCWD 8), it anticipates eventually transferring ownership and operation of the system to VCWD 8, which is a dependent district of the City of Simi Valley. In 2020, the CMWD provided 57 AF to VCWD 8, and anticipates providing 80 AFY for the foreseeable future.
- In the 2000s, the CMWD, in partnership with the Camrosa Water District, developed recycled water facilities for the Conejo Creek Diversion Project. The diversion structure, draws flows generated primarily from treated effluent discharged from the City of Thousand Oaks' Hill Canyon Wastewater Treatment Plant and surface runoff from the Conejo Valley and Santa Rosa Valley. The nonpotable surface water is used for nonpotable agricultural and landscape irrigation purposes within the service areas of the Camrosa Water District and the Pleasant Valley County Water District in lieu of groundwater pumping.
- From 2016 through 2020, the District conveyed treated wastewater from the City of Oxnard Advanced Water Purification Facility to agricultural customers in lieu of groundwater pumping. The water was conveyed through the District's Salinity Management Pipeline (SMP) (a pipeline designed to deliver treated wastewater to the Pacific Ocean, discussed later in this report) to support agricultural irrigation efforts in the Oxnard Plain.

#### Waste Water Disposal Services

According to the District's 2020 UWMP, the District owns and operates a regional Salinity Management Pipeline (SMP) that collects brine (i.e., salty water, or "waste water" (distinct from untreated sewage/"wastewater")) generated by groundwater desalting facilities located within the District's service area, as well as excess recycled water (i.e., treated wastewater), and conveys that water for beneficial reuse or safe discharge to the ocean, where natural salt levels are higher.<sup>14</sup> The CMWD does not generate waste water itself or treat the waste water it

<sup>&</sup>lt;sup>14</sup> Water Code Section 13050(d) provides, "Waste' includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing,

collects; rather, it provides conveyance and disposal service only to waste water generators, generally.

According to District staff, high groundwater salinity levels within the Calleguas Creek Watershed limit use of groundwater as a local water source. Groundwater treatment processes create a concentrated brine by-product that is unfit for discharge to the watershed or existing sewer systems; therefore, the SMP was designed as an alternative means of conveying and disposing of the brine that helps alleviate salinity within the watershed. The SMP supports use of local groundwater resources and diversification of water supply within southeastern Ventura County by creating new opportunities for development of groundwater treatment and wastewater reuse facilities, which in turn encourages use of local water supplies to support existing and future development.<sup>15</sup> By creating a method for discharging salty water to the ocean (instead of into the local watershed), the SMP creates opportunities for developing groundwater treatment facilities that generate a salty by-product, as well as allowing wastewater treatment facilities to discharge excess treated wastewater to the ocean.

The SMP extends from the Las Posas Valley (north of the City of Camarillo) approximately 14.5 miles to an ocean outfall in the City of Port Hueneme that terminates approximately ½ mile from the beach into the sea (Figure 10, on the following page). Currently, the SMP accepts waste water discharges from the Camrosa Water District's Round Mountain Desalter, the City of Oxnard, and the Port Hueneme Water Agency's Port Hueneme Brackish Water Reclamation Facility. The City of Camarillo's North Pleasant Valley Groundwater Treatment Facility, expected to come online in early 2023, will also discharge to the SMP. Extensions of the SMP are planned to accommodate additional dischargers. Ventura County Waterworks District No. 1, which provides sewer services in and around the City of Moorpark, and the sewer treatment plants of the cities of Thousand Oaks and Simi Valley are anticipated to eventually discharge treated waste water to the SMP.

manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal." The brine and water resulting from groundwater and sewer treatment processes that are/will be discharged into the SMP appear to meet this definition. In fact, according to the 2002 Final Program EIR for the SMP, "a discharge of waste to a water body" (emphasis added) is, in this case, subject to approval of a permit from the Los Angeles Region of the California Regional Water Quality Control Board (page 4.5-10), which in 2014 issued Order R4-2014-0033 – "Waste Discharge Requirements for Calleguas Municipal Water District Regional Salinity Management Pipeline."

<sup>&</sup>lt;sup>15</sup> The District's website contains educational information for the public on its website in the form of a <u>SMP Brochure</u>.



Figure 10: Salinity Management Pipeline Facility Map (Source: 2020 CMWD UWMP)

The District has been authorized to provide waste water disposal services through the SMP since 2019, when LAFCo approved the District's request for activation of the latent power pursuant to Government Code Section 56050.5. Notwithstanding LAFCo requirements, the authorization for the District to provide waste water disposal service is contained in Chapter 3 (Other Functions) of Water Code Section 71670, and states that a municipal water district "may acquire, construct, and operate facilities for the collection, treatment, and disposal of sewage, waste, and storm water of the district and its inhabitants."

The 2020 UWMP states that upon build-out, the SMP is expected to improve water supply reliability through the development of approximately 40,000 AFY of new, local water supplies, as a result of SWP vulnerability to drought, levee failures, and shutdowns of pumping facilities for environmental reasons. Such support of local supply projects through the implementation and expansion of the SMP is anticipated to reduce local reliance on imported water demands.

The District's operation of the SMP complies with waste discharge requirements and a National Pollutant Discharge Elimination System (NPDES) permit known as Order No. R4-2019-0075, which must be renewed prior to its expiration date of July 31, 2024.

The CMWD FY 2018-19 budget documented capital improvement costs of nearly \$16.5 million. Capital improvement costs to date total approximately \$140,945,000, and are expected to reach \$215,935,000 to accommodate all contemplated connections to the SMP. However, the CMWD will not pursue large capital expenses to extend the pipeline until there are assurances that additional desalters will be constructed by CMWD purveyors. CMWD staff states that

capital improvement costs of the SMP are expected to be recovered within 35 to 50 years, depending on the number of dischargers that are connected to the SMP.

The District's FY 2022-23 budget identifies \$445,450 in total expenditures related to the SMP, compared with \$560,470 in FY 2021-22. It documents total expenditures during FY 2021-22 related to the SMP through March 2022 to be \$1,128,790, and includes the "SMP Phase 3" (i.e., construction of approximately 27,000 lineal feet of 18-inch to 24-inch pipe from the intersection of Upland Road and Las Posas Road in Camarillo to the intersection of Santa Rosa Road and Hill Canyon Road in the Santa Rosa Valley), and "SMP Phase 4" (i.e., extension of the SMP an additional 49,000 feet to Simi Valley to serve potential dischargers, potentially including at least one groundwater desalter each in Simi Valley and Thousand Oaks, potable reuse at the City of Simi Valley's wastewater treatment plant, and Las Virgenes Municipal Water District and Triunfo Sanitation District's potable reuse facility). Revenues collected by the District related to the SMP in the form of fees were \$195,600 in FY 2021-22 and are estimated to be \$631,880 during FY 2022-23.

# Sphere of Influence

The District's sphere of influence reflects historical mapping errors that were recently discovered as part of a mapping analysis conducted to compare the jurisdictional boundaries of the CMWD with the MWDSC. As a result of the effort to improve the precision of the CMWD's jurisdictional boundaries, nine areas are recommended for modification to the sphere (generally depicted below in Figure 11, and described in more detail in the staff report and exhibits related to the recommended sphere of influence update (LAFCo 23-02S)). Each of the identified areas A though I represents an area to be adjusted for one or more of the following reasons: (1) align the sphere with the existing jurisdictional boundaries of the District, (2) align the sphere with a city boundary, and/or (3) align the sphere with a city sphere of influence boundary. In all cases, the modifications serve to make minor adjustments to the District's sphere to more closely match its jurisdictional boundary, to reduce the sphere where future services are not anticipated, and to expand the sphere to include areas already within the District's jurisdictional area or within the public road right-of-way. The existing sphere of influence boundary otherwise continues to reflect the District's current and probable service area.



Figure 11: CMWD Sphere of Influence Update

# Written Determinations

The Commission is required to prepare a written statement of its determinations with respect to each of the subject areas provided below (Government Code § 56430(a)).

#### 1. Growth and population projections for the affected area

• Growth estimates for the District are estimated using data produced by the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (adopted by the Southern California Association of Governments in 2020). The 2020 Metropolitan Water District of Southern California UWMP (June 2021) estimates the population within the portion of its service area that lies within Ventura County (i.e., the area within the CMWD service area) to be 630,000 as of July 2020. The 2020 Calleguas Municipal Water District UWMP (June 2021), estimates a 2020 population of 644,441 and projects that the population will increase to 679,367 by 2030 and to 699,089 by 2040.

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

 A disadvantaged unincorporated community is defined as a community with an annual median household income that is less than 80 percent of the statewide annual median household income (Government Code § 56033.5). According to Ventura LAFCo Commissioner's Handbook Section 3.2.5, Ventura LAFCo has identified Nyeland Acres (within the City of Oxnard's sphere of influence to the north of the city), the Piru community, and Saticoy (within the City of San Buenaventura's sphere of influence to the east of the city) as disadvantaged unincorporated communities. Of the three identified disadvantaged unincorporated communities, only the community of Nyeland Acres, which has a median household income of \$42,043, is within the CMWD's sphere of influence (although it is outside the CMWD's jurisdictional area). The Nyeland Acres community receives fire protection services from both the Ventura County Fire Protection District and the City of Oxnard under a mutual aid agreement, police protection services from the Ventura County Sheriff's Office, wastewater collection services from Ventura County Service Area No. 30 (CSA 30), wastewater collection and treatment from the City of Oxnard (through an agreement between CSA 30 and the City whereby CSA 30 discharges to the City's collection system), and water services from the Garden Acres Mutual Water Company and Nyeland Acres Mutual Water Company.

# **3.** Present and planned capacity of public facilities, adequacy of public services, and infrastructure needs or deficiencies

Water Services:

 The District is a wholesale water provider that operates pursuant to the Municipal Water District Law of 1911. It provides potable water within much of southern and eastern Ventura County, including portions or all of the cities of Simi Valley, Moorpark, Thousand Oaks, Camarillo, Oxnard, and Port Hueneme, and surrounding unincorporated areas (e.g., Bell Canyon, Lake Sherwood, Oak Park, Santa Rosa Valley, Somis, and Naval Base Ventura County), and serves a population of approximately 645,000.

- The District's potable water supply is provided entirely by the Metropolitan Water District of Southern California, which receives its water from the State Water Project and through the Colorado River Aqueduct. The CMWD is the MWDSC's regional wholesale provider within Ventura County.
- The District imports water through a system of infrastructure. It operates and maintains approximately 130 miles of major transmission pipelines that range from 14 inches to 78 inches in diameter, 12 enclosed reservoirs with a total storage capacity of approximately 59 million gallons, six pump stations, groundwater injection wells, pump and pressure regulating stations, and hydroelectric generators.
- Imported water supply within the District was 89,630 AF in 2020. The 2020 UWMP estimates a minimum combined water supply (imported water plus a minimal amount of recycled water) to be 96,888 AF in 2022 and 88,248 AF in 2023. Supply is expected to be 86,607 AFY by 2025, increasing incrementally into the foreseeable future, reaching 87,720 AFY by 2030, 89,880 AFY by 2035, 91,326 AFY by 2040, and 91,784 AFY by 2045.
- The District delivered 89,666 AF in 2017, 91,338 AF in 2018, and 82,236 AF in 2019, and water demand within the District was 91,940 AF in 2020. The District anticipates relatively stable imported water demand for the foreseeable future: 87,461 AFY by 2025, 88,585 AFY by 2030, 90,766 AFY by 2035, 92,227 AFY by 2040, and 92,689 AFY by 2045. These estimates include a constant 1,255 AFY of demand for replenishment water (i.e., water used for injection into the District's Las Posas Aquifer Storage and Recovery facility and storage at Lake Bard).
- Based on information provided by the District and data available in its 2020 Urban Water Management Plan, it appears that water supply is currently sufficient to meet current potable water demand, and will remain so for the foreseeable future.
- The District owns Lake Bard (an earthen open-surface reservoir) and operates the Las Posas Aquifer Storage and Recovery (ASR) Project. The lake has a storage capacity of 10,500 AF, of which 7,500 AF is available for treatment at the Lake Bard Water Filtration Plant and distribution as potable water, and the remaining 3,000 AF may be used as emergency non-potable supply. The Las Posas ASR Project accommodates both injection of imported water into the Las Posas groundwater basin for storage of excess water supply and extraction of stored water when regular water supply is unavailable. In combination, water from Lake Bard and the Las Posas ASR comprised 1,729 AF during 2020, and is expected to total 1,255 AFY from 2025 into the foreseeable future (i.e., at least through 2045).
- Peak capacity at the East Portal of the District's Santa Susana Tunnel is 300 cfs. In 2021, the District's average day peak demand flow was 190 cfs, which totaled 378 AF for that peak demand day.
- The District is involved in the development or exploration of a variety of projects in support of improved water reliability, including the City of San Buenaventura State Water Project Interconnection, the Calleguas Municipal Water District-Las Virgenes Municipal Water District Interconnection, the Crestview Mutual Water Company Interconnection, Los Angeles Department of Water and Power Interconnection, Las Posas Aquifer Storage and Recovery Project, and Salinity Management Pipeline.

- The District has developed a Water Shortage Contingency Plan (WSCP) in preparation for potential reductions in imported water deliveries by the MWDSC resulting from severe water shortage conditions or catastrophic interruption of water supply conditions. The CWMD's WSCP is closely tied to the contents of MWDSC's WSCP, given that the District is entirely reliant on the MWDSC for its water supply; however, the CMWD is developing its own water shortage contingency measures. All measures related to water shortage conditions assume continued reliance on (i.e., no catastrophic failure of) the Santa Susana Tunnel. The District has established six levels of shortage conditions and corresponding responses (e.g., required reduction in demand). Water demand reductions for Shortage Levels 1 through 5 would be met by existing storage, flexible supplies, voluntary demand reductions, and WSAP supply allocations. In addition to the responses outlined for Shortage Levels 1 through 5, Shortage Level 6 involves potential prohibition of outdoor water use.
- The District's WSCP includes a Water Supply Alternatives Study (WSAS), which is a comprehensive planning effort that evaluates projects and programs that enhance water supply reliability that focus on meeting water demands during an extended outage of supplies from the MWDSC; and an Imported Water Outage Protocol (IWOP), which details potential methodologies for supply allocation during a catastrophic interruption of imported water.
- The CMWD's website states that the District's capital improvement projects are focused on the rehabilitation and replacement of aging infrastructure, improvement of local water supply reliability, and extension of the SMP to enable the development of local water supply projects. The District's FY 2022-23 adopted budget identifies a list of capital improvement projects, categorized as follows including costs of \$135,025,710 to fully implement the identified projects: (1) Salinity Management Pipeline (\$1,846,023), (2) Emergency Water Supply Reliability (\$104,366,687), (3) Improvements to Existing Facilities (\$10,102,000), (4) Rehabilitation, Replacement and Relocation (\$16,911,000), and (5) Unplanned System Repairs (\$1,800,000).

**Recycled Water Services:** 

- The District has been involved in several recycled water delivery projects, but does not treat recycled water that it purchases and delivers to its customers. Currently, the District provides recycled water generated at the Simi Valley Water Quality Control Plant to Ventura County Waterworks District No. 8 in Simi Valley; however, it anticipates eventually transferring ownership and operation of the system to VCWD 8. In 2020, the CMWD provided 57 AF to VCWD 8, and anticipates providing 80 AFY for the foreseeable future.
- Currently, the District's focus on support of recycled water is in the form of operation of the Salinity Management Pipeline (SMP), which enables purveyors to develop their own recycled water systems.

# Waste Water Disposal Services:

• The CMWD operates the regional SMP that collects brine generated by groundwater desalting facilities and conveys that water for beneficial reuse or safe discharge to the Pacific Ocean. The SMP supports use of local groundwater resources and diversification

of water supply within southeastern Ventura County by creating new opportunities for development of groundwater treatment facilities, resulting in the encouragement of use of local groundwater supplies to support existing and future development.

#### 4. Financial ability of agencies to provide services

- The District prepares a comprehensive annual budget, and maintains a capital improvement plan. It has a balanced budget and appears to have the ability to finance the services it currently provides.
- The District is independently audited on a regular basis. According to the District, the most recent audit (December 21, 2022) for FY 2021-2022 prepared for the District was unqualified. An unqualified report reflects fair and transparent financial statements in compliance with generally accepted accounting principles and statutory requirements.
- The District has a steady stream of revenue through water sales, capacity charges, property taxes, and grants. It has predictable expenses including water purchases, salaries and benefits, capital outlay costs, supplies/services, professional services, and membership and dues. Over the last three years, the District has maintained reserves ranging between 99 percent and 128 percent of total revenue.
- The District's bond ratings are Aa2 (Moody's) and AA (Standard and Poor's), which reflect that bonds issued by the District are generally considered to be safe investments, and that the District has the ability to fulfill its financial obligations to its bond holders.
- Based on information that the Ventura County Special Districts Association provided the County in January 2021, the District has experienced an estimated financial impact (including costs related to personal protective equipment, sick leave, custodial/sanitation activities, signage, education and enforcement, childcare, and technology) of approximately \$109,000, related to the coronavirus. The District covered these costs through additional revenue obtained through higher-than-budgeted water sales during that period.

# 5. Status of, and opportunities for, shared facilities

- The District is primarily responsible for wholesale water provision; therefore, its operations are by nature closely tied to retail water purveyors within its service area, and its activities have direct impacts on those agencies. For example, the District participates in a Regional Water Conservation Rebate Program offered by the MWDSC, which results in water use efficiencies throughout its service area and the service areas of retail water agencies within its service area (e.g., turf replacement program).
- The District operates the Regional Salinity Management Pipeline, which is a conduit that allows brine generated by groundwater desalting facilities and excess recycled water to be discharged into the Pacific Ocean. Water discharged through the SMP is not generated by the District; instead, the District enables discharge by other agencies and users within the District's boundaries. Operation of the SMP does not directly support the District's primary purpose to serve water; instead, it enables its retail water providers to develop projects in support of local water reliability.

- The District is involved with several projects to improve water supply reliability, including interconnections with other water providers (e.g., City of San Buenaventura, Las Virgenes Municipal Water District, City of Camarillo, and Crestview Mutual Water Company).
- The District's office contains a meeting space that can accommodate approximately 100 people for classes or other training purposes, and is amenable to coordinating training events with other agencies.

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

- The District is accountable to its constituents through its elected Board of Directors, adherence to applicable government code sections, open and accessible meetings, and dissemination of information.
- Meeting notices are posted at the District's office and on its website, and are sent to purveyors and individuals who have requested notification.
- The District has adapted to the changing needs of public access as a result of the disease caused by the novel coronavirus (COVID-19) pandemic, by providing live internet access and public participation opportunities for its meetings.
- The District maintains a website that provides detailed information about the District. It contains the District's history, mission, summary of services, budget, boundary map, studies and reports, contact information and roster of current Board members, meeting agendas and minutes for the current year, upcoming meeting information, news and announcements, current project information, and educational videos. The District could improve its transparency by maintaining historical budgets, meeting agendas, and meeting minutes on its website, by posting its enabling legislation, financial audit documents, and the State Controller's "By the Numbers" (agency financial reporting information) and "Public Pay" (employee salary) webpages, by recording and archiving Board meetings to be available on the District's website, and by adding a Spanish translation feature to its web content.
- The District has prepared a Water Shortage Contingency Plan that spells out the District's planned actions during water shortage conditions. The District plans to schedule meetings with individual purveyors to simulate various outage scenarios.
- The District sponsors and/or coordinates outreach programs intended to increase public awareness of water resource issues and encourage water use efficiency, including: (1) hosting semi-annual native plant sales and rain barrel sales, (2) hosting and participating in workshops to promote drought-friendly landscaping and turf alternatives, graywater and rainwater capture, and drip irrigation, (3) presenting on water resource matters to political bodies and community and service organizations, (4) maintaining a social media presence, and (5) frequently publishing advertisements in local newspapers regarding the availability of consumer rebates for water-saving devices. Information regarding MWDSC's water saving and efficiency programs is available at <u>bewaterwise.com</u>.
- The District participates in the <u>California Water/Wastewater Agency Response Network</u> <u>WARN (CALWARN)</u> program (which supports and promotes statewide emergency preparedness, disaster response, and mutual assistance processes for public and private

water and wastewater utilities in coordination with the State Office of Emergency Services), the <u>Association of California Water Agencies Joint Powers Insurance</u> <u>Authorities</u> (which provides insurance coverage, training programs, and other practical resources for public water agencies), and the <u>Calleguas-Las Virgenes Public Financing</u> <u>Authority</u> (which allows the District to consolidate financing of capital projects with the Las Virgenes Municipal Water District to achieve lower borrowing costs).

- The Ventura County Grand Jury released a document entitled <u>Final Report –</u> <u>Independent Special Districts (April 26, 2018)</u>, which was the result of an investigation by the Grand Jury into the transparency and public accountability of independent special districts within the County. The Grand Jury identified opportunities for improvement in these subject areas and required a response from the District. The District's response stated that expanded information is now available on the District's website, as a result of the report.
- District staff was responsive in providing information for this MSR during the requested timeframe.

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

- The Sustainable Groundwater Management Act (SGMA) of 2014 requires the formation of local groundwater sustainability agencies (GSAs) for high- or medium-priority water basins, as determined by the state. GSAs are required to evaluate local water basin conditions and develop groundwater sustainability plans (GSPs). The purpose of a GSP is to define sustainability for an individual basin and establish a path toward sustainability by 2040 for high-priority basins, and 2042 for medium-priority basins. A summary of the GSPs prepared for high-priority basins within the District's jurisdictional boundaries is provided below.
- The Las Posas Basin is listed as a high-priority basin, pursuant to the State Department of Water Resources (DWR). The Fox Canyon Groundwater Management Agency is the GSA for all areas of the Las Posas Basin except for the portion located within the jurisdictional area of the Camrosa Water District. The Fox Canyon Groundwater Management Agency (FCGMA) adopted a GSP for the entire Las Posas Basin in December 2019, which was approved by the DWR on January 13, 2022.
- The Oxnard Subbasin is listed as a high-priority basin, pursuant to the DWR. The FCGMA, the Camrosa Water District-Oxnard Subbasin GSA, and the Oxnard Outlying Areas GSA have jurisdiction over different portions of the Subbasin. The FCGMA adopted a GSP for the entire Subbasin in December 2019, which was approved by the DWR on November 22, 2021.
- The Pleasant Valley Basin is listed as a high-priority basin, pursuant to the DWR. The FCGMA, County of Ventura, Camrosa Water District have jurisdiction over different portions of the Subbasin. The FCGMA adopted a GSP for the entire Subbasin in December 2019, which was approved by the DWR on November 22, 2021.