

Ventura Local Agency Formation Commission

# United Water Conservation District

Municipal Service Review



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**Accepted by the Commission on September 20, 2023**

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## Introduction

### ***Purpose of the Municipal Service Review***

Local Agency Formation Commissions (LAFCo) 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 United Water Conservation District (UWCD 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:** The Ventura County General Plan and general plans of the cities included within the District's sphere of influence provided information regarding land use, populations, and service levels;
- **District Documents:** Various District documents provided supplementary information relating to service provision;
- **Historical MSRs:** The 2004 MSR (pertaining to water and wastewater services) and 2005 MSR (pertaining to recreation and park services) 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

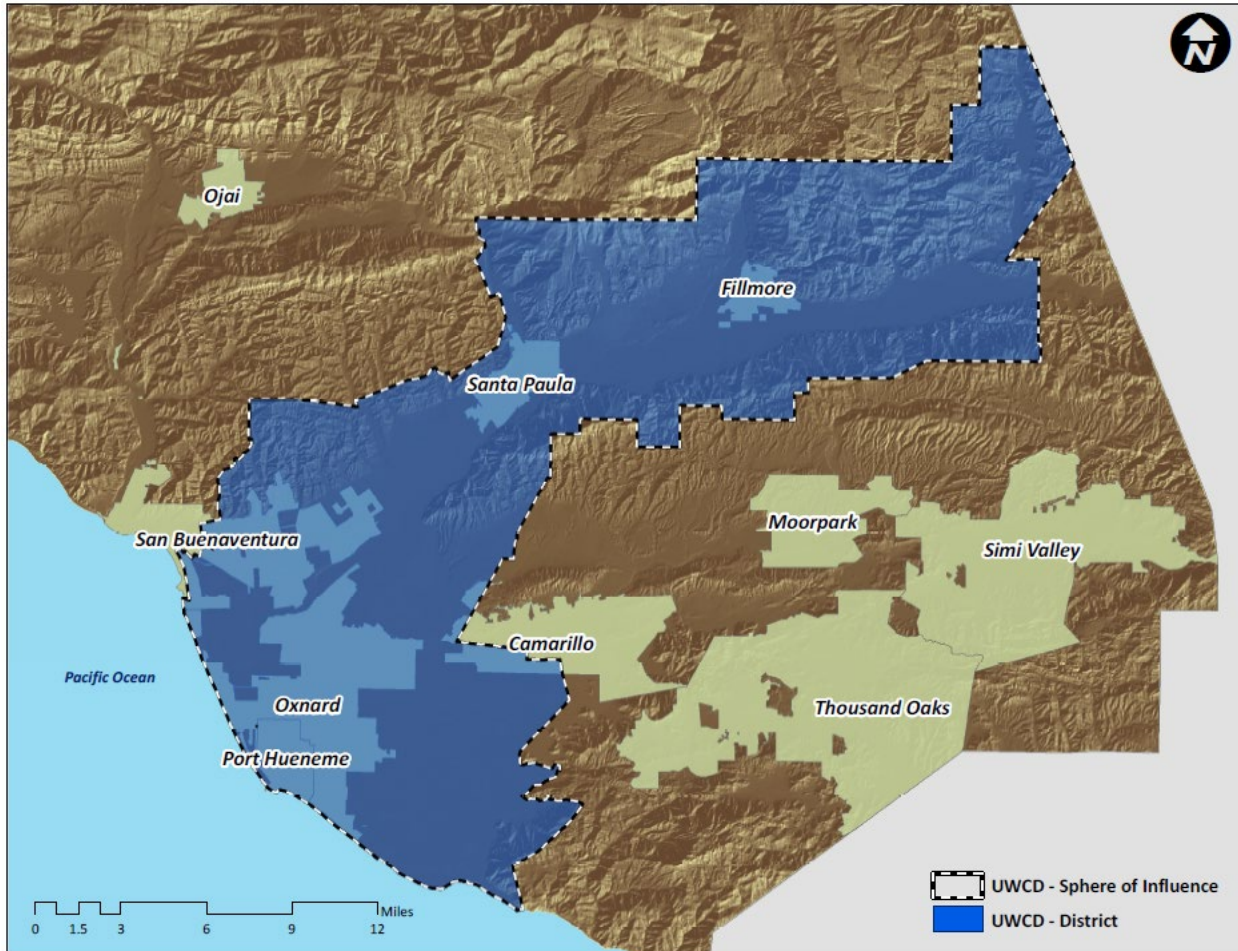


Figure 1: Location Map

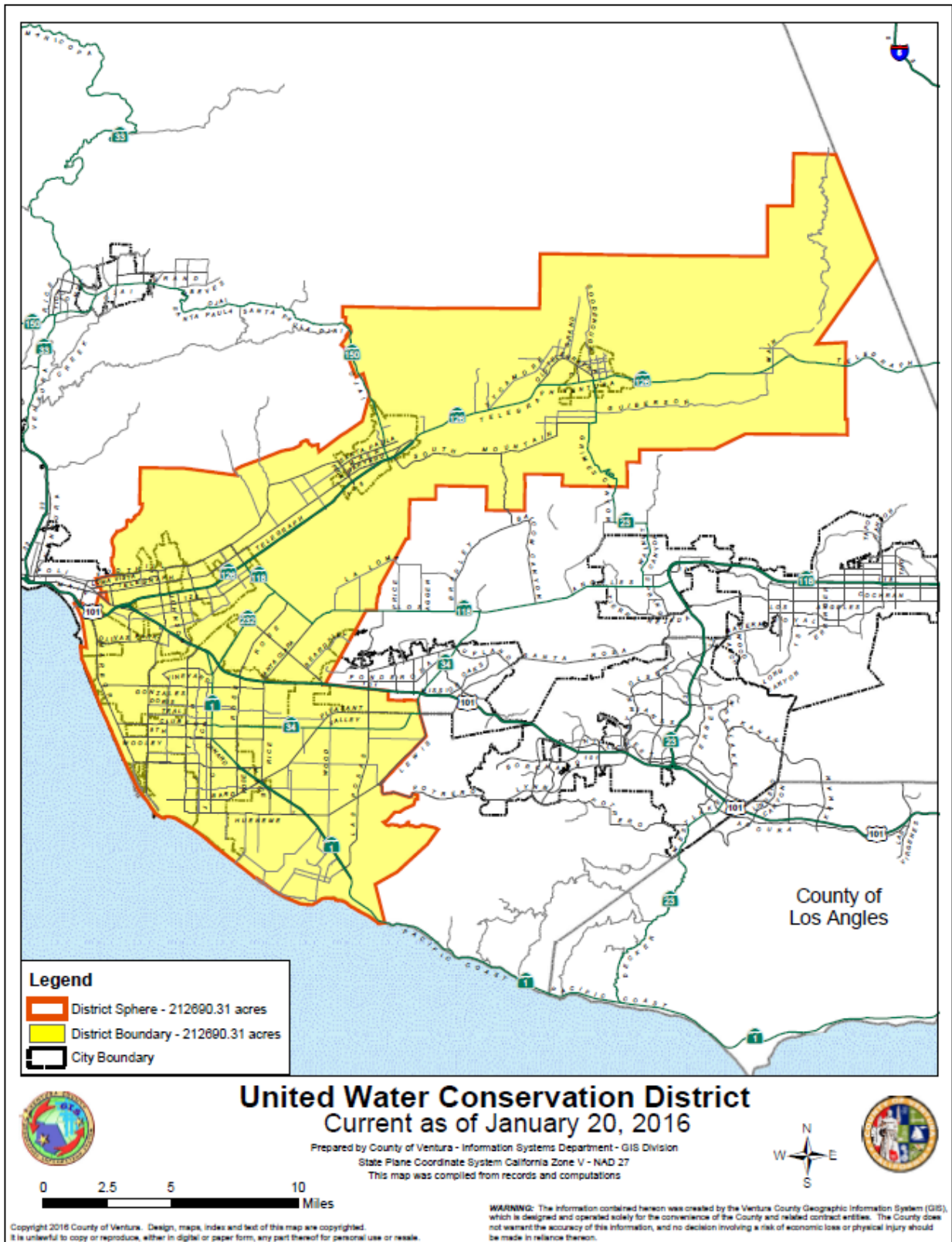


Figure 2: Official LAFCo Map

## Profile

The UWCD provides services related to the conservation of surface and groundwater resources, groundwater replenishment, and wholesale water delivery to the Oxnard, Port Hueneme, and Camarillo areas, and recreation and potable water services at the Lake Piru Recreation Area.

The District's mission is provided as follows:

*United Water Conservation District manages, protects, conserves and enhances the water resources of the District and produces a reliable and sustainable supply of groundwater for the reasonable, beneficial use of all users.*

The UWCD was formed in 1950 to address insufficient groundwater recharge within the Oxnard Forebay.<sup>1</sup> It owns, operates, and manages several facilities and infrastructure systems in support of its original purpose, including the Lake Piru reservoir and Santa Felicia Dam, the Saticoy Groundwater Recharge Facility and the El Rio Groundwater Recharge Facility, the Oxnard-Hueneme Pipeline (which provides drinking water to the City of Oxnard, the Port Hueneme Water Agency (PHWA),<sup>2</sup> and several mutual water companies), the Pleasant Valley Pipeline and Pumping Trough Pipeline (which deliver surface water directly from the Santa Clara River to agricultural properties on the Oxnard Plain and in the Pleasant Valley area to reduce groundwater pumping), and the Freeman Diversion (which diverts water from the Santa Clara River to recharge local groundwater supplies and combat seawater intrusion).

Additionally, the District provides recreational services related to its operation of the Lake Piru Recreation Area (which contains amenities for overnight camping as well as day use facilities for walking, hiking, fishing, water-based activities, etc., at Lake Piru), and provides limited wastewater collection services for wastewater facilities within the Lake Piru Recreation Area.

The UWCD's service area includes the entire Santa Clara River Valley (reaching from the Ventura/Los Angeles County line to the Santa Clara River delta at the Pacific Ocean between the cities of San Buenaventura and Oxnard), as well as the cities of Fillmore, Santa Paula, Oxnard, and Port Hueneme, and portions of the cities of Camarillo and San Buenaventura.

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<sup>1</sup> According to the UWCD's 2020 Urban Water Management Plan (UWMP), and as discussed in more detail later in this report, the "Oxnard Forebay is the unconfined portion of the Oxnard Plain Basin and is generally located along the Santa Clara River northeast of the intersection of Pacific Coast Highway and U.S. Highway 101 in the City of Oxnard."

<sup>2</sup> The Port Hueneme Water Agency (PHWA) operates under a Joint Powers Agreement, and is governed by a board of directors consisting of three members of the City of Port Hueneme City Council and two directors from the Channel Islands Beach Community Services District. Water users of the PHWA include the City of Port Hueneme, the Channel Islands Beach Community Services District, and Naval Base Ventura County (i.e., Naval Construction Battalion Center Port Hueneme and Naval Air Weapons Station Point Mugu). According to the PHWA's 2020 UWMP, the PHWA provides a means to reduce historical seawater intrusion along the coast, enhance fire protection, improve water quality, encourage wastewater reclamation, and comply with the county-wide extraction reduction schedule. The PHWA operates a groundwater softening treatment plant, a storage tank, and a booster station and serves about 44,000 people.

### Contact Information

District Manager	Mauricio Guardado, Jr.
District Office	1701 Lombard Street, Suite 200, Oxnard, CA 93030
Mailing Address	1701 Lombard Street, Suite 200, Oxnard, CA 93030
Phone Number	(805) 525-4431
Website	unitedwater.org
E-mail Address	mauriciog@unitedwater.org

### Governance Information

Formation Date	December 5, 1950
Legal Authority	<u>Water Code § 74000</u> (Water Conservation District Act of 1931)
Type of District	Independent
Board of Directors	Seven members. Elected by voting district to staggered, four-year terms of office (elections held in even-numbered years).
Board Meetings	2 <sup>nd</sup> Wednesday of most months, beginning at 12:00 p.m., located at 1701 Lombard Street, Suite 200, Oxnard, CA 93030

### Services Provided

The UWCD is authorized to provide: (1) services related to wholesale water provision, water treatment, agricultural water provision, groundwater management, water replenishment, and groundwater and surface water conservation throughout its service area, and (2) potable water services, wastewater services, and recreational services within the Lake Piru Recreation Area.

### Population and Area Information

	<i>Population</i> <sup>3</sup>	<i>Area (square miles)</i>
Jurisdictional Area	350,000	332.33
Sphere of Influence Area	350,000	332.33

### Staffing – Full Time Equivalent Positions

Executive/ Management	Professional/ Support	Operational	Recreation <sup>4</sup>	Total
15	32	20	6	73

<sup>3</sup> According to District staff, the U.S. Census Bureau estimated a 2020 population within the District service area of approximately 350,000.

<sup>4</sup> The District's recreation department includes several part-time and seasonal employees, who cover recreation duties during peak visitation season.



Revenues	Expenditures
Primary Revenue Sources	Primary Expenses
Groundwater Revenue	Operating Expenditures
Water Deliveries	Transfers Out-Capital Improvement Projects
Property Tax Revenue	Personnel Costs
FY 2023-24 Revenues (Budget)	FY 2023-24 Expenditures (Budget)
\$52,633,000	\$59,280,000 <sup>5</sup>

Public Agencies with Overlapping Jurisdiction	
Bardsdale Cemetery District	Oxnard Harbor District
Blanchard/Santa Paula Library District	Piru Public Cemetery District
Calleguas Municipal Water District	Pleasant Valley County Water District
Camarillo Health Care District	Pleasant Valley Recreation and Park District
Camarillo Sanitary District	Saticoy Sanitary District
Channel Islands Beach Community Services District	Ventura County Air Pollution Control District
City of Camarillo	Ventura County Fire Protection District
City of Fillmore	Ventura County Resource Conservation District
City of Oxnard	Ventura County Service Area No. 4
City of Port Hueneme	Ventura County Service Area No. 14
City of San Buenaventura	Ventura County Service Area No. 30
City of Santa Paula	Ventura County Service Area No. 32
Fillmore-Piru Memorial District	Ventura County Service Area No. 34
Fox Canyon Groundwater Management Agency	Ventura County Transportation Commission
Gold Coast Transit District	Ventura County Watershed Protection District
Metropolitan Water District of Southern California	Ventura County Waterworks District No. 19
Oxnard Drainage District No. 1	Ventura Regional Sanitation District
Oxnard Drainage District No. 2	

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<sup>5</sup> Two funds are projected to have shortfalls in the FY 2023-2024 budget, and the District is addressing the shortfall over the next three years, consistent with the Reserve Policy. According to District staff, the primary factor for this was the recent San Buenaventura v. UWCD court decision which struck down the requirement in the Water Code for the District to charge different rates for agricultural and non-agricultural customers, resulting in an unusual change in groundwater extraction fees. Resolution of the legal issue came so late in the budget development process that there was little opportunity to educate pumpers about the change. The District opted to implement the changes over a three-year period, during which time funds will not be balanced.

## **Growth and Population Projections**

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

According to the 2020 UWCD Urban Water Management Plan (UWMP) (adopted June 8, 2021), which is based on data gathered from the Southern California Association of Governments, the Port Hueneme Water Agency, and the Safe Drinking Water Information System, the estimated population within the District's Oxnard Hueneme Pipeline system and its sphere of influence that receives (wholesale) water service in 2020 was 257,296, and is anticipated to increase to 271,834 by 2030 and to 285,409 by 2040. According to District staff, the U.S. Census Bureau estimated a 2020 population within the District's entire service area of approximately 350,000.

## 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)).

### District History

The Santa Clara Water Conservation District (SCWCD), formed under the Water Conservation District Act of 1927, was the predecessor of the UWCD. It was formed for the purpose of protecting water rights and conserving (i.e., storing) water from the Santa Clara River and its tributaries, to ensure water provision to the Santa Clara River Valley, Oxnard Plain, and Pleasant Valley Basin. The UWCD was formed as the result of an election in 1950 to address insufficient groundwater recharge within the Oxnard Forebay within the Oxnard Groundwater Basin. The Water Conservation District Act of 1931, in effect at the time of the UWCD's formation, provided the District with the authority to issue general obligation bonds for the design and construction of several significant water infrastructure projects, unlike the limited borrowing authority available to the SCWCD under the 1927 Act. While both districts coexisted for a short time, the SCWCD ultimately transferred its assets to the UWCD and was dissolved.

The District's purpose has expanded over time, and today it provides services related to surface and groundwater conservation, groundwater replenishment, and wholesale water delivery. In support of its purpose, the District constructed the Santa Felicia Dam in 1955 (which created Lake Piru), established several recharge basins/spreading grounds, constructed the Oxnard-Hueneme Pipeline (OH Pipeline) in 1956 (which provides drinking water to the City of Oxnard, the PHWA, and several mutual water companies), the Pleasant Valley Pipeline (PVP) in 1959 and Pumping Trough Pipeline (PTP) in 1986 (which deliver surface water directly from the Santa Clara River to agriculture on the Oxnard Plain and Pleasant Valley to reduce pumping in the overdrafted lower aquifer system that is vulnerable to seawater intrusion<sup>6</sup>), and the Freeman Diversion in 1991 (to divert Santa Clara River flow to enhance recharge of local groundwater supplies into underground pools to ward off seawater intrusion). These core operations and facilities of the District are discussed in detail later in this report under Water Services.

Additionally, the District provides recreational services related to its operation of the Lake Piru Recreation Area (LPRA), which contains amenities for overnight camping as well as day use facilities for walking, hiking, fishing, water-based activities, etc., at Lake Piru (discussed below under Recreational Services), and provides limited wastewater collection services for wastewater facilities within the LPRA (discussed below under Wastewater Services).

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<sup>6</sup> The UWCD's 2020 UWMP states: "Due to groundwater extractions, groundwater resources are vulnerable to the effects of rising sea levels. When groundwater extraction exceeds recharge in coastal areas, water levels in the aquifers decline and an onshore hydraulic gradient can develop that promotes intrusion of seawater into the underlying aquifers. Seawater intrusion has already been documented in the Lower Aquifer System of the South Oxnard Plain" (page 3-5 of the 2020 UWMP).

## Service Area

The UWCD's service area includes the entire Santa Clara River Valley (reaching from the Ventura/Los Angeles County line to the Santa Clara River delta at the Pacific Ocean between the cities of San Buenaventura and Oxnard), as well as the cities of Fillmore, Santa Paula, Oxnard, and Port Hueneme, and portions of the cities of Camarillo and San Buenaventura. It includes the portions of the Santa Clara River that lie within Ventura County between Los Angeles County and the Pacific Ocean, as well as the Lake Piru reservoir and the Santa Felicia Dam.

## **Recreational Services**

Although the primary purpose of the UWCD is to provide services related to surface and groundwater conservation, groundwater replenishment, and wholesale water delivery (discussed in detail later in this report under Water Services), the District provides recreational services by offering a venue and opportunities for visitors to engage in recreational water activities, day use, and overnight camping at the LPRAs centered around the Lake Piru reservoir. Public access to the reservoir for recreational purposes is a requirement of the District's Federal Energy Regulatory Commission (FERC) license. The UWCD operates the LPRAs pursuant to a County-authorized conditional use permit.

Land-based recreational facilities exist along the western shoreline of Lake Piru. According to the *Lake Piru Recreation Area Management Plan* (September 14, 2018), developed areas of Lake Piru include a marina which contains 66 boat slips, three boat launch ramps, swim areas, 238 developed campsites for overnight camping, two group campgrounds, a primitive overflow camping area, restrooms on land and two floating restrooms, showers, laundry facilities, picnic areas, sports facilities (i.e., basketball courts, volleyball nets, horseshoe pits, and a 9-hole disc golf course), a dog park, a day use area, hiking facilities, a store, and associated vehicle parking areas. Figure 3 to the right shows the portion of the LPRAs that contains the campground along the western shoreline.



Figure 3: Lake Piru Recreation Area  
Source: United Water Conservation District

Water-based recreational activities at Lake Piru include swimming, water skiing, jet skiing, wakeboarding, paddleboarding, windsurfing, kayaking, canoeing, and sailing. The LPRAs also includes a U.S. Forest Service fire station, located just east of the campground. The District

collects fees for services within the developed portions of the LPRA (e.g., by means of vehicle entrance fees, slip fees, and camping fees). Approximately 1.4 miles of pullouts along the roadway following the western Lake Piru shoreline is available free of charge for visitors to park vehicles and access the lake. The District previously operated recreational facilities through a contractor/concessionaire; however, since January 2022, the District has been operating and maintaining the LPRA and facilities using its own staff as well as landscape maintenance contractors.

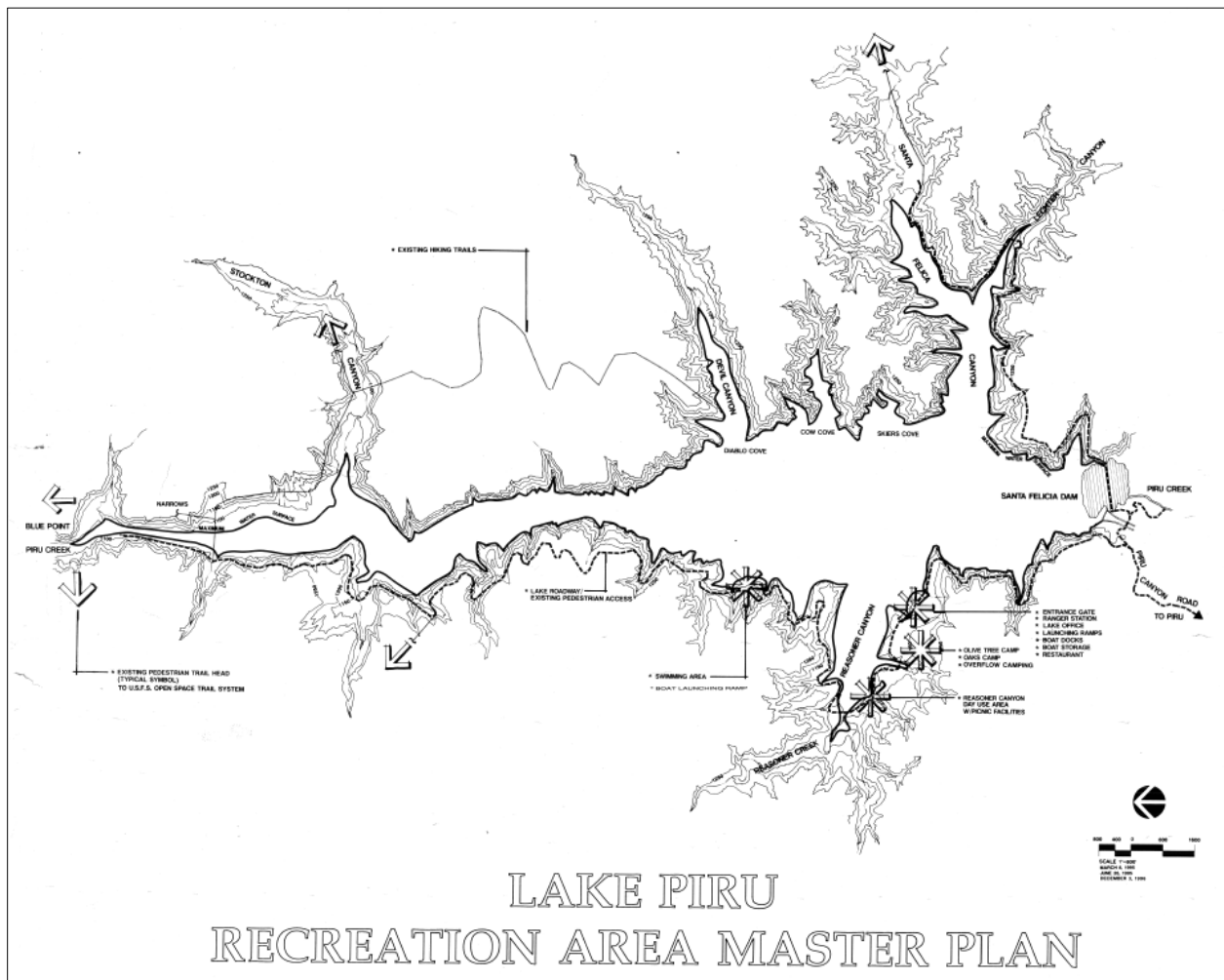


Figure 4: Lake Piru Recreation Area (LPRA)  
 Source: United Water Conservation District

The LPRA experienced a considerably greater number of visitors annually in the decade spanning 1990 to 2000 (more than 150,000 visitors annually) than it did in the mid-2010s (55,449 visitors in 2017), likely attributable to the fact that lake levels during that time were consistently high (never dropping below 1,000 feet elevation). According to District staff, historical trends show that when lake levels are consistently at levels above 1,000 feet elevation, recreational opportunities and visitation increase. At full capacity (1,055 feet elevation), Lake Piru offers about 1,240 surface acres of water and includes several coves, whereas during the normal minimum pool elevation of 980 feet, coves disappear and the lake

provides approximately 58 percent less surface area (i.e., about 500 surface acres of water) (Figure 4, on the previous page). District staff estimates a recent average annual service volume to include 90,000 visitors to the LPRA, with approximately 75 percent consisting of overnight camping visitors and approximately 25 percent consisting of day use visitors. While the District does not make formal projections regarding the number of visitors to the LPRA, the number of visitors annually is anticipated to remain stable.

## **Wastewater Services**

Wastewater generated at the LPRA (e.g., at the restrooms, ranger station, gate house, snack bar, maintenance facilities, fish cleaning station, and recreational vehicle dump station) is collected and treated through the use of 12 existing septic systems. Wastewater is discharged through existing seepage pits and leach fields. Additionally, wastewater collected from six remote vault toilet facilities (intermittent use with relatively low volume) is transported by a private hauler to the Joint Water Pollution Control Plant (JWPCP) operated by the Los Angeles County Sanitation Districts in Carson, California, for treatment. Previously, the private hauler transported the wastewater to the Santa Clara Wastewater facility at 815 Mission Rock Road located between the cities of San Buenaventura and Santa Paula; however, that facility was closed following a chemical explosion in November 2014, at which time the private hauler began delivering the wastewater to the JWPCP for treatment. During Fiscal Year (FY) 2022-23, the wastewater hauler collected wastewater from the LPRA two times and hauled it to the JWPCP for treatment.

## **Water Services**

### *Water Service History*

Beginning in 1928, in response to recognized overdraft conditions of local groundwater basins and to support recharge of the basins, the SCWCD developed spreading grounds to enhance the natural percolation through sand and gravel of surface water from local streams, creeks, and the Santa Clara River, as discussed later in this report. By 1947, annual overdraft of local groundwater basins reached 30,000 acre-feet<sup>7</sup> per year (AFY) and was forecast to double with anticipated population growth in the region. The District recognized that implementation of additional water supply projects would be essential to avoid severe overdraft of groundwater resources and to address the threat of seawater intrusion. Within a few years, the situation had become dire, and groundwater recharge in the Oxnard Forebay<sup>8</sup> was insufficient to counteract drawdown of groundwater supplies.

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<sup>7</sup> An acre-foot (AF) is the volume of water that would cover a one-acre area in one foot of water, or approximately 326,000 gallons.

<sup>8</sup> According to the UWCD's 2020 UWMP, the "Oxnard Forebay is the unconfined portion of the Oxnard Plain Basin and is generally located along the Santa Clara River northeast of the intersection of Pacific Coast Highway and U.S. Highway 101 in the City of Oxnard. The Oxnard Forebay is where the majority of the groundwater recharge to the principal aquifers used for water supply in the Oxnard Plain Basin occurs. The Oxnard Forebay is recharged by infiltration from the riverbed of the Santa Clara River and the four (4) groundwater recharge facilities... Surface water applied to these basins seeps down to the regional water table and serves to recharge the aquifers of the upper aquifer system (UAS) and the lower aquifer system (LAS). The UAS and LAS are hydraulically connected to



The UWCD was formed in 1950 with the mission to “conserve and enhance the water resources of the Santa Clara River, while protecting the river’s natural features,” in a coordinated process that included the dissolution of the SCWCD. Building on the framework established by the SCWCD, the UWCD implements its mission through the construction and operation of a variety of facilities and programs, which are generally summarized as follows, and explained in more detail later in this report:

- Conservation of surface and groundwater resources through groundwater replenishment activities;
- Delivery of wholesale water within its service area, including to the City of Oxnard and PHWA, Cypress Mutual Water Company, Dempsey Road Mutual Water Company, Saviers Road Mutual Water Company, and Vineyard Avenue Estates Mutual Water Company; and
- Delivery of direct (e.g., retail) potable water at the LPR (which is owned and operated by the UWCD), and to E&H Land, Rio Real Elementary School, and Rio Del Valle Middle School.

The UWCD’s significant water-related facilities are the Santa Felicia Dam at Lake Piru, the Lake Piru reservoir, the Freeman Diversion along the Santa Clara River, the Saticoy groundwater recharge basin and El Rio groundwater recharge basin, and distribution pipelines in support of the OH Pipeline, PTP, and PVP, all of which have a symbiotic relationship and each of which is discussed in detail later in this report. Major facilities are generally depicted in Figure 5 to the right. The UWCD’s operations are funded primarily through groundwater pumping charges, water delivery charges, and property taxes.

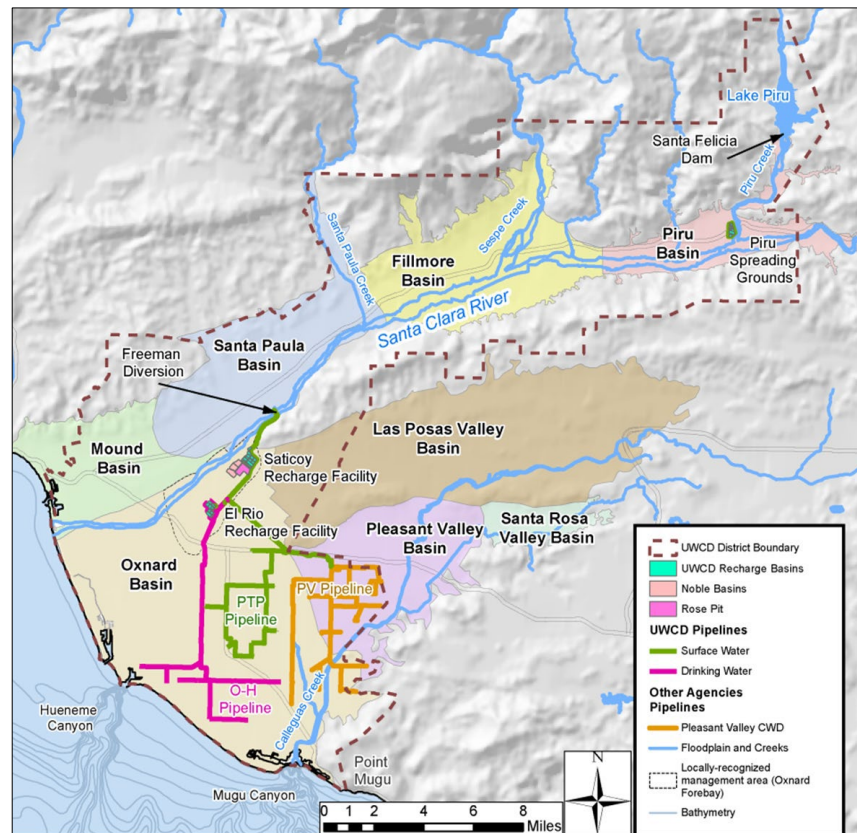


Figure 5: United Water Conservation District Facilities  
Source: United Water Conservation District

the Pacific Ocean, allowing seawater intrusion in the Oxnard Plain Basin when groundwater elevations are below sea level.”

## Santa Clara River

The Santa Clara River's headwaters are located in the Angeles National Forest in Los Angeles County, and the river flows southwest into Ventura County through the Santa Clara River valley area (i.e., generally south of the community of Piru and the cities of Fillmore and Santa Paula) and between the cities of San Buenaventura and Oxnard, ultimately reaching the Pacific Ocean at McGrath State Beach and the Ventura Harbor (Figure 6, below).



Figure 6: United Water Conservation District General System Map

Source: Ventura County Geographic Information Systems Waterbodies Data & LAFCo (2023)

The Santa Clara River is one of very few major rivers in Southern California, and is widely touted as one of the last rivers in the region that remains mostly in a natural state (e.g., without significant concrete channels and with an abundance of wildlife habitat).



## Santa Felicia Dam

In 1955, the District constructed the Santa Felicia Dam<sup>9</sup> across Piru Creek to create the Lake Piru reservoir, located approximately 4½ miles northeast of the unincorporated community of Piru, and manage the flow of water from Piru Creek into the Santa Clara River. The photograph below (Figure 7) shows Lake Piru behind the Santa Felicia Dam and spillway. The intent of the



Figure 7: Lake Piru and Santa Felicia Dam  
Source: United Water Conservation District

Santa Felicia Dam construction project was to encourage the recharge of downstream groundwater basins to address concerns of declining groundwater levels in the region. The UWCD manages water releases from the reservoir into Lower Piru Creek to supplement groundwater recharge of overdrafted downstream basins. Groundwater can then be pumped in response to water demand and is used as a water buffer to combat seawater intrusion (a

condition in which seawater encroaches into coastal aquifers and contaminates the groundwater by introducing briny water).<sup>10</sup> Furthermore, surface water from the Santa Clara River can be harvested by municipal users.

On June 3, 2019, the District initiated a substantial release of water from the Santa Felicia Dam, resulting in 15,000 AF reaching the Freeman Diversion for groundwater recharge use. This action represented the largest volume released since 2012 and was considered an early seasonal release of water compared with the historical tendency to release water after the dry

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<sup>9</sup> The Santa Felicia Dam, identified by the California Department of Water Resources Division of Safety of Dams (DSOD) as CA00805, is 200 feet wide and has a 450-foot spillway. It is under the jurisdiction of the Federal Energy Regulatory Commission (FERC), and the District holds a license pursuant to FERC and the DSOD, which imposes requirements related to the safety of the dam and public safety, water quality, management of biological and land resources, and recreational opportunities and facilities. The power that is generated at the site is conveyed by transmission lines owned and operated by the Southern California Edison Company.

<sup>10</sup> The UWCD's 2020 UWMP documents that "...as sea levels rise, seawater intrusion to groundwater supply occurs. Due to groundwater extractions, groundwater resources are vulnerable to the effects of rising sea levels. When groundwater extraction exceeds recharge in coastal areas, water levels in the aquifers decline and an onshore hydraulic gradient can develop that promotes intrusion of seawater into the underlying aquifers. Seawater intrusion has already been documented in the Lower Aquifer System of the South Oxnard Plain. Rising sea levels combined with the potential for future overdraft associated with changes in precipitation patterns could exacerbate this effect and reduce the volume of groundwater resources available for United and other users in the region." Saline intrusion primarily occurs at the Hueneme Submarine Canyon and Mugu Submarine Canyon in the Pacific Ocean off the coast of City of Port Hueneme.

summer months. The water release was completed in part to dilute rising nitrate levels in the groundwater that forced the temporary shutdown of groundwater wells in the unincorporated community of El Rio north of the City of Oxnard; the shutdown situation negatively impacted more than 350 residential and commercial customers of the Vineyard Avenue Acres Mutual Water Company who rely on local groundwater. The release was made possible by a \$3 million contribution by the Fox Canyon Groundwater Management Agency (FCGMA) to pay for transportation of supplemental State Water Project (SWP) water that the California Department of Water Resources (DWR) offered at that time. In a press release, the UWCD stated: “This historical release of water at our Santa Felicia Dam will ultimately result in the diversion of high-quality water at our Freeman Diversion facility, helping to recharge the area’s aquifer still recovering from drought and helping to offset the increasing nitrate levels of wells within the immediate vicinity of El Rio. It will also help with seawater intrusion issues we continue seeing on the Oxnard Plain.”

The Santa Felicia Dam most recently spilled on March 16, 2023, when Lake Piru filled to capacity following the significant winter storms of 2023, and was the first time the dam had spilled since 2006 and the highest level reached since 2019. The District is currently releasing water from the Santa Felicia Dam for groundwater recharge, with approximately 30,000 AF released to date. The District expects the release to continue until November 2023.

The original Santa Felicia Dam outlet works components and spillway were constructed in 1955 and continue to operate as designed. The District has twice increased the height of the intake tower from its original elevation of 890 feet above sea level: (1) a 13.25-foot increase to an elevation of 903.25 feet in 1969, and (2) a 29.35-foot increase to an elevation of 932.6 feet in 1976. In both cases, the District heightened the intake tower to accommodate the accumulation of fine sediments in the vicinity of the original intake structure, which were expected to interfere with operation of the dam at the then-existing height of the intake structure.

The Federal Energy Regulatory Commission (FERC) has jurisdiction over Santa Felicia Dam, which is authorized to generate up to 1,420 kilowatts (kW) of hydroelectric power through the release of water. The District sells its hydroelectric power to Southern California Edison. FERC has classified the Santa Felicia Dam as “high hazard.” The Division of Safety of Dams (DSOD) of the DWR established and maintains a downstream hazard dam rating system to establish downstream impacts to life and property upon dam failure in the situation when a reservoir is full. The District reports that the Santa Felicia Dam falls into the DSOD’s *Extremely High* hazard category (the highest risk level), indicating that failure of the dam when Lake Piru is full would be “expected to cause considerable loss of human life or would result in an inundation area with a population of 1,000 or more.” Pursuant to the oversight of FERC and DSOD, the District maintains an Emergency Action Plan for the Santa Felicia Dam. The Emergency Action Plan discusses projected inundation zones for the scenario in which the Santa Felicia Dam fails and Lake Piru is full (worst-case scenario) as well as the scenario when the lake is partially full, and sets forth a process for reacting to such a circumstance. The DSOD maintains [California Dam Breach Inundation Maps](#) on its website.

## Lake Piru Reservoir

The purpose of the Santa Felicia Dam and associated Lake Piru (located in eastern Ventura County, north of the unincorporated community of Piru and near the boundary line that separates Ventura County from Los Angeles County) is to capture surface winter and spring stormwater for later releases into Lower Piru Creek, in order to recharge downstream groundwater resources along the Santa Clara River when aquifers reach their seasonal lows.<sup>11</sup> Rainfall in the Piru Creek watershed is highly variable; however, most of the water (i.e., approximately 90 percent) within Lake Piru at any given time consists of stormwater runoff generated from within the 479-square-mile Piru Creek watershed that includes Upper Piru Creek and its tributaries. The remaining volume consists of imported water from the SWP supplied by DWR (i.e., approximately 6 percent), and direct precipitation onto the surface of the lake (i.e., approximately 4 percent). Lake Piru currently has a storage capacity of 82,067 AF, based on the most recent siltation evaluation, and covers up to 1,240 acres of surface area.

Water released from Lake Piru, combined with flows from the Sespe Watershed and Santa Paula Creek Watershed (which enter the Santa Clara River downstream of Piru Creek), travels into and through the Santa Clara River, where a portion of streamflow is diverted for surface water deliveries and groundwater recharge at the Freeman Diversion near the unincorporated community of Saticoy. Some water percolates in the river channel to the groundwater basins upstream of the Freeman Diversion, and the remaining water not diverted flows to the Santa Clara River delta at the Pacific Ocean between the cities of San Buenaventura and Oxnard. Typical releases from the Santa Felicia Dam during dry weather result in approximately 50 percent being recharged in the Piru Basin and Fillmore Basin, and the other 50 percent flowing across the Santa Paula Basin to the Freeman Diversion. The District captures a significant portion of that flow and releases a portion downstream for environmental purposes. During wet weather and following storms, the majority of the water in the river typically flows to the Pacific Ocean.

In early 2023, Lake Piru contained a mere 14,000 AF of water (approximately 17 percent of capacity). However, following the winter storms of 2023 the reservoir reached capacity on March 16, 2023, when water spilled over the Santa Felicia Dam. As a by-product of the provision of water storage for conservation and replenishment purposes, Lake Piru offers year-round camping, boating, fishing and other outdoor recreational opportunities to visitors, as explained earlier in this report in the discussion of Recreational Services.

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<sup>11</sup> The District's activities related to water capture and release are licensed by the California State Water Resources Control Board.

### Vern Freeman Diversion

In 1991, the UWCD constructed the 25-foot tall, 1,200-foot-wide Vern Freeman Diversion, east of the unincorporated community of Saticoy (east of the City of San Buenaventura), to redirect a portion of the water from the Santa Clara River to spreading basins in order to support groundwater recharge and replenishment, and to buffer against seawater intrusion (Figure 8).

When constructed, the Freeman Diversion replaced temporary diversion structures that were operated first by the SCWCD and later by the UWCD. Today, operation of the Freeman Diversion yields the replenishment of water in the Oxnard Plain Basin by diverting water from the Santa Clara River, slowing seawater intrusion beneath approximately 50,000 acres of agricultural land.



Figure 8: Freeman Diversion  
Source: United Water Conservation District

The Freeman Diversion structure features a fish ladder to allow for the unimpeded upstream migration of steelhead trout and other aquatic species, and a screened fish bay component that prevents fish from entering the diversion canal and recharge basins. In order to improve the function of the facility, the District is currently pursuing expansion of the diversion structure, as discussed in more detail later in this report under Capital Improvement Projects.

The Freeman Diversion annually diverts an average of 58,000 AFY, or about 23 percent, of the Santa Clara River's flow into the underground water supply. Over the course of its existence, the Freeman Diversion has rerouted approximately 1.7 million AF of water from the Santa Clara River for beneficial uses. Precise streamflow gauging using automated measuring devices poses challenges, given that the lower Santa Clara River consists of a wide, sandy riverbed that frequently morphs in shape; therefore, the District gauges streamflow manually in sections of the river channel where its automated stream-gauging equipment cannot supply accurate streamflow data. Additionally, the UWCD relies upon and financially contributes to United States Geological Survey (USGS) stream-gauging facilities operated and managed by USGS and Ventura County Watershed Protection District hydrologists.

### Groundwater Recharge Facilities

The UWCD operates several recharge basins (also known as spreading grounds) that facilitate a natural percolation process, allowing water from the Freeman Diversion to seep through layers of sand and gravel to replenish the aquifers. The UWCD's 2020 UWMP documents that in



addition to enabling increased water volumes available for pumping, recharge activity generally has a positive impact on the quality of pumped groundwater in that it contributes to the dilution of nitrate concentrations. While the District has historically been involved in the operation of four recharge basins (i.e., the Saticoy Groundwater Recharge Facility, El Rio Groundwater Recharge Facility, Piru Groundwater Recharge Facility, and Santa Paula Groundwater Recharge Facility), its groundwater recharge activities are currently limited to the facilities in El Rio and Saticoy. Each of the four recharge facilities is discussed below.

- Saticoy Groundwater Recharge Facility (Active)

The District owns and operates the Saticoy Groundwater Recharge Facility's Saticoy Basins, located east of Los Angeles Avenue in unincorporated area east of the City of San Buenaventura, which became operational in 1927 and have provided continuous service for nearly 100 years. Water is conveyed from the Freeman Diversion through a gravity-flow canal and gravity-flow pipelines to the desilting basin, and then by means of a gravity-flow canal to the Saticoy Groundwater Recharge Facility.

Over the years, the District expanded the groundwater recharge capacity in Saticoy to accommodate additional available surface water for groundwater recharge of the Oxnard Forebay with the purchases of the Noble Basins (Noble 1, 2, and 3) in 1994 (in service since approximately 1995), the Rose Basin in 2009 (operational since approximately 2016), and the Ferro Basin in 2009 (see Figure 9, to the right). The gravity-flow canal from Noble Basin 3 to Ferro Basin has not yet been constructed but is anticipated to be operational by 2027, following construction of an additional canal and pipeline conveyance. All of the expansion areas were formerly owned by an aggregate mining company.



Figure 9: Saticoy Groundwater Recharge Facility  
Source: United Water Conservation District

As a member of the Riverpark Reclamation and Recharge Joint Powers Authority (JPA) (consisting of the City of Oxnard and UWCD), the District explored the use of the nearby Riverpark basins (i.e., Large Woolsey Basin and Small Woolsey Basin) for groundwater recharge (which would use surface water and recycled water) and surface water storage. The Riverpark Reclamation and Recharge JPA ultimately abandoned the water recharge and storage concept at this location, based on conclusions regarding excessive excavation depth and exposure of aquifers supplying nearby potable wells with water that would not have had sufficient time to be naturally filtered. Additionally, District staff states that the City of Oxnard determined that recharge in the Riverpark basins using the City's highly-treated recycled water would not represent the highest and best use of the recycled water. The District continues to be

interested in exploring additional opportunities for purchasing land within the Oxnard Forebay region to further expand its water recharge capacity.

- El Rio Groundwater Recharge Facility (Active)

The El Rio Groundwater Recharge Facility, located between Vineyard Avenue and Rose Avenue north of the unincorporated community of El Rio adjacent to the City of Oxnard, was established in 1956. The District documents that a portion of the water diverted at the Freeman Diversion is conveyed through the Saticoy Groundwater Recharge Facility through a gravity-flow canal, and then through a gravity-flow pipeline along Rose Avenue to the El Rio Groundwater Recharge Facility.

- Piru Groundwater Recharge Facility (Inactive)

The Piru Groundwater Recharge Facility is owned by the District and was established in 1932, prior to the construction of the Santa Felicia Dam. District staff reports that due to restrictions stemming from the Endangered Species Act (ESA), the Piru Diversion and Piru Groundwater Recharge Facility have not been operational since 2008. Currently, the facility alternatively functions as the recharge component for a stormwater quality project that serves a portion of the unincorporated community of Piru.<sup>12</sup> When operational as a groundwater recharge facility, water is conveyed from the Piru Diversion, located on Piru Creek near the unincorporated community of Piru, through a gravity-flow pipeline to the facility. The District is now exploring the possibility of pursuing improvements to the Piru Diversion that would allow it to meet ESA requirements.

Discharge of treated wastewater from wastewater treatment plants upstream along the Santa Clara River (i.e., within the Santa Clarita area in Los Angeles County) and the operation of the Santa Felicia Dam have decreased the usefulness of the Piru Groundwater Recharge Facility as originally designed; however, potential programs to use recycled water in the Santa Clarita area are anticipated to result in decreased discharges to the Santa Clara River, thereby increasing potential future usefulness of the recharge facility.

- Santa Paula Groundwater Recharge Facility (Inactive)

The Santa Paula Groundwater Recharge Facility was located northeast of the confluence of Santa Paula Creek and the Santa Clara River, on leased land on what was then known as the Teague-McKevet Ranch. The facility was destroyed by a past flooding event in or prior to 1969, and has not been reestablished.

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<sup>12</sup> In 2015, the Ventura County Public Works Agency and the UWCD developed a project to capture stormwater runoff from a portion of the community of Piru that previously discharged to Piru Creek. The project involves the diversion of water to the existing Piru Groundwater Recharge Facility and addition of a debris-removal system to collect the trash before discharging to the basins. Information regarding the project is available on the [Ventura County Public Works Agency's website](#).

## Groundwater Management Activities in the Oxnard Plain Basin

The preservation of groundwater quantity and quality within the UWCD's jurisdictional area occurs through the collaboration of agencies that each have a role in ensuring the health and sustainability of underlying groundwater basins. The District overlies several groundwater basins (i.e., the Mound Basin, Santa Paula Basin, Fillmore Basin, Piru Basin, Las Posas Basin, Pleasant Valley Basin, and Oxnard Plain Basin, as depicted in Figure 10) and is involved in the management of each. Given its purpose and the location of its major facilities along the Santa Clara River, its most significant role involves supporting groundwater sustainability within the Oxnard Plain Basin, which has historically been susceptible to overdraft and seawater intrusion.

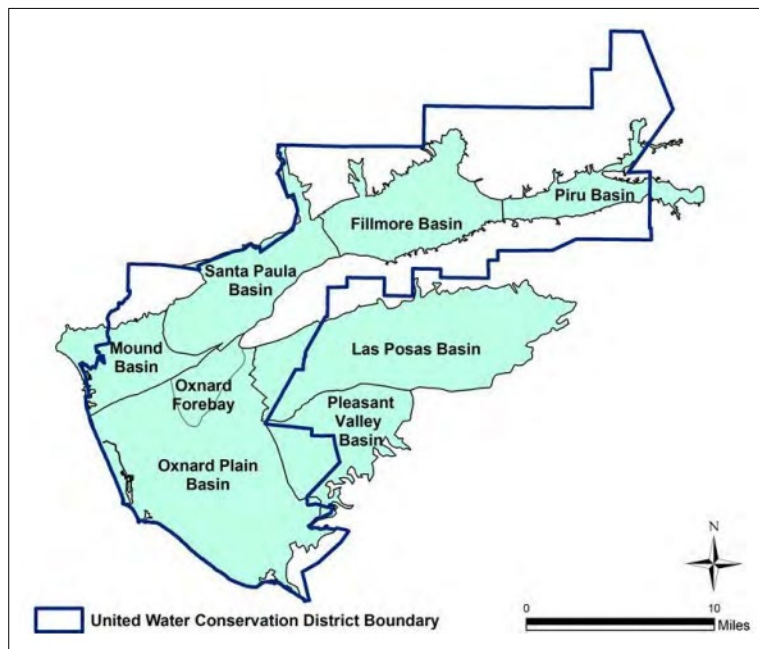


Figure 10: Groundwater Basins within UWCD  
Source: Annual Investigation and Report of Groundwater Conditions Within United Water Conservation District, Figure 1 (March 2020)

- Oxnard Plain Basin

According to the 2020 UWMP, evidence of groundwater overdraft in the Oxnard Plain Basin was first recognized in the 1930s when water levels were recorded below sea level and elevated chloride was observed in wells along the coast near Port Hueneme. The UWCD continued to track groundwater level decline into the 1950s and beyond. The District documented saline intrusion into the Oxnard Plain Basin through preparation of a geophysical survey in 2010, followed by an update in 2016 that demonstrated saline intrusion and Upper Aquifer System groundwater levels exceeding 20 feet below sea level (using 2015 measurements).

The Oxnard Plain Basin is classified by the DWR as being critically overdrafted. The FCGMA manages the aquifers within the Oxnard Plain Basin in an effort to prevent overdraft, and does so through the regulation of groundwater extractions. The FCGMA was formed through Assembly Bill 2995, nearly simultaneously with the UWCD's initiation of use of the Freeman Diversion. The operations of the two agencies complement each other to control groundwater overdraft and lessen the threat of seawater intrusion in the Oxnard Plain Basin; the FCGMA controls groundwater extractions within the basin and the UWCD focuses on groundwater recharge activities.

In 2014, in response to severe drought conditions, declining water levels, and seawater intrusion, the FCGMA Board of Directors adopted Emergency Ordinance E, resulting in the imposition of a 20-percent reduction on allowed groundwater extractions (i.e., allocations) over a two-year period (i.e., a 5-percent reduction during each 6-month interval). The FCGMA maintained the 20-percent pumping reduction limitation until 2020. As the UWCD is also a water provider (discussed in detail below in Water Service Systems and Water Delivery Infrastructure), pumping restrictions impacted its service related to the OH Pipeline. Under FCGMA's Emergency Ordinance E, the FCGMA set a temporary extraction allocation of 14,757.497 AFY for the District's El Rio Wellfield, which supplies the OH Pipeline. The District's OH Pipeline customers achieved full compliance with the pumping limitations set forth in Emergency Ordinance E.

Also in 2014, at the State level, the enactment of the Sustainable Groundwater Management Act (SGMA)<sup>13</sup> further bolstered the FCGMA's efforts to achieve safe yield of the Oxnard Plain Basin, by requiring the development of a Groundwater Sustainability Plan (GSP) for the basin. According to the Oxnard Subbasin GSP, prepared by the FCGMA in 2019 as the groundwater sustainability agency (GSA), between 2015 and 2017, the average rate of groundwater production from the Oxnard Plain Basin was approximately 40,000 AFY (within the Upper Aquifer System) and 29,000 AFY (within the Lower Aquifer System) for a total of 69,000 AFY; continued pumping at this rate was determined to exacerbate seawater intrusion. The GSP concluded that pumping reductions are necessary in order to achieve sustainable management of the Oxnard Plain Basin.

In accordance with and in response to the conclusion contained within the Oxnard Subbasin GSP, in October 2019 the FCGMA adopted an allocation ordinance to establish a new, currently-applicable extraction allocation for the UWCD. The new allocation of 14,336.56 AFY for the District's El Rio Wellfield is based on historical pumping and water deliveries during the period of 2005 to 2014, and represents approximately 18.6 percent of the total allocation of the Oxnard Plain Basin. Users of the remaining approximately 81.4 percent include the City of Oxnard, the City of San Buenaventura (which pumps from the Oxnard Plain Basin and exports for use in other areas), and mutual water companies, as well as agricultural pumpers. According to the UWCD's 2020 UWMP, from October 2021 onward, annual allocation cutbacks of 2.6 percent (i.e., 372 AFY) are anticipated through September 2040 in support of the achievement of sustainable yield of the basin. The GSP states that pumping allocations may be reduced in the future to meet groundwater sustainability objectives. Ideally, however, sustainability would be supported through the development of water supply projects that would minimize or eliminate the need for future reductions in pumping. Some of these

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<sup>13</sup> 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. The Oxnard Plain Basin is listed as a high-priority basin, pursuant to the DWR. The FCGMA, the Camrosa Water District-Oxnard Plain Basin 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.



projects are discussed later in this report under Capital Improvement Projects. OH Pipeline customers have thus far achieved full compliance with the FCGMA's new allocation ordinance.

The UWCD conducts regular monitoring of groundwater levels throughout the District. The data from this monitoring effort is used to track trends and model the effects of future possible hydrologic conditions. The District's Annual Investigation and Report of Groundwater Conditions Within the United Water Conservation District (March 2023) stated that average annual overdraft over the preceding 10 years for the whole service area was estimated to be 59,100 AFY, with an estimated -69,000 AF of overdraft in Water Year 2022-2023. According to the report, the negative number implies that replenishment will exceed extractions for the District, as a whole.

#### Water Supply Sources: Groundwater and Santa Clara River Surface Water

The District's primary strategy for groundwater recharge is to divert surface water from the Santa Clara River and convey it to recharge facilities, currently limited to recharge basins within the Oxnard Forebay. The District is also a water provider, and delivers surface water and groundwater within the Oxnard Plain and Pleasant Valley areas, for both potable and non-potable purposes (as discussed later in this report under Water Service Systems and Water Delivery Infrastructure). Groundwater recharge activities and water distribution by pipeline are two methods used by the UWCD to support groundwater levels and quality within its jurisdictional area. Surface water deliveries from the Santa Clara River reduce groundwater pumping in overdrafted areas of the Oxnard Plain Basin.

Water supply within the various systems managed by the UWCD includes:

- Oxnard-Hueneme Pipeline (OH Pipeline)  
Potable water sourced from 12 production wells within the El Rio Wellfield, located adjacent to the El Rio Groundwater Recharge Facility, to serve municipal customers within the Oxnard and Port Hueneme area (OH Pipeline);
- Pumping Trough Pipeline (PTP)  
Non-potable surface water from the Santa Clara River and non-potable groundwater pumped from groundwater wells, in support of agricultural users in the Oxnard Plain; and
- Pleasant Valley Pipeline (PVP)  
Non-potable surface water from the Santa Clara River to serve agricultural customers within the Oxnard Plain and Pleasant Valley areas.

#### Imported (State Water Project) Water Supply

In 1963, the Ventura County Flood Control District (now known as the Ventura County Watershed Protection District) entered into an agreement with the State of California to

purchase entitlement to 20,000 AFY of State water through the SWP.<sup>14</sup> The SWP is operated by DWR and involves conveyance of water through the Sacramento-San Joaquin Delta in northern California to end users within the state, primarily within Southern California.

In 1971, the Casitas Municipal Water District was assigned administration responsibility for the 20,000 AFY water supply contract with the State, and the water shares were divided as follows: (1) 5,000 AFY for use by the Casitas Municipal Water District, (2) 10,000 AFY for use by the City of San Buenaventura, and (3) 5,000 AFY for use by UWCD. Of the 5,000 AFY allocated to the UWCD, 1,850 AFY is leased since 1996 to the PHWA through a permanent agreement between the UWCD and the PHWA.<sup>15</sup>

UWCD uses its allocation to supplement recharge to the aquifers along the Santa Clara River within Ventura County. The District's SWP water can reach Ventura County by release from either Pyramid Lake or Castaic Lake (both of which are owned and operated by DWR) and diverted at the Freeman Diversion along the Santa Clara River. Pyramid Lake and Castaic Lake are licensed by FERC, and both reservoirs operate under one system. As water flows down Piru Creek and the Santa Clara River, a portion of it percolates into the groundwater basins along the river (Piru, Fillmore, and Santa Paula) and a portion reaches the Freeman Diversion for recharge to the Oxnard Plain Basin. Most of the remaining volume continues to flow along the Santa Clara River and reaches the Pacific Ocean, a stretch of the river where relatively little groundwater recharge occurs.

The FERC license limits the quantity and timing of releases from Pyramid Lake to Lake Piru via middle Piru Creek, due to the presence of federally ESA-listed Arroyo toads (*Bufo*



Figure 11: SWP Water Release from Pyramid Lake  
Source: United Water Conservation District

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<sup>14</sup> 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 Ventura County Watershed Protection District) by means of a 500-mile conveyance network that includes reservoirs, aqueducts, and pump stations. As additional facilities were not constructed, and environmental regulations have limited the export of water from the delta, DWR, through the SWP, does not routinely deliver full amounts of contracted water to its contractors. According to the UWCD's 2020 UWMP, acquisition of the imported water is funded through a voter-approved special assessment within the District's jurisdictional area. When surplus water is available through the SWP, the District has the opportunity to purchase water in excess of its established allocation, which it has done in 2017 (10,000 AF) and in 2019 (15,000 AF). The 15,000 AF acquired in 2019 was diverted at the Freeman Diversion.

<sup>15</sup> The PHWA's portion of SWP water is delivered from Castaic Lake to the Metropolitan Water District of Southern California (MWDSC), where it receives surface water treatment, then to the CMWD, then to the City of Oxnard, and finally delivery to PHWA customers.

*californicus*) annually between March through October; therefore, releases from Pyramid Lake to Lake Piru must occur from November through February, during the toads' hibernation period. The District prefers to take its SWP water deliveries through Pyramid Lake via Lake Piru (as opposed to through Castaic Lake via the Santa Clara River), as the Lake Piru reservoir operations provide the most control over the release timing and rate to maximize groundwater recharge (Figure 11, on the preceding page). The District typically schedules its Table A water<sup>16</sup> and any transfer water deliveries during the period toads' hibernation period (November through February).

The District is working with the DWR and regulatory agencies to evaluate the potential increase of the 3,150 AFY SWP water limitation described above. Any surplus SWP water or transfer water in excess of the 3,150 AFY limitation that is available outside of the delivery window is typically delivered by way of Castaic Lake to Castaic Creek, and then to the Santa Clara River. For these releases, the District works cooperatively with the DWR and the Santa Clarita Valley Water Agency (SCVWA) to maximize groundwater recharge in the Santa Clara River watershed in both Los Angeles County and Ventura County. This supplemental source of SWP water benefits the District, including the Oxnard Plain Basin, but is more costly than natural runoff.

The District's facilities are capable of storing and conveying increased quantities of SWP water during most years. With financial assistance from the FCGMA, the District has successfully imported 44,385 AF of SWP water since 2016. In 2019, the District implemented a surcharge fee to its pump charges to fund future purchases of additional SWP water. This supplemental recharge, paid through a voter-approved property tax special assessment, benefits all groundwater basins throughout the District's jurisdictional area. The District also purchases surplus SWP water, known as Article 21 water, when it is available and beneficial to the District. In 2017 and 2019, the District purchased 10,000 AF and 15,000 AF of Article 21 water, respectively. The volume of Article 21 water acquired in 2019 was all diverted at the Freeman Diversion and the \$3 million purchase was reimbursed by FCGMA. In 2023, the District purchased 2,079 AF of Article 21 water, which was delivered through Castaic Creek.

In order to maintain water reliability despite unpredictable SWP deliveries and to supplement its imported water supply, the District sometimes also pursues additional SWP water by means of transfers with other SWP contractors. SWP water is used to recharge the basins along the Santa Clara River and can be diverted to the Saticoy Recharge Facility and the El Rio Recharge Facility to replenish local aquifers. The District has also recently purchased 5,000 AF of Casitas Municipal Water District Table A water, which will be delivered via Pyramid Lake in November 2023.

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<sup>16</sup> Pursuant to information available on the California Department of Water Resources website, Table A water allocations are based on hydrology, volume in storage, and planned release volumes. Table A allocations vary (sometimes dramatically) annually and may even change within an allocation period. The Table A allocation increased from 5 percent at the beginning to 2023 to 100 percent by April 2023, reaching 100 percent for the first time since 2006.

## Water Service Systems and Water Delivery Infrastructure

As explained above, the water-related functions performed by the UWCD are multi-faceted. Not only does the District construct and operate facilities to ensure conservation and long-term sustainability of water supplies within its service area, but it also provides wholesale (and a minimal amount of retail) water service to customers in furtherance of its purpose to safeguard and promote groundwater resources. In addition to direct water service at the LPRA which is supplied from the Lake Piru reservoir, the District's water is sourced from both surface and groundwater supplies, and is derived from both imported and local sources. Groundwater extraction charges, surface water delivery charges, and District-extracted groundwater delivery charges have historically been imposed to achieve cost recovery. The following discussion addresses the District's water service role.

### *Lake Piru Water System at LPRA (Direct Water Service)*

The Lake Piru Water System, established in approximately 1966, serves potable water to the LPRA (consisting of campgrounds, day use areas, and a ranger station) and the Forest Service fire station facility located immediately adjacent to the recreation area, under permit from the Division of Drinking Water overseen by the California State Water Resources Control Board. The source water is surface water from Lake Piru (which includes natural drainage from Upper Piru Creek, imported SWP water, and precipitation on the lake's surface). The water is treated through a pressure filtration and disinfection process before it enters the distribution system. During 2022, the Lake Piru Water System distributed approximately 4.2 million gallons within the LPRA and approximately 650,000 gallons to the Forest Service fire station.

### *Indirect (Wholesale) Water Service*

Downstream of the Freeman Diversion and the District's various recharge basins are several water distribution pipelines that are owned and operated by the UWCD for the purpose of minimizing groundwater pumping on the Oxnard Plain that would otherwise lead to increased seawater intrusion. The Oxnard-Hueneme Pipeline (OH Pipeline) delivers wholesale potable water to retail agencies, and a minimal amount of retail potable water directly to end users. The Pumping Trough Pipeline (PTP) and Pleasant Valley Pipeline (PVP) provide non-potable water as a source of irrigation water for agricultural land. The District's FY 2023-24 adopted budget characterizes the three pipeline systems as providing "in-lieu of groundwater extraction" water deliveries of Santa Clara River surface water and/or Oxnard Forebay groundwater from areas where the aquifer is more easily recharged when surface water is available.

Each of the three distribution systems (i.e., the OH Pipeline, PTP, and PVP) is supported by wells, reservoirs, and pump stations. A discussion of each distribution system is provided as follows.

- *Oxnard-Hueneme Pipeline (OH Pipeline)*

The Oxnard-Hueneme Pipeline (OH Pipeline) system is primarily a wholesale supplemental water system, established in 1956, that provides potable water to the Oxnard Plain area to minimize groundwater pumping close to the coast that would exacerbate seawater intrusion into the potable aquifers. The OH Pipeline is supported by 12 wells, treatment facilities, two reservoirs (16.8 million-gallon capacity), one 4-pump station, one back-up 4-pump station, and pressure distribution pipeline to customer metering stations. Its service area covers approximately 43 square miles.

The District provides wholesale potable water to the City of Oxnard, PHWA, and several mutual water companies<sup>17</sup> (98 percent of total water demand), and a small amount of water (2 percent) directly to retail customers.<sup>18</sup> All of these areas consist largely of already-developed areas. The location of the District’s wholesale and retail water customers<sup>19</sup> are depicted in Figure 12, to the right. The OH system is operated as an enterprise, pursuant to the terms of a 40-year 1996 contract; costs for the system are borne by the contractors.



Figure 12: United Water Conservation District Customers  
Source: UWCD (Figure 3-1 of the 2020 Urban Water Management Plan)

<sup>17</sup> Mutual water companies that are served potable water by the UWCD consist of the Cypress Mutual Water Company, the Dempsey Road Mutual Water Company, Saviers Road Mutual Water Company, and Vineyard Avenue Estates Mutual Water Company).

<sup>18</sup> Retail customers include E&H Land, and the Rio School District’s Rio Real Elementary School and Rio Del Valle Middle School.

<sup>19</sup> Except for the City of Oxnard and the PHWA, the District’s customers previously used their own groundwater wells, supplemented by water from the UWCD, eventually ceasing use of the wells for potable supply and relying solely upon supply from the UWCD. The Vineyard Avenue Estates Mutual Water Company and the Rio School District have been District customers since approximately 1995, when their on-site water wells likely experienced high nitrate levels that prevented their use for potable water or required blending with water from the District’s system. The service connection to the E&H Land Company’s agricultural property serves one residence, dating back to the 1960s; however, the District’s records do not include a history of the purpose of the connection. In 2022, the quantity of water delivered to the Rio School District water systems was 12.90 AF, and to the E&H Land Company was 2.45 AF.

Use of the OH Pipeline reduces groundwater pumping near the coastal areas of Oxnard and Port Hueneme, where water wells are most vulnerable to seawater intrusion. According to the UWCD's 2020 UWMP, groundwater extracted by the District at the El Rio Wellfield to supply the OH Pipeline is primarily recharged by the El Rio Groundwater Recharge Facility. Surface water does not directly supply the OH Pipeline, but is used for groundwater replenishment through recharge basins that benefit the El Rio Wellfield (upon which the OH Pipeline relies).<sup>20</sup> The OH Pipeline demand is limited to the supply allowed to be extracted as allocated by the FCGMA. The current allocation for the OH Pipeline is 14,336.56 AFY.

While the District purchases imported water from DWR through the SWP (as discussed in more detail earlier in this report under Imported (State Water Project) Water Supply), imported water is not currently used to directly supply the OH Pipeline. The OH Pipeline's water source consists of 12 production wells within the El Rio Wellfield, located adjacent to the El Rio Groundwater Recharge Facility. Due to the proximity of the wells to the recharge basins, the source water is considered to be "groundwater under the influence of surface water." The percolation of the surface water slowly through the formation under the groundwater basins to the wells serves as slow sand filtration treatment.<sup>21</sup> The final treated water product is distributed to customers through the OH Pipeline, which is operated by the UWCD under a permit from the California State Water Resources Control Board Division of Drinking Water.

As mentioned above, together with the Casitas Municipal Water District and the City of San Buenaventura, the District is a party to the Ventura County Watershed Protection District (VCWPA) water contract with DWR. The contract provides the UWCD with up to 5,000 AFY annually of SWP Table A water. In 1996, the District permanently leased 1,850 AFY of its Table A water entitlement to the newly-established PHWA, leaving the UWCD with a maximum entitlement of 3,150 AFY. The PHWA's entitlement does not travel through Lake Piru or the Santa Clara River as does the District's entitlement; instead, is delivered through Castaic Lake to the Metropolitan Water District of Southern California's (MWDSC's) water filtration and treatment facility, and conveyed by the Calleguas Municipal Water District (CMWD) to the City of Oxnard, where it is ultimately delivered to the PHWA.<sup>22</sup>

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<sup>20</sup> According to the UWCD's 2020 UWMP, the District does not purchase or import water for the OH Pipeline on a regular basis for direct supply to its customers. However, the District does purchase imported water during most years to recharge the groundwater basins (including the Oxnard Plain Basin) beyond what water is naturally available within the Santa Clara River watershed.

<sup>21</sup> Following extraction, the water is disinfected with chloramines. The El Rio Wellfield also periodically experiences high nitrate levels in its groundwater. The District monitors nitrate levels in individual wells and blends water from high-nitrate wells with water from low-nitrate wells to achieve continuous compliance with the nitrate standard. The deeper wells with low nitrate levels contain higher levels of iron and manganese. The District is currently completing construction of an iron and manganese treatment plant to reduce the levels of these two constituents prior to blending for nitrate.

<sup>22</sup> The PHWA receives water from two different sources: (1) OH system from the UWCD (which does not deliver imported water), and (2) 1,850 AFY of SWP water through the City of Oxnard.



- Pumping Trough Pipeline (PTP)

The PTP, shown in Figure 13 to the right, was constructed in 1986 as a collaborative effort among the UWCD, the County of Ventura, and the FCGMA to accommodate non-potable irrigation water use by agricultural growers within the Oxnard Plain and Pleasant Valley. The PTP conveys surface water from the Santa Clara River and groundwater pumped from deep wells as non-potable water to irrigate more than 5,000 acres of agricultural land. Use of the PTP reduces pumping in the overdrafted upper and lower aquifer systems of the Oxnard Plain Basin, which are vulnerable to seawater intrusion. As an alternative, SWP water, if available, can be diverted from the Santa Clara River at the Freeman Diversion and directly delivered to the PTP for irrigation purposes, in lieu of groundwater extraction. The PTP system includes 4 wells, one reservoir (16-AF capacity), one booster station, and a distribution system to customer metering stations. The PTP system is operated as an enterprise; costs for the system are borne by the PTP users.

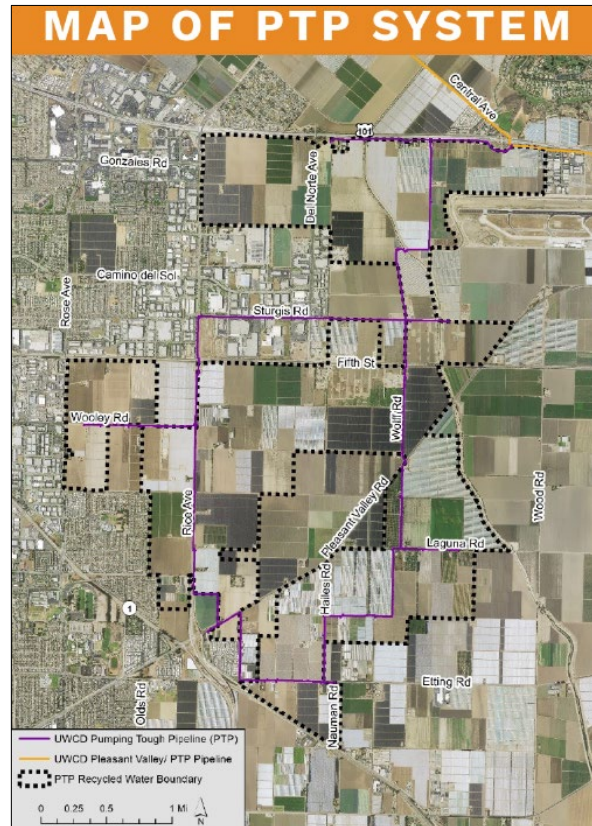


Figure 13: Map of Pumping Trough Pipeline  
Source: United Water Conservation District

- Pleasant Valley Pipeline (PVP)

The PVP was completed in 1959 to deliver non-potable surface water directly from the Santa Clara River to agricultural land in the Pleasant Valley area between the cities of Oxnard and Camarillo to supplement groundwater and reduce pumping in this area known to be impacted by overdraft and seawater intrusion. District staff documents that the Pleasant Valley County Water District (PVCWD) is the sole customer of the supplemental surface water that the District delivers to it by means of the PVP (the PVCWD also purchases water from the Camrosa Water District and the City of Oxnard). As an alternative, SWP water, if available, can be diverted from the Santa Clara River at the Freeman Diversion and directly delivered to the PVP for irrigation purposes, in lieu of groundwater extraction. The PVP system is supported by 4 wells (operated only under very rare conditions in the Saticoy Groundwater Recharge Facility), and gravity pipeline to the PTP system and the two Pleasant Valley terminal reservoirs (227 AF capacity) that serve the PVCWD. The PVP system is operated as an enterprise pursuant to several contracts; costs for the system are borne by the PVCWD.

## Water Supply and Demand

As discussed throughout this report, the District coordinates the use of surface water to recharge groundwater resources. Although surface water is not directly used for potable supply to the OH Pipeline, it is used to recharge basins upon which the OH extraction wells rely. Additionally, surface water is distributed to the non-potable PTP and PVP systems used for agricultural purposes.

According to the District's 2020 UWMP, approximately 93 percent of potable water demand on the District's OH Pipeline system is generated from retail water purveyors (i.e., City of Oxnard, PHWA, and mutual water companies). The remaining seven percent consists of minor retail distribution and system losses.

Between 2016 and 2020, OH Pipeline wells have produced, on average, the following volumes of groundwater for distribution to the OH Pipeline, as demonstrated in Table 6-1 of the 2020 UWMP:

<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
10,832	10,917	11,622	11,601	13,374 <sup>23</sup>

District staff states that the two major factors in water used by OH system contractors are: (1) the FCGMA allocation (i.e., the overall reduction in total well production required through Emergency Ordinance E), and (2) the statewide conservation message and reporting requirements (i.e., State Water Resources Control Board). When drought conditions receded and the FCGMA reset its allocations, use of the OH system increased. As discussed above and in the 2020 UWMP, the FCGMA adopted an allocation ordinance to meet the requirements of SGMA. The UWCD's OH Pipeline received an allocation of 14,337 AF with an annual cutback of 2.6 percent (372 AFY) through September 2040 upon the anticipated reaching of groundwater sustainability. Pursuant to the District's FY 23-24 budget, the OH Pipeline's recent historical, current, and projected potable water deliveries consist of the following, and fall within the extraction limits set by the FCGMA:

<b>FY 19-20 (Actual)</b>	<b>FY 20-21 (Actual)</b>	<b>FY 21-22 (Actual)</b>	<b>FY 22-23 (Projected)</b>	<b>FY 23-24 (Projected)</b>
11,851	14,300	13,738	10,023	10,380

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<sup>23</sup> The 13,374 AF figure does not include 600 AF transferred to the City of Oxnard during 2020 for temporary purposes.



According to District staff, annual total deliveries by the UWCD through the OH Pipeline for the years since the establishment of Emergency Ordinance E are provided in Table 3, below:

<b>Table 3: Total Water Deliveries to OH Pipeline Under Emergency Ordinance E</b>	
<b>Period</b>	<b>Volume (in AF)</b>
January 2014 - December 2014	10,671
January 2015 - December 2015	10,883
January 2016 - December 2016	10,567
January 2017 - December 2017	10,685
January 2018 - December 2018	11,032
January 2019 - December 2019	11,285
January 2020 - September 2020	13,630

Pursuant to the District’s FY 23-24 budget, the PTP’s recent historical, current, and projected non-potable water deliveries consist of the following:

<b>Table 4: PTP System Deliveries (in AF)</b>				
<b>FY 19-20 (Actual)</b>	<b>FY 20-21 (Actual)</b>	<b>FY 21-22 (Actual)</b>	<b>FY 22-23 (Projected)</b>	<b>FY 23-24 (Projected)</b>
5,404	6,593	6,064	5,113	5,200

Pursuant to the District’s FY 23-24 budget, the PVP’s recent historical, current, and projected non-potable water deliveries consist of the following:

<b>Table 5: PVP System Deliveries (in AF)</b>				
<b>FY 19-20 (Actual)</b>	<b>FY 20-21 (Actual)</b>	<b>FY 21-22 (Actual)</b>	<b>FY 22-23 (Projected)</b>	<b>FY 23-24 (Projected)</b>
1,032	3,171	759	424	900

According to Table 7-2 of the 2020 UWMP, the District projects that through at least 2045, water supply during normal (average) years will be equal to demand for the OH Pipeline system:

<b>Table 6: OH Pipeline Normal Year Supply and Demand Comparison (in AF)</b>					
	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>
<b>Supply</b>	12,755	10,894	9,033	7,265	7,265
<b>Demand</b>	12,755	10,894	9,033	7,265	7,265
<b>Difference</b>	0	0	0	0	0

The 2020 UWMP provides an estimate of supply and demand for single dry years through 2045 in Table 7-3. The supply and demand estimates for single dry years are identical to those for normal years:

<b>Table 7: OH Pipeline Single Dry Year Supply and Demand Comparison (in AF)</b>					
	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>
<b>Supply</b>	12,755	10,894	9,033	7,265	7,265
<b>Demand</b>	12,755	10,894	9,033	7,265	7,265
<b>Difference</b>	0	0	0	0	0

In multiple dry year conditions, estimated difference in supply and demand is expected to remain equal, 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:

<b>Table 8: OH Pipeline Multiple Dry Years Supply and Demand Comparison (in AF)</b>						
		<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>
<b>Year 1</b>	<b>Supply</b>	12,755	10,894	9,033	7,265	7,265
	<b>Demand</b>	12,755	10,894	9,033	7,265	7,265
	<b>Difference</b>	0	0	0	0	0
<b>Year 2</b>	<b>Supply</b>	12,383	10,522	8,661	7,265	7,265
	<b>Demand</b>	12,383	10,522	8,661	7,265	7,265
	<b>Difference</b>	0	0	0	0	0
<b>Year 3</b>	<b>Supply</b>	12,011	10,150	8,289	7,265	7,265
	<b>Demand</b>	12,011	10,150	8,289	7,265	7,265
	<b>Difference</b>	0	0	0	0	0
<b>Year 4</b>	<b>Supply</b>	11,639	9,778	7,917	7,265	7,265
	<b>Demand</b>	11,639	9,778	7,917	7,265	7,265
	<b>Difference</b>	0	0	0	0	0
<b>Year 5</b>	<b>Supply</b>	11,267	9,406	7,545	7,265	7,265
	<b>Demand</b>	11,267	9,406	7,545	7,265	7,265
	<b>Difference</b>	0	0	0	0	0

The District’s FY 2023-24 adopted budget explains the challenges of forecasting groundwater demands, which includes factors such as weather, user conservation efforts, and alternative sourcing. This is reflected in the District’s historical groundwater pumping records, recorded on the next page in Table 9. The District budgeted for 145,322 AF during FY 22-23, and 148,353 AF for FY 23-24. The listed volumes represent groundwater pumping throughout the District’s service area, and include use by the District as well as others not limited to the Piru community; cities of Fillmore, Santa Paula, San Buenaventura, and Oxnard; the PHWA; mutual water companies; and private pumpers.

<b>Table 9: UWCD Groundwater Pumping Volume (in AF)</b>				
<b>FY 17-18 (Actual)</b>	<b>FY 18-19 (Actual)</b>	<b>FY 19-20 (Actual)</b>	<b>FY 20-21 (Actual)</b>	<b>FY 21-22 (Projected)</b>
171,132	137,312	141,899	167,161	145,500

Capital Improvement Projects

Pursuant to the District’s FY 23-24 adopted budget, its capital improvement plan for the fiscal year includes several major projects: Freeman Diversion (e.g., expansion of the facility, upgrades to the fish passage system, and upgrades to the conveyance system) (\$11.1 million of \$125 million total cost), Santa Felicia Dam outlet works rehabilitation (\$1.5 million of \$90 million total cost), and development of the Extraction Barrier Brackish Water Treatment Plant (\$7.4 million of \$388 million total cost). Funding for all capital improvement projects is anticipated to consist of a combination of grants, general obligation bonds, revenue bonds, and user fees. A summary of significant current, long-term, and contemplated capital improvement projects is provided below.

- Supplemental SWP Purchases and SWP Interconnection Project

As discussed above, the UWCD has a 5,000-AFY allocation of imported water from the SWP. In recent years, the UWCD has, at times, purchased, exchanged, and/or transferred water, such as during conditions when additional SWP water is available for artificial recharge and surface water delivery in its service area. The District assumes that a maximum of 6,000 AFY of additional SWP water may intermittently be available for purchase. While the District has not fully evaluated its options or committed to making additional SWP purchases of imported water, it continues to participate in discussions and track opportunities to increase its SWP purchases.

Currently, the District takes delivery of its SWP water exclusively from either Pyramid Lake (via Lake Piru) or from Castaic Lake (via the Santa Clara River), and water is diverted at the Freeman Diversion for conjunctive-use pipelines and or groundwater recharge in the Oxnard Forebay. The District anticipates that in the future it will have the ability to access additional smaller volumes of SWP water as a result of the construction of new pipeline to accommodate the City of San Buenaventura’s SWP Interconnection Project.<sup>24</sup> Such a new connection would be located at the District’s Noble basins at the Saticoy Groundwater Recharge Facility, and would allow for an alternative route for water to support groundwater recharge, as well as be used for direct delivery to the OH Pipeline.

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<sup>24</sup> The City of San Buenaventura’s SWP interconnection pipeline project would enable the City to take delivery of its SWP entitlement through the construction of a pipeline connecting existing CMWD infrastructure in the City of Camarillo to the City of San Buenaventura. As designed, SWP water would be wheeled through the MWDSC and CMWD infrastructure to reach the City. Implementation of the 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 resources.

Additionally, the City of San Buenaventura's planned SWP Interconnection Pipeline project will include a blow-off within the District's spreading grounds for discharging of flushed water generated as a result of operations and maintenance. Flushed water can be recharged at the Saticoy Recharge Facility. Furthermore, the District is coordinating with the City of San Buenaventura and designing the extension pipeline for additional turnouts for emergency supply. These proposed turnouts may provide opportunities for delivery of modest quantities of water from CMWD (and wheeled through the SWP Interconnect Pipeline) or the City of San Buenaventura, in limited circumstances, to serve as emergency municipal and industrial supply. The District anticipates approximately 500 AFY of flushed water to be recharged at the Saticoy Recharge Facility, which will slightly increase overall yield and availability of groundwater at the El Rio Recharge Facility. The District has budgeted \$30,000 for FY 23-24 (of a total \$344,000 project cost responsibility for the District), to be funded through the District's Water Conservation Fund (which in turn is funded through groundwater extraction charges).

- Santa Felicia Dam Safety Improvement Project

As discussed above, the Santa Felicia Dam is designated by the DSOD as an extremely high hazard dam, based on the potential for damage to life and property in case of dam failure. The Santa Felicia Dam Safety Improvement Project involves: (1) the construction of a new outlet works and a small hydropower facility that will be designed to withstand a magnitude 7.2 earthquake, (2) an increase in the height of the dam crest by 6½ feet and modifications to the existing spillway (resulting in an increased hydraulic capacity of the spillway in order to safely pass the inflow design flood and prevent overtopping the spillway walls), which will increase the resilience of the dam and reduce public safety risk coming from dam failure and flooding along the path of Lower Piru Creek and the Santa Clara River. Benefits of this project include improved sustainability of groundwater recharge and resilience of the regional water supply, support of the endangered Southern California steelhead critical habitat in lower Piru Creek, added protection against invasive quagga mussels released into Lower Piru Creek, operational flexibility and redundancy in operations, and accommodation of future sediment level rise in Lake Piru. The Santa Felicia Dam Safety Improvement Project will be completed at an estimated cost of \$151 million, to be funded by a Federal Emergency Management Agency (FEMA) grant (\$68 million), Environmental Protection Agency (EPA) low-interest loan (\$63.7 million), and \$163,000 High Hazard Potential Dam (HHPD) Rehabilitation Grant program.

- Freeman Diversion Expansion Project

While the Freeman Diversion has been very successful in accomplishing groundwater recharge/replenishment as designed, the UWCD is pursuing actions to expand and improve on the structure's established effectiveness. The District is in the midst of a major project to increase the capacity of its existing diversion and groundwater recharge system at the Freeman Diversion through use of additional reclaimed aggregate mining pits (i.e., Rose and Ferro pits). When complete, the project is expected to increase groundwater recharge and in-lieu surface water deliveries initially by 6,000 AFY, and ultimately up to an average of 10,000 AFY.

Specific work related to this capital project includes: (1) replacement of the existing new fish passage facility that can operate in river flows of up to 6,000 cubic feet per second in compliance with an ESA settlement and as an effects minimization related to the District's Habitat Conservation Plan (HCP) for the facility, which will also accommodate diversion of higher flows with high levels of suspended sediment, (2) reconfiguration of existing fish screens (for ESA and operational reasons), (3) addition of concrete over the roller compacted concrete face (to preserve the long-term integrity of the diversion structure), (4) addition of trash racks/screens at the pipe inlets (for operator safety), and (5) dredging the desilting basin to original lines and grades (to accommodate the continued operations for another estimated 20 years). The District's efforts related to this project are necessarily being coordinated with the U.S. Army Corps of Engineers (USACE), National Marine Fisheries Services (NMFS), California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), and the County of Ventura. The total project cost is estimated to be approximately \$122.3 million, with approximately \$3.7 million anticipated to be expended during FY 23-24, to be funded through federal and state grants. Alternatives analysis, computer and physical modeling, and design work has been ongoing since 2012, with fish passage construction work estimated to be completed in 2028 and the remaining portions to be completed in 2036.

- Extraction Barrier Brackish Water Treatment Project

When pumping exceeds recharge, water levels in the Oxnard Plain Basin can fall below sea level, drawing seawater into the aquifers and impacting water quality. The extraction barrier brackish water treatment project involves the extraction and treatment of brackish groundwater to achieve the goals of: (1) remediation of the effects of historical seawater intrusion (i.e., aquifer salinity contamination); (2) development of a hydraulic barrier by intercepting landward flow of seawater through the creation of a groundwater depression; and (3) desalination of extracted groundwater for direct use by Naval Base Ventura County (NBVC), or for recharge. Implementation of the project would allow for the pumping of at least 3,500 AFY, and the potential to generate up to 14,000 AFY of potable water for municipal use at NBVC, irrigation use at nearby agricultural fields, and emergency water supply. Residual brine would be disposed of through the Salinity Management Pipeline<sup>25</sup> which is owned and operated by the CMWD. Implementation of this project is anticipated to contribute toward sustainability of the Oxnard Plain Basin and Pleasant Valley Basin. The estimated cost of the project is \$300 million, with nearly \$10 million being covered by a variety of state grants. The District is currently pursuing funding for the remaining extensive cost to develop the project.

- Iron and Manganese Treatment Plant

The District is pursuing the development of an iron and manganese treatment plant that will treat groundwater extracted through wells located at the El Rio Water Treatment and

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<sup>25</sup> 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.

Groundwater Recharge facility. The treatment plant is anticipated to reduce iron and manganese concentrations from wells extracting from the Lower Aquifer System, and then the treated groundwater will be blended with groundwater from shallower wells extracting from the Upper Aquifer System that have historically contained higher nitrate concentrations, thereby improving overall water quality. The project is aimed primarily at improving reliability during periods of drought. The enhanced local water supply would enable use of a maximum of 11,750 AFY of groundwater. Total cost of the project is expected to reach \$10.3 million, with approximately \$6.7 million being covered by federal and state grants, and the remaining amount being covered by user fees revenue. Construction is nearly complete and the plant is expected to be operational during FY 23-24.

- Alternative Supply Assurance Pipeline Project (Potential Project)

The UWCD prepared a feasibility study regarding the potential to develop an Alternative Supply Assurance Pipeline Project (ASAPP), intended to maximize surface water deliveries from Lake Piru to the Oxnard Plain. Options may include either: (1) an interim recharge and storage in Piru or Fillmore basins then extraction and pipeline delivery of the stored water to the Oxnard Plain Basin, or (2) direct delivery of water from Lake Piru to the Oxnard Plain Basin through a pipeline. The ASAPP project would allow continuous deliveries from Lake Piru through 27 miles of new pipeline and existing delivery systems to meet demands on the Oxnard Plain. The project would result in the increase of SWP imports and surface water deliveries, allow full control of water deliveries to Oxnard Plain, maximize surface water deliveries during drought periods, increase water levels in coastal aquifers, and reduce seawater intrusion. At this time, the District is not planning to pursue the ASAPP.

- Recycled Water Service (Potential Project)

The UWCD is generally supportive of recycled water projects and efforts to expand the use of recycled water and has been assessing recycled water opportunities to offset groundwater pumping and expand its water supply portfolio. The District acknowledges that it shares the vision of the State of California's 2020 Water Resilience Portfolio that was prepared in response to the Governor's Executive Order N-10-19, which recognizes recycled water as a sustainable and drought-proof water supply opportunity that reduces local reliance on groundwater extraction and preserves groundwater resources for the future in support of the OH Pipeline.

Within a portion of its water distribution area, the City of Oxnard distributes recycled water produced at its Advanced Water Purification Facility (AWPF)<sup>26</sup> to its water customers for landscape irrigation and industrial uses. It also sells recycled water outside of its service area to

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<sup>26</sup> A portion of the secondary effluent generated at the City's wastewater treatment facility is treated at the City's AWPF, which can produce high-quality recycled water for non-potable uses including groundwater recharge. The AWPF treats municipal wastewater using microfiltration, reverse osmosis, ultra-violet light/hydrogen peroxide disinfection and lime stabilization.

agricultural irrigation customers along Hueneme Road, including to the PVCWD.<sup>27</sup> The City is currently developing a pilot program to use recycled water for groundwater recharge through an aquifer storage and recovery (ASR) groundwater well. If successful, the City would use the recovered recycled water to supplement its drinking water, under an indirect potable reuse program.

The District is a party to the Full Advanced Treatment Recycled Water Management and Use Agreement with the City of Oxnard, PVCWD, and several agricultural water users within the Oxnard Plain. The Agreement provides for the delivery of recycled water from Oxnard's AWP when it is available. Under this Agreement, this recycled water would be conveyed through the City's Hueneme Road pipeline to the District's PTP system, to be used as supplemental water source to reduce groundwater pumping. No pipeline connecting the City's Hueneme Road line to the PTP system currently exists. The District anticipates that a connection will be designed and built within the next several years.

Inclusion of recycled water in PTP deliveries is expected to offset groundwater pumping on the Oxnard Plain and result in the reduction of groundwater extraction volume, positively influencing overall groundwater reliability, mitigation against seawater intrusion, and the establishment of a supplemental water supply for the District's PTP customers. The District is taking steps to ensure that it can meet California recycled water requirements for delivery of recycled water to PTP users, when it becomes available. The required work involves inspection of all customer turnouts, private piping and on-site uses, in order to identify and eliminate any cross connections with potable uses (i.e., cross-connection between private potable water piping on an agricultural property with the non-potable agricultural irrigation piping that would convey recycled water). The recycled water regulations also require training programs for recycled water users. The District has been working with California State Water Resources Control Board Division of Drinking Water on this effort. Once all requirements have been met related to the distribution of recycled water, the District can initiate construction work for this project.

- Conejo Creek Storage Expansion (Potential Project)

The Conejo Creek Diversion Facility in Camarillo draws approximately 10,000 AFY from Conejo Creek, which consists of 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. Non-potable surface water is pumped to the Camrosa Water District's storage ponds and then used for non-potable irrigation at municipal and agricultural properties. The Camrosa Water District sells surplus non-potable surface water to the neighboring PVCWD for irrigation use. The UWCD, in collaboration with the City of Camarillo, Camrosa Water District, and PVCWD, is considering the potential development concept of a storage facility to contain increased diversions from Conejo Creek for delivery to

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<sup>27</sup> The provision of non-potable/recycled water is exempt from Government Code Section 56133, which otherwise requires LAFCo approval in order for a city or district to provide a new or extended service outside its jurisdictional boundary; therefore, the City is authorized to provide non-potable water outside its boundaries.

local agricultural users. Such a project could potentially yield up to 2,500 AFY in additional surface water supplies available for use by a variety of water user types.

- Water Exchanges, Transfers and Interties

In 2023, the District entered into a five-year agreement with Casitas Municipal Water District for the transfer of a portion of its Table A SWP water, up to 5,000 AFY. It is also currently negotiating water transfer agreements with the Palmdale Water District and Santa Clarita Valley Water Agency, with water anticipated to be delivered in November 2023. The District indicates that it will continue to consider potential exchanges and transfers in response to availability and need. Notable past water exchanges and transfers involving the UWCD included: (1) a water exchange agreement with the SCVWA in 2019,<sup>28</sup> (2) a memorandum of understanding established in 2005 for a pilot program among the Castaic Lake Water Agency, Casitas Municipal Water District, the City of San Buenaventura, and the UWCD, which enabled use of flexible storage allocations,<sup>29</sup> (3) transfer agreements in 2019 and 2020 with the City of San Buenaventura to transfer 5,625 AF of the City's allocation to the District (which the City could not access due to infrastructure constraints) which were delivered at Lake Piru and released into the Santa Clara River. Some of this water percolated into groundwater basins upstream of the Freeman Diversion and the remaining water was diverted at the Freeman Diversion for recharge to Oxnard Plain Basin and surface water deliveries.

Additionally, the District's OH Pipeline does not have an emergency intertie with any other agencies. The City of San Buenaventura's SWP Interconnection Pipeline is anticipated to allow the City to take delivery of some or all of its SWP entitlement by wheeling water through existing water pipelines owned by the MWDSC and the CMWD, and constructing new pipeline between the City of Camarillo and the City of San Buenaventura. As a part of this project, the UWCD would receive a turnout dedicated to SWP supply to the OH Pipeline for emergency use, in addition to one turnout for pipeline discharge into recharge basins.

The District is also exploring the possibility of supporting a municipal and industrial water market (i.e., M & I Water Market), although it would not be a direct party to any transfers that may occur. The M & I Water Market, if successfully implemented, would allow flexibility to exchange portions of groundwater allocations among municipal and industrial water suppliers and users. The UWCD's OH Pipeline could potentially be involved in any transfers that occur as a result of the conceptual water market.

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<sup>28</sup> According to the UWCD's 2020 UWMP, in 2019 the District entered into a Water Exchange Agreement with the SCVWA to implement a "2-for-1 Water Exchange Program." The agreement enables the exchange of a maximum of 2,000 AF of its SWP water allocation. Through implementation of this agreement, the District received 1,000 AF and the SCVWA received 500 AF. At the time, the SWP agreement only allowed exchanges between contractors; an amendment made since that time allows transfers. At the time, the SCVWA considered the water to be surplus (i.e., over and above its needs for that year) and was willing to enter into the exchange, and groundwater conditions within the UWCD service area were poor. Repayment of the 500 AF was from UWCD's 3,150 AF Table A allocation and was delivered to SCVWA via the SWP at Castaic Lake.

<sup>29</sup> This agreement allows the SCVWA to access 1,376 AF of storage of SWP water.



- Maintenance Projects

In addition to the several significant capital projects described above, the District continues to perform routine maintenance activities related to its existing facilities to ensure long-term viability and efficiency of its operations. The District's operations and maintenance activities for the OH Pipeline include regular replacement of anodes, flanges, and meters, a valve exercise program, and a well replacement program. Additionally, the District has a well replacement program, whereby it is replacing one well every three to five years until the original wells within the Upper Aquifer System that supply the OH pipeline at the El Rio Groundwater Recharge Facility to have replaced (six of the 12 have been replaced to date). Southern California Edison annually conducts efficiency tests on well pumps, resulting in repair or replacement of pumps as needed. Furthermore, the District is working toward implementation of a geographic information system based computerized maintenance management system which will streamline the District's asset management activities.

### Water Shortage Contingency Planning

The District adopted a Water Shortage Contingency Plan (WSCP) for the OH Pipeline system on June 8, 2021, as part of its UWMP to specify procedures and response actions to address potential water shortage conditions, which align with the efforts of its water retailers (e.g., City of Oxnard and PHWA) that have the authority to impose direct demand reduction measures. Such requirements may include prohibitions on using potable water for street washing, filling of decorative fountains, car washing, and filling of pools. The FCGMA (and not the UWCD) levies penalties on the District's OH Pipeline purveyors for taking water delivery in excess of established allocations. As a wholesale water provider, the UWCD's demand reduction efforts are focused primarily on expanding the public information campaign and promoting the success of demand reduction measures being implemented by its retailers.

The District's six established shortage levels are provided as follows, and would be implemented in response to a shortage declaration by the District:

- Shortage Level 1 (10 percent required reduction in use) based on water supply condition of up to 10 percent reduction in groundwater allocated by the FCGMA;
- Shortage Level 2 (20 percent required reduction in use) based on water supply condition of up to 20 percent reduction in groundwater allocated by the FCGMA;
- Shortage Level 3 (30 percent required reduction in use) based on water supply condition of up to 30 percent reduction in groundwater allocated by the FCGMA;
- Shortage Level 4 (40 percent required reduction in use) based on water supply condition of up to 40 percent reduction in groundwater allocated by the FCGMA;
- Shortage Level 5 (50 percent required reduction in use) based on water supply condition of up to 50 percent reduction in groundwater allocated by the FCGMA; and
- Shortage Level 6 (greater than 50 percent required reduction in use) based on water supply condition of more than 50 percent reduction in groundwater allocated by the FCGMA.

The District's UWMP for the OH Pipeline system contains a variety of water conservation and demand management planning activities, including the following:

- **Metering:** The District's OH Pipeline and groundwater wells are metered. The District replaces meters when they reach the end of their useful life as part of a routine maintenance program, and budgets for its meter replacement program. Furthermore, the UWCD regularly calibrates meters to ensure accuracy.
- **Public Education and Outreach:** The UWCD is involved in a variety of public education and outreach programs, such as an annual water symposium, regional water facility tours, and presentations to stakeholders. While it does not have a formal outreach program, it assists retail agencies by providing water conservation materials for programs provided by those agencies.
- **Water Conservation Program Coordination and Staffing Support:** Several District staff members share the responsibility of providing water conservation program coordination. Additionally, the District has dedicated a section of its website to educational materials related to water use efficiency.
- **Asset Management:** The District's operations and maintenance activities for the OH Pipeline include regular replacement of anodes, flanges, and meters, a valve exercise program, and a well replacement program. Additionally, Southern California Edison annually conducts efficiency tests on well pumps, resulting in repair or replacement as needed. Furthermore, the District is working toward implementation of a geographic information system based computerized maintenance management system which will streamline the District's asset management activities.

The District's WSCP includes a Water System Emergency Response Plan to establish an organized and relevant response in the event of a catastrophic supply interruption. According to the WSCP, this plan contains the "strategies, resources, plans, and procedures that can be used to prepare for and respond to an incident, natural or man-made, that threatens life, property, or the environment." The plan, while not publicly available, sets forth the actions that allow the District to respond in the event of an earthquake or other natural disaster related to securing the El Rio Treatment Plant, isolating any leaks/ruptures in the OH Pipeline, reestablishing power supply to the District's facilities. Additional threats to water supply and service include groundwater contamination, sewage spills from wastewater treatment plants located upstream along the Santa Clara River, and petroleum spills from oil pipelines or overturned trucks near or at the plant. The District has established lines of communication with emergency personnel to shut down and/or isolate the OH Pipeline and notify purveyors of the interruption in service. Emergency response is especially important given that the District does not have redundant pipelines for the OH Pipeline to deliver water to the OH Pipeline purveyors.

### Habitat Conservation Efforts

According to the District, it is developing a multiple-species habitat conservation plan (HCP) related to its current and future operations at the Freeman Diversion facility and nearby recharge basins. Because the District's operations and maintenance activities at the Freeman Diversion facility have the potential to affect the federally endangered Southern California

steelhead and other species that are or could become listed in the future under the ESA and the California Endangered Species Act (CESA).

Working closely with the National Marine Fisheries Service (NMFS), United States Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW), the District is developing conservation measures that will minimize to the extent practicable and mitigate the effects of its operations and maintenance activities at the Freeman Diversion (including a new fish passage facility and modified water diversions) and nearby recharge basins on the 11 species covered in the HCP (i.e., the Southern California steelhead, Tidewater goby, Santa Ana sucker, Least Bell's vireo, Southwestern willow flycatcher, Pacific lamprey, Western pond turtle, Two-striped garter snake, Yellow warbler, Western yellow-billed cuckoo, and Yellow-breasted chat). To qualify for an incidental take permit, an HCP must contain conservation measures that minimize and mitigate the effects of activities on the covered species to the maximum extent practicable.

While not directly related to the District's HCP, it also continues to take steps to address concerns related to quagga mussels at Lake Piru. Quagga mussels are an invasive species that plague lakes throughout California and require extensive attention for containment. Specifically, quagga mussels clog pipes used for drinking water, irrigation, and hydropower, disrupt the operation of motors on boats and other lake vehicles, and harm native fish species by altering the habitat and food network. Quagga mussels were discovered in Lake Piru in 2013, resulting in UWCD's development of a Monitoring and Control Plan to contain the infestation. As part of that plan, the District instituted a strict inspection policy for all watercraft entering and leaving Lake Piru.

### Ventura County Grand Jury Reports

The Ventura County Grand Jury released a document entitled Final Report – Independent Special Districts (April 26, 2018), 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.

The Grand Jury also released a report entitled Final Report - Ventura County Dam Safety (May 10, 2018), which documented the Ventura County Office of Emergency Services' concern that a failure of the Santa Felicia Dam at Lake Piru could have a significant impact on the residents of Ventura County. According to the report, the DSOD rated the Santa Felicia Dam as being in "fair" condition because of deficiencies in its outlet works system (i.e., consisting of the intake tower, conduit through the dam, hydroelectric facilities, and downstream control facilities) that could sustain loading from the Maximum Credible Earthquake prior to the completion of anticipated upgrades of the existing outlet and spillway. The report further acknowledged that the District is pursuing dam improvements to address safety concerns. The Grand Jury did not require a response to be provided by the District.

## **Sphere of Influence**

There have been no changes to the District's service area that would require alterations to its sphere of influence boundary, and no changes are anticipated in the foreseeable future.

## 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

According to the 2020 UWCD Urban Water Management Plan (UWMP) (adopted June 8, 2021), which is based on data gathered from the Southern California Association of Governments, the Port Hueneme Water Agency, and the Safe Drinking Water Information System, the estimated population within the District's Oxnard Hueneme Pipeline system and its sphere of influence that receives (wholesale) water service in 2020 was 257,296, and is anticipated to increase to 271,834 by 2030 and to 285,409 by 2040. According to District staff, the U.S. Census Bureau estimated a 2020 population within the District's entire service area of approximately 350,000.

### 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. The UWCD's sphere of influence (which is coterminous with its jurisdictional area) includes all three disadvantaged unincorporated communities identified by LAFCo:

- The community of Nyeland Acres is located northeast of and contiguous to the City of Oxnard. Based on 2010 U.S. Census Bureau demographic data, the Nyeland Acres community consists of 3,003 residents and has a median household income of \$42,043. 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.
- The community of Piru is located within the Santa Clara River valley along Highway 126, approximately six miles east of the City of Fillmore and about five miles west of the Ventura/Los Angeles County line. It is not contiguous to any city. Based on 2020 U.S. Census Bureau data, the Piru community (i.e., within the area identified by the U.S. Census Bureau as the Piru Census Designated Place) has a population of 2,587 and a median household income of \$59,000. The Piru community receives fire protection

services from the Ventura County Fire Protection District, police protection services from the Ventura County Sheriff's Office, wastewater collection and treatment services from Ventura County Waterworks District No. 16, and water services from the Warring Water Service, Inc., a mutual water company.

- The community of Saticoy is located southeast of and contiguous to the City of San Buenaventura and located within the City's current sphere of influence. Based on a 2018 income survey provided by the Proposition 1 program, the median household income for Saticoy is \$30,000. The Saticoy community receives fire protection services primarily from the City of San Buenaventura (through a mutual aid agreement between the City and Ventura County Fire Protection District), police protection services from the Ventura County Sheriff's Office, wastewater collection and treatment services from the Saticoy Sanitary District, and water services from the City of San Buenaventura).

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

#### Recreational Services:

- The District's primary purpose relates to groundwater conservation, groundwater replenishment, and wholesale water delivery; however, it also provides a variety of recreational services in and surrounding the Lake Piru reservoir, within the Lake Piru Recreation Area (LPRA). Specifically, the District offers a venue and opportunities for recreational water activities, day use, and overnight camping, and includes a marina, boat slips, launch ramps, swim area, campsites, restrooms, showers, laundry facilities, picnic area, sports facilities, a dog park, hiking trails, a store, and associated parking areas.
- The District operates the LPRA under the authority of the Federal Energy Regulatory Commission (FERC) and subject to a County-authorized conditional use permit.
- Between 1990 and 2000, the LPRA documented more than 150,000 visitors annually, an increase from past years that was likely attributable to consistently high lake levels. The District currently averages 90,000 visitors annually to the LPRA, with approximately 75 percent consisting of overnight camping visitors and approximately 25 percent consisting of day use visitors. The District anticipates that figures for annual visitation will remain stable for the foreseeable future.
- Fees for services apply within the developed portions of the LPRA (e.g., vehicle entrance fees, slip fees, and camping fees). Approximately 1.4 miles of pullouts along the roadway along the western Lake Piru shoreline is available free of charge for visitors to park vehicles and access the lake.
- The Lake Piru Recreation Area Management Plan (September 14, 2018) documents that over the last several years the District has standardized its data collection methods so that it can better evaluate needs related to recreational facility improvements and expansions. Topics of data collection include daily number of visitors, visitor nights (camping), vehicles, and boating vessels. Changes in services would be based on documented changes in use patterns, visitor needs, or new regulations.

#### Wastewater services:

- Wastewater generated at the LPRA (e.g., restrooms, ranger station, gate house, snack bar, maintenance facilities, fish cleaning station, and recreational vehicle dump station) is collected and treated through the use of 12 existing septic systems. Wastewater is discharged through existing seepage pits and leach fields.
- Additionally, wastewater collected from six remote vault toilet facilities (intermittent use with relatively low volume) is transported by a private hauler to the Joint Water Pollution Control Plant (JWPCP) operated by the Los Angeles County Sanitation Districts in Carson, California, for treatment. During FY 2022-2023, the private hauler collected wastewater from the LPRA two times and transported it to the JWPCP facility for treatment.

#### Water Services:

- The UWCD's mission is to "conserve and enhance the water resources of the Santa Clara River, while protecting the river's natural features." It implements programs pertaining to the conservation of surface and groundwater resources through groundwater replenishment activities and delivery of water within its service area.
- The District's significant water-related facilities are the Santa Felicia Dam at Lake Piru, the Lake Piru reservoir, the Freeman Diversion along the Santa Clara River, the Saticoy groundwater recharge facility and El Rio groundwater recharge facility, and distribution pipelines in support of the Oxnard-Hueneme Pipeline (OH Pipeline), Pumping Trough Pipeline (PTP), and Pleasant Valley Pipeline (PVP).
- The UWCD owns and operates the Santa Felicia Dam, which was constructed to encourage the recharge of downstream groundwater basins to address concerns of declining groundwater levels in the region. The UWCD manages water release from the Lake Piru reservoir into Lower Piru Creek to supplement groundwater recharge of overdrafted downstream basins. Groundwater can then be pumped in response to water demand and is used as a water buffer to combat seawater intrusion. FERC has jurisdiction over the Santa Felicia Dam, which is authorized to generate a maximum of 1,420 kilowatts of hydroelectric power through the release of water.
- The District implements one of its primary purposes by capturing water behind the Santa Felicia Dam at Lake Piru for later releases into Lower Piru Creek, in order to recharge downstream groundwater resources along the Santa Clara River and on the Oxnard Plain when they reach their seasonal lows.
- The District owns and operates the Vern Freeman Diversion, immediately east of the unincorporated community of Saticoy, to redirect a portion of the water from the Santa Clara River to spreading basins in order to support groundwater recharge and replenishment, and to buffer against seawater intrusion. The Freeman Diversion includes a fish passage facility to allow for the unimpeded upstream migration of steelhead trout and other aquatic species. The structure annually diverts an average of 58,000 AFY of the Santa Clara River's flow into the underground water supply. Over the course of its existence, the Freeman Diversion has rerouted approximately 1.7 million AF of water from the Santa Clara River for beneficial uses.
- The UWCD operates several recharge basins (also known as spreading grounds) that facilitate a natural percolation process, allowing water from the Freeman Diversion to



seep through layers of sand and gravel to replenish the aquifers. While the District has historically been involved in the operation of four recharge basins, groundwater recharge activities are currently limited to the facilities in El Rio and Saticoy.

- The Fox Canyon Groundwater Management Agency (FCGMA) manages the aquifers within the Oxnard Plain Basin (as well as the Pleasant Valley Basin and Las Posas Basin) in an effort to prevent overdraft, and does so through the regulation of groundwater extractions. The operations of the UWCD and FCGMA complement each other to control groundwater overdraft and lessen the threat of seawater intrusion in the Oxnard Plain Basin; the FCGMA controls groundwater extractions within the basin, and the UWCD focuses on groundwater recharge activities.
- The District is subject to the limitations set forth in the groundwater sustainability plans (pursuant to the Sustainable Groundwater Management Act) affecting the groundwater basins that underlie the District's jurisdictional area. The District's current extraction allocation within the Oxnard Basin is 14,336.56 AFY, and is anticipated to be reduced annually by 372 AFY through September 2040 in support of the achievement of sustainable yield of the basin. OH Pipeline customers have thus far achieved full compliance with the FCGMA's allocation ordinance.
- Water supply within the various systems managed by the UWCD includes: (1) potable water sourced from 12 production wells within the El Rio Wellfield, located adjacent to the El Rio Groundwater Recharge Facility, to serve municipal customers within the Oxnard and Port Hueneme area (OH Pipeline); (2) non-potable surface water from the Santa Clara River and non-potable groundwater pumped from deep wells, in support of agricultural users in the Oxnard Plain (PTP); and (3) non-potable surface water from the Santa Clara River to serve agricultural customers on the Oxnard Plain and Pleasant Valley areas (PVP).
- The District receives up to 3,150 AFY of allocated imported water by means of the State Water Project (SWP) (owned and operated by the California Department of Water Resources (DWR)). UWCD's 3,150 AFY allocation is ordered from DWR during normal and dry years for delivery to Lake Piru via stream releases from the DWR-operated Lake Pyramid downstream along Piru Creek. This SWP water is then released from Lake Piru as part of UWCD's normal conservation release in the late summer and fall. As this water flows down Piru Creek and the Santa Clara River, a portion of it percolates into the groundwater basins along the river (Piru, Fillmore, and Santa Paula) and a portion reaches the Freeman Diversion for recharge to the Oxnard Plain. Alternatively, the District may take delivery of SWP water along the Santa Clara River via Castaic Lake. The District sometimes has opportunities (and often pursues such opportunities) to obtain additional SWP water, when surplus water is available.
- The District operates several water service systems and associated delivery infrastructure. It serves potable water using the Lake Piru Water System at the LPR. Additionally, it provides water service by means of the Oxnard-Hueneme Pipeline (potable water), the Pumping Trough Pipeline (non-potable water), and the Pleasant Valley Pipeline (non-potable water). In 2020, the District pumped 13,374 AF within the Oxnard Plain Basin, and is projected to pump 10,380 AF during FY 23-24.
- The District is involved in an array of significant capital improvement projects, which include active projects (e.g., SWP interconnection project, Santa Felicia Dam safety

improvement project, Freeman Diversion expansion and upgrade, extraction barrier brackish water treatment project, and an iron and manganese treatment plant.) Additionally, it is exploring the possibility to pursue several other projects that, if implemented, would establish supplemental methods for supporting the District's purpose. Finally, the District provides ongoing evaluation, maintenance, repair, replacement, and rehabilitation of its infrastructure.

- The District adopted a Water Shortage Contingency Plan in 2021 for its OH system to specify procedures and response actions to address potential water shortage conditions, which align with the efforts of its water retailers (e.g., City of Oxnard and Port Hueneme Water Agency) that have the authority to impose direct demand reduction measures. Such requirements may include prohibitions on using potable water for street washing, filling of decorative fountains, car washing, and filling of pools.

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

- The District routinely has a balanced budget. However, the District's budget will not balance for an approximately 3-year period, during which time adjustments to groundwater rates will be phased in, following court clarification of the Constitution versus State law issues raised in litigation involving the District and the City of San Buenaventura.
- The District appears to have the ability to finance the services it currently provides.
- The District has a steady stream of revenue through groundwater pumping charges, property taxes, and water delivery charges. It has predictable expenses related to capital outlay and salaries/benefits.
- The District has a policy to maintain sufficient levels of reserves. The District's July 1, 2022, reserves policy establishes reserves to ensure its continued ability to finance water-related programs, including set-asides that are reevaluated annually, as a part of the budget process. The District's reserves policy includes: (1) SWP Fund (i.e., a formula for ensuring sufficient SWP deliveries based on historical water expenditures and deliveries plus a maximum of \$1 million for all projected annual SWP costs), (2) Freeman Fund (i.e., \$1 million to \$1.5 million, depending on estimates of revenue fluctuation and operational expense), (3) OH Pipeline Fund (i.e., \$750,000, increased annually to a current level of \$1.6 million), (4) PVP Fund (i.e., an amount consisting of the 3-year running average of expenditures, currently set at \$593,000), (5) PTP Fund (i.e., \$1 million for operations and maintenance). The District currently has a balance of \$20.8 million in reserves, and therefore is in compliance with its reserves policy. According to the FY 23-24 adopted budget, the District anticipates ending FY 23-24 with total cash reserves of \$16.9 million.
- The OH Pipeline fund is used to account for the resources and costs of operating and maintaining of the OH Pipeline. The District delivers potable water through this pipeline via groundwater treatment for municipal, industrial, and agricultural uses. Resources for the costs of management and maintenance the OH Pipeline are derived from the customers who directly benefit from the delivery of the water.
- The PVP Fund is used to account for the resources and costs to operate and maintain the PVP. The District diverts surface water at the Freeman Diversion and transports it

via the pipeline to the Pleasant Valley County Water District (PVCWD) for agricultural use. Revenues are primarily generated from fees paid by the PVCWD and its customers. Expenditures for the fund include operations, maintenance, improvements and a portion (50 percent) of the District's moss screen facility.

- The PTP Fund is used to account for the resources and costs of operating and maintaining the PTP. The PTP provides a combination of Santa Clara River surface water, Oxnard Forebay groundwater (Saticoy Wellfield), and Fox Canyon aquifer water in an overpumped area of the Oxnard Plain. Revenues are generated from fees and cover the costs of operations and maintenance of the pipeline and a portion (50 percent) of the District's moss screen facility.
- The District has a five-year capital improvement plan (FY 2023-24 through FY 2027-28) that outlines projects to be completed or being considered for completion within the five-year time period. The capital improvement plan includes a discussion of funding mechanisms designated for specific projects, with identified resources coming from transfers from the operating funds, grants, or financing proceeds.
- Groundwater extraction rates increased in FY 23-24. The rate increase will enable the District to implement critical capital improvements and respond to ongoing legal and regulatory challenges, as well as continue operations and maintain required reserve levels.
- The District is independently audited on a regular basis. The most recent audit (December 5, 2022) prepared for the District for FY 20-21 and FY 21-22 was unqualified. An unqualified opinion is an independent auditor's judgment that a company's financial statements are fairly and appropriately presented, without any identified exceptions, and in compliance with generally accepted accounting principles (GAAP).
- The District's bond rating is AA (Standard and Poor's) as of November 2, 2022, 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 \$505,000, related to the coronavirus, which were covered in the District's budget.

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

- The District shares its meeting rooms at its Oxnard headquarters with water-related organizations in the region (e.g., Association of Water Agencies of Ventura County, Watersheds Coalition of Ventura County, Santa Clara River Watershed Committee, Ventura County Special Districts Association).
- The District shares training activities with the Association of Water Agencies of Ventura County, the California Special Districts Association, and is exploring the possibility of additional shared training programs.
- The District is a member of California Water Agency Network (CalWARN), a mutual aid organization for sharing equipment and staff during emergencies.

## 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.
- The District 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 achieves operational efficiencies through participation in the California Special District Risk Management Authority insurance pool.
- The District maintains a modern and educational website that provides detailed information about the District. It contains the District's history, mission, summary of services and facilities, current and historical budgets and comprehensive annual financial reports, the State Controller's "By the Numbers" (agency financial reporting information), studies and reports, roster of current Board members, historical meeting agendas and minutes, upcoming meeting information, library of relevant documents related to the District, copies of visual presentations of a broad range of topics related to operation of the District and projects it is pursuing, an online form for public records requests, news/press releases and a calendar of events related to the District, and a link to the Ventura LAFCo website containing municipal service reviews prepared by LAFCo for the District. The District could improve its transparency by posting links to the District's enabling legislation, its official boundary map as determined by LAFCo, contact information for board members, by recording and archiving Board meetings to be available on the District's website, and by adding a Spanish translation option for its website content.
- The District participates in the California Water/Wastewater Agency Response Network (CALWARN) 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 District is equipped with emergency generators at its well sites and pump stations for the purpose of providing back-up power.
- In 2020, the District earned the District Transparency Certificate of Excellence from the Special District Leadership Foundation (a statewide non-profit foundation known for promoting good governance and best practices), which acknowledges the District's commitment to operating in an transparent an ethical manner, and efforts to engage with the public and increase awareness of its activities.
- The Ventura County Grand Jury evaluated aspects of the District's operation during 2018. The Grand Jury released a document entitled Final Report – Independent Special Districts (April 26, 2018), 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.

Additionally, the Grand Jury released a document entitled Final Report - Ventura County Dam Safety (May 10, 2018), which noted issues related to the Santa Felicia Dam, and documented deficiencies that would increase the dam's vulnerability in the case of a significant earthquake. The District was not required to provide a response to the Grand Jury report; it is, however, in the process of completing safety improvements at the Santa Felicia Dam.

- The District annually produces a consumer confidence report, and has posted its annual reports on the District's website from 2017 through 2022.
- The District achieves operational efficiencies through shared training activities with the Association of Water Agencies of Ventura County and the California Special Districts Association. It also participates in the California Special District Risk Management Authority (which provides insurance coverage, training programs, and other practical resources for public agencies) and contracts with private providers (e.g., local engineering contractors for water system repairs).
- Because the District supplies more than 3,000 AFY of water, it is required to prepare an UWMP. The District's 2020 UWMP is posted on the District's website.

**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-priority 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 DWR. The FCGMA 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 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 Plain Basin is listed by the DWR as a high-priority basin. The FCGMA, the Camrosa Water District-Oxnard Plain Basin 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 by the DWR as a high-priority basin. 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.
- According to the District's FY 23-24 adopted budget, the City of San Buenaventura filed lawsuits (the first of which was filed in 2011) over groundwater extraction rates approved by the District's Board for FY 2011-12 through FY 22-23. The lawsuits

challenged the extraction rates approved by the District and a judgment was entered against the District on April 22, 2021. Upon appeal by the District, the matter was subsequently heard by the Second Appellate District, Division Six, which affirmed the trial court judgment, finding that Section 75594 of the Water Code was unconstitutional under Proposition 26 and that by following Section 75594 in setting rates, the District had violated Proposition 26. The District thereafter filed a petition for review with the California Supreme Court. That petition was denied by the Court on August 10, 2022, and the court of appeal issued its remittitur to the trial court, rendering the judgment as final. The District engaged with a consulting firm to review its rate structure and determine the correct rate structure and groundwater extraction rates for future financial years. The review supported the District's current zone structure and determined a new ratio between municipal and industrial to agricultural uses. The new ratio was applied to the FY 2023-24 budget and anticipated to be used going forward. Additionally, it was determined that a new zone needed to be created to address users that do not pay for the District's annual SWP costs but receive direct benefit from the District's use of the SWP to replenish aquifers within its jurisdiction.