URBAN WATER MANAGEMENT PLAN

2025 UPDATE

SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

Zone 3: A Wholesale Water Agency

Prepared By: Wallace Group

June 2026

COUNTY of SAN LUIS OBISPO

WALLACE GROUP

Table of Contents

Appendices

List of Figures

List of Tables

Acronyms and Abbreviations

AB	Assembly Bill
AC	Advisory Committee
AF	Acre-Feet
AFY	Acre-Feet per Year
APW	Advanced Purified Water
ATF	Advanced Treatment Facility
AWWA	American Water Works Association
BMP	Best Management Practice
BOS	Board of Supervisors
CCR	California Code of Regulations
CCWA	Central Coast Water Authority
Contract Agency	Contracting Retail Water Agency
County	San Luis Obispo County
CSA	County Service Area
CSD	Community Services District
CWC	California Water Code
DDW	Division of Drinking Water
District	San Luis Obispo County Flood Control and Water Conservation District
DMM	Demand Management Measure
DRA	Drought Risk Assessment
DWR	Department of Water Resources
ERP	Emergency Response Plan
ESA	Endangered Species Act
ET or ETo	Evapotranspiration
GHG	Greenhouse Gas
GIS	Geographic Information System
Guidebook	Urban Water Management Plan Guidebook
HCP	Habitat Conservation Plan
IDRS	Interim Downstream Release Schedule
IRWM	Integrated Regional Water Management
kWh	kilowatt-hours
Legislature	State of California Legislature
LRRP	Low Reservoir Response Plan

LWTP	Lopez Water Treatment Plant
MCL	Maximum Contaminant Level
MG	Million Gallons
MGD	Million Gallons per Day
MWC	Mutual Water Company
PG&E	Pacific Gas and Electric Company
PIWC	Partners in Water Conservation
RRWSP	Regional Recycled Water Strategic Plan
RUWMP	Regional Urban Water Management Plan
RWQCB	Regional Water Quality Control Board
SB X7-7	Senate Bill 7 of Special Extended Session 7
SCADA	Supervisory Control and Data Acquisition
SLO	San Luis Obispo
SMGB	Santa Maria Groundwater Basin
SSLOCSD	South San Luis Obispo County Sanitation District
SWRCB	State Water Resources Control Board
SWRP	Stormwater Resources Plan
TAC	Technical Advisory Committee
UWMP	Urban Water Management Plan
WSCP	Water Shortage Contingency Plan
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant
Zone 3	Flood Control Zone 3

Executive Summary

The San Luis Obispo County Flood Control and Water Conservation District (District) prepared this 2025 Urban Water Management Plan (UWMP) for the District Zone 3 System (Zone 3). Zone 3 of the District funds the operations of the Lopez Project, which includes Lopez Reservoir and Dam, Lopez Terminal Reservoir, Lopez Water Treatment Plant (LWTP), and the water transmission system, which conveys wholesale water to its contracting retail water agencies (Contract Agencies).

This UWMP was prepared in compliance with California Water Code (CWC) requirements for UWMPs following guidance from the California Department of Water Resources (DWR) UWMP Guidebook 2025 and is intended to be the long-term water resources planning reference for the District.

Purpose and Organization of the Plan

This UWMP provides DWR with a detailed summary of present and future water resources and demands within the Zone 3 service area and assesses Zone 3 water resource needs. Specifically, the UWMP provides water supply planning for a 25-year planning period, in five-year increments, and identifies water supply needs to meet existing and future demands for this defined service area. The demand analysis identifies supply reliability under three hydrologic or rainfall conditions: 1) an average (or normal) year, 2) a single-dry year, and 3) multiple-dry years.

The District previously prepared UWMPs in accordance with DWR's five-year planning cycle. This 2025 UWMP serves as an update to the 2020 UWMP and complies with new requirements and regulations. This UWMP is organized following the outline provided in the 2025 UWMP Guidebook.

Outreach and Engagement

The District is a wholesale supplier, supplying Lopez Project water to the Zone 3 Contract Agencies. During the development of this UWMP, the District coordinated with its Contract Agencies and other neighboring stakeholders to inform these agencies of the District's efforts and activities, gather high-quality data, and coordinate planning activities with other related regional plans and initiatives. The District provided a public review period for the Draft 2025 UWMP and held a public hearing to solicit input from stakeholders.

Notifications were sent to the following Contract Agencies and stakeholders:

Contract Agencies

- City of Arroyo Grande
- City of Pismo Beach
- City of Grover Beach
- Oceano Community Services District (OCSD)
- County of San Luis Obispo Public Works Department, County Service Area (CSA) 12

Additional Stakeholders

- Avila Beach CSD
- Port San Luis Harbor District
- County of San Luis Obispo Planning and Building Department

These notifications also included information regarding the District's preparation of the 2025 Water Shortage Contingency Plan (WSCP). Copies of these notifications are included in **Appendix A**.

Service Area Description

Lopez Reservoir is located in the Arroyo Grande Creek watershed. Zone 3 was created to fund, maintain, and operate Lopez Reservoir to provide municipal and agricultural water supplies and water for recreational uses. The District manages the operations of the Lopez Project, which includes Lopez Reservoir and Dam, Lopez Terminal Reservoir, Lopez Water Treatment Plant (LWTP), and the water transmission system. The project provides surface water supplies (potable water) to the Cities of Arroyo Grande, Pismo Beach, and Grover Beach; Oceano CSD; and CSA 12. CSA 12 subcontracts Zone 3 water to Avila Beach CSD, Port San Luis Harbor District, Avila Valley Mutual Water Company, and residential property owners located in the Avila Beach region. Zone 3 is a zone of benefit of the County's Flood Control and Water Conservation District, which is operated, maintained and administered by the San Luis Obispo County Department of Public Works.

The Lopez Reservoir covers an area of about 918 acres and is located primarily within the Arroyo Grande Creek drainage area, consisting of a 67 square mile (43,000 acre) watershed that drains into Lopez Reservoir. The Lopez Dam was built to provide an additional water supply to reduce the reliance on groundwater and provide recreation opportunities. The dam and reservoir were constructed on Arroyo Grande Creek, approximately 8 miles upstream from the community of Arroyo Grande and approximately 13 miles from the mouth of the creek, where it discharges to the Pacific Ocean. The Arroyo Grande Creek watershed

provides habitat for fish and wildlife species, including anadromous steelhead (Oncorhynchus mykiss) and California red-legged frogs (Rana aurora draytonii). Both are listed for protection under the Federal Endangered Species Act. Steelhead habitat is restricted to the reach of Arroyo Grande Creek from Lopez Dam to the Pacific Ocean. A map of the Zone 3 service area and water transmission system is shown in Figure ES- 1.

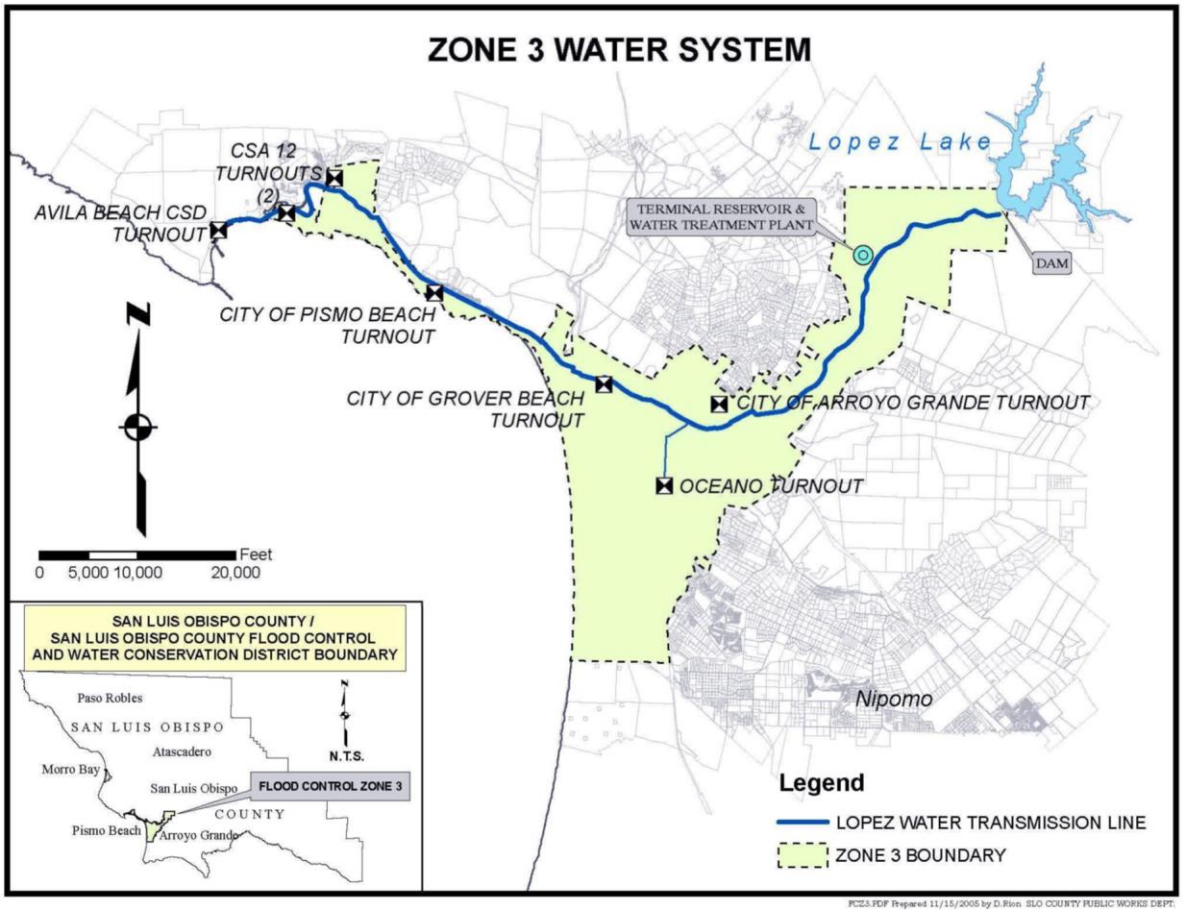


Figure ES- 1: Zone 3 Service Area Boundary Map

Water Demands

Total water use within the Zone 3 service area is comprised of Lopez Reservoir sales of potable water (treated at LWTP) to its Contract Agencies and raw lake water releases to Arroyo Grande Creek.

As a wholesale supplier, the District's Zone 3 water deliveries are determined by the safe yield of Lopez Reservoir which is 8,730 AFY[1]. Projected water deliveries by the District, a total

[1] San Luis Obispo County Integrated Regional Water Management Plan, May 2020

of 4,530 AF, are equal to the Contract Agencies' entitlements. Table ES-2 provides projected water use data for Zone 3 in five-year increments through 2050, broken down by Contract Agency.

Raw water from Lopez Reservoir is treated at the LWTP and delivered to the Contract Agencies. The District contracts 4,530 acre-feet per year (AFY) of the safe yield to its Contract Agencies as an important source of water to meet their retail demands. While the District does not supply raw or recycled water to its Zone 3 Contract Agencies, it does discharge raw water to the Arroyo Grande Creek for habitat conservation and groundwater recharge. The District reserves the remaining 4,200 AFY of the safe yield for downstream releases to maintain flows and support environmental and agricultural needs along Arroyo Grande Creek. The releases are adjusted (increased or decreased) as necessary in response to changing agricultural needs, changes in weather conditions, and/or other factors that may influence surface flows within the creek system. The adaptive management of downstream releases has generally resulted in annual releases of less than 4,200 acre-feet (AF); the remaining water has been periodically offered to the Contract Agencies as surplus water.

In December 2024, the United States District Court for the Central District of California entered a preliminary injunction order directing the County to develop, adopt, and implement a Flow Release Plan that included minimum base flows and pulse flow releases from Lopez Dam. The order required a minimum base flow release of 7.9 cfs in years when Lopez Reservoir storage equals or exceeds 20,000 AF. A release of 7.9 cfs correlates to a total release of 5,720 AF per year, which is 1,520 AF greater than the established downstream release (of 4,200 AFY) and could impact the District's ability to deliver entitlements to the Contract Agencies. The County appealed the ruling, and in December 2025, the United States Court of Appeals for the Ninth Circuit vacated the preliminary injunction order. The District subsequently resumed established downstream releases of 4,200 AFY; however, litigation remains ongoing as of March 2026. The UWMP assumes that that in future years the downstream release will remain at 4,200 AFY. For information regarding water demand within each Contract Agency's service area, please refer to their individual UWMPs.

Table ES- 1. DWR 4-1W Actual Demands for Water

Use Type	Additional Description (as needed)	2025 Actual Water Use	
		Potable or Non-Potable[1]	Volume[2]
Sales to other agencies	Contract Agency Deliveries	Potable	2,482
Sales to other agencies	Lopez Surplus Usage	Potable	930
Wetlands or wildlife habitat (optional)	Downstream Releases to Arroyo Grande Creek[3]	Non-Potable	5,130
		Subtotal Potable	3,412
		Subtotal Non-Potable	5,130
		Total	8,542

NOTES:
[1] Recycled water demands are NOT reported in this table. Recycled water demands are reported in Table 6-4.
[2] Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.
[3] In 2025, the downstream release of 7.9 cfs (5,720 AFY) was required pursuant to the December 2024 district court order. The UWMP assumes that in the future years the downstream release will be 4,200 AFY.

Demand Management Measures

The District has been actively promoting water conservation throughout the County, making conservation a California way of life by participating in public outreach events and designating a conservation coordinator to manage water conservation campaigns at the District level. The District funds conservation efforts through its Flood Control General Fund. The District has committed to promoting water conservation by continuing to support the efforts of its five Zone 3 Contract Agencies who operate water conservation programs, including Plumbing Retrofits and Cash for Grass, within each of their service areas.

Water Supplies

The source of water for Zone 3 is exclusively surface water from Lopez Reservoir. The Lopez Reservoir has a storage capacity of approximately 49,388 AF and provides water for municipal supply, recreational, and environmental uses. The safe yield of Lopez Reservoir is 8,730 AFY, which reflects the sustainable water supply year over year under all hydrologic conditions. The safe yield is derived from two historical studies: the Lopez Project Hydrology Review conducted in June 1962 and the Hydrologic Balance of Arroyo Grande Groundwater Basin study conducted in November 1962. The safe yield of the project has been confirmed via reservoir operations modeling using historical data since the dam was constructed. The

County manages the Zone 3 water supply to stay within the safe yield year-to-year. During extended drought periods, entitlements must be reduced, pursuant to the Low Reservoir Response Plan (LRRP), to remain as close to safe yield as possible.

Approximately 52% of the safe yield of the reservoir (4,530 AFY) has been apportioned by agreements to the Contract Agencies. The remaining 4,200 AFY is reserved for agricultural and environmental downstream releases. Past, current, and projected water supplies are available in Table ES- 2.

The District does not purchase or import supplemental water, extract groundwater, or supplement with recycled water in Zone 3 and does not plan to in the foreseeable future. Zone 3 was established to operate the Zone 3 water supply system and is a wholesale supplier with no retail water customers.

In addition to Lopez Project water, Zone 3 Contract Agencies have the following other sources:

- City of Pismo Beach: State Water, Groundwater
- City of Arroyo Grande: Groundwater
- City of Grover Beach: Groundwater
- Oceano CSD: State Water, Groundwater
- Avila Beach CSD/CSA 12: State Water

Table ES- 2. Water Supplies- Past, Current, and Projected (AFY)

	2020	2025	2030	2035	2040	2045	2050
City of Pismo Beach	892	892	892	892	892	892	892
City of Arroyo Grande	2,290	2,290	2,290	2,290	2,290	2,290	2,290
City of Grover Beach	800	800	800	800	800	800	800
Oceano CSD	303	303	303	303	303	303	303
Avila Beach CSD/ CSA 12	245	245	245	245	245	245	245
Downstream Releases	4,200	5,130	4,200	4,200	4,200	4,200	4,200
Available Surplus	1,803	930	0	0	0	0	0
TOTAL	**10,533**	**10,590**	**8,730**	**8,730**	**8,730**	**8,730**	**8,730**

It is assumed that at least 4,200 AFY will always be reserved for downstream releases and no surplus water will be available. However, if less water is released from Lopez Reservoir for downstream releases and/or Contract Agencies do not use their full entitlement in a given year, surplus water may be made available to Contract Agencies.

While the preliminary injunction order was in effect, the District was required to release 7.9 cfs downstream to Arroyo Grande Creek. A downstream release of 7.9 cfs, or 5,720 AFY, would result in a total annual use of 10,250 AFY, which exceeds the safe yield (of 8,730 AFY) by 1,520 AFY. The County appealed the ruling, and in December 2025, the United States Court of Appeals for the Ninth Circuit vacated the order. If the downstream releases were required to remain at 7.9 cfs, it could negatively impact the District's ability to supply the full entitlements to the Zone 3 Contract Agencies. All following tables in this report assume that future downstream releases will remain at 4,200 AFY. If future judicial orders require downstream releases greater than 4,200 AFY, the downstream releases will increase accordingly to comply with such orders.

Water Supply Reliability

Every urban water supplier is required to assess the reliability of its water service to its retail agencies under normal, dry, and multiple-dry year hydrologic conditions, as well as the drought risk over the next five years. Various factors may impact reliability of supplies, such as legal, environmental, water quality, and climatic. These factors can result in impacts to water reliability that are immediate (facility failures), near-term (State Water Project limitations), or long-term (climate change), and therefore should be considered in future planning. The impacts of these factors on reliability increase under single-dry and multiple-dry year hydrologic patterns. Climate change projections forecast more extreme weather, including flooding and prolonged droughts. Surface storage capacity provides the greatest flexibility to water supply systems in the face of extreme weather, providing the ability to capture more winter runoff and control larger floods, as well as hold water in reserve storage for dry years and droughts.[2]

Surface water tributaries to the Lopez Reservoir are primarily Arroyo Grande Creek and several other watershed area creeks. The Lopez Reservoir is a very reliable water supply source; however, continuing and/or prolonged droughts are always a potential constraint on Zone 3's water source, even considering potential higher inflows to the Reservoir during wet years. Historically, the District has been able to deliver full entitlements to Contract Agencies, except during the longest drought periods on record (2015/2016 and 2021/2023), when the District was operating Zone 3 in accordance with certain policies and procedures

[2] *San Luis Obispo County Master Water Report*, Carollo, May 2012.

set forth in the LRRP developed by Contract Agencies and District staff in 2014.[3] In response to the ongoing drought conditions and declining reservoir levels, entitlements were reduced by 10% in July 2021 through mid-2023.

In December 2020, the water levels in the Lopez Reservoir dropped to just below 20,000 AF, which is one of the two triggers in the LRRP. The District and the Contract Agencies participated in discussions regarding whether the District would operate Zone 3 pursuant to LRRP provisions. The Contract Agencies chose to voluntarily reduce their entitlements pursuant to the LRRP in advance of a statewide drought declaration. In July 2021, the District BOS adopted a resolution to operate Zone 3 in accordance with certain policies and procedures set forth in the LRRP, including a reduction in entitlements (included in **Appendix D**).

As part of the completion of this UWMP, the District has completed a comprehensive WSCP as its proposed plan to address reliability in the event of a water shortage. The District's 2025 WSCP is presented in **Chapter 8**. Expected water supply reliability for normal, single-dry, and multiple-dry years through 2050 is discussed below, followed by a drought risk assessment for 2026 to 2030.

During an average water year, the Lopez Project is able to reliably deliver the contract entitlements, totaling 4,530 AFY to Contract Agencies, and reserve up to 4,200 AFY for downstream releases. The municipal entitlements to Lopez Reservoir will remain constant at 4,530 AFY through the year 2050, unless changes to future water supply conditions limit or enhance Zone 3's ability to provide entitlements to the Contract Agencies. Recently completed reservoir modeling predicts that Zone 3 will continue to be able to provide Contract Agency entitlements under anticipated future conditions.

Based on historic data (1969–2025), the average storage in Lopez Reservoir is 36,900 AF. Figure ES- 2 shows the historical storage in the Lopez Reservoir (1968–2025). Based on the calculated average water supply, 2007 was determined to be the representative normal year for the supply reliability assessment for Zone 3. The single-dry year is defined as the year that represents the lowest water supply available to the supplier. The five-consecutive-year

[3] Prior to development of the LRRP in 2014, the District adopted the Interim Downstream Release Schedule (IDRS) dated July 20, 2006. The IDRS includes a conceptual-level LRRP which consists of a methodology to assess near-term reservoir levels and a set of example actions that could be taken to mitigate the impacts of low reservoir levels. The purpose of the 2014 LRRP is to provide a more concrete plan that the District will implement when the Lopez Reservoir drops below 20,000 AF and the Board of Supervisors declares an emergency related to Zone 3. However, the District never adopted the 2014 LRRP. Rather, on August 24, 2021, the District Board adopted Resolution No. 2021-183 adopting certain policies and procedures set forth in the LRRP in response to the last drought. Thus, the Board would need to take similar action in connection with future droughts, i.e. the 2014 LRRP does not become "automatically enacted."

drought is defined as the driest five-year historical sequence for the supplier (CWC Section 10612). For the water supply reliability assessment, the District used the five-consecutive-year dry period based on the lowest average water supply available in Lopez Reservoir. Table ES- 3 summarizes how the dry years may impact water deliveries.

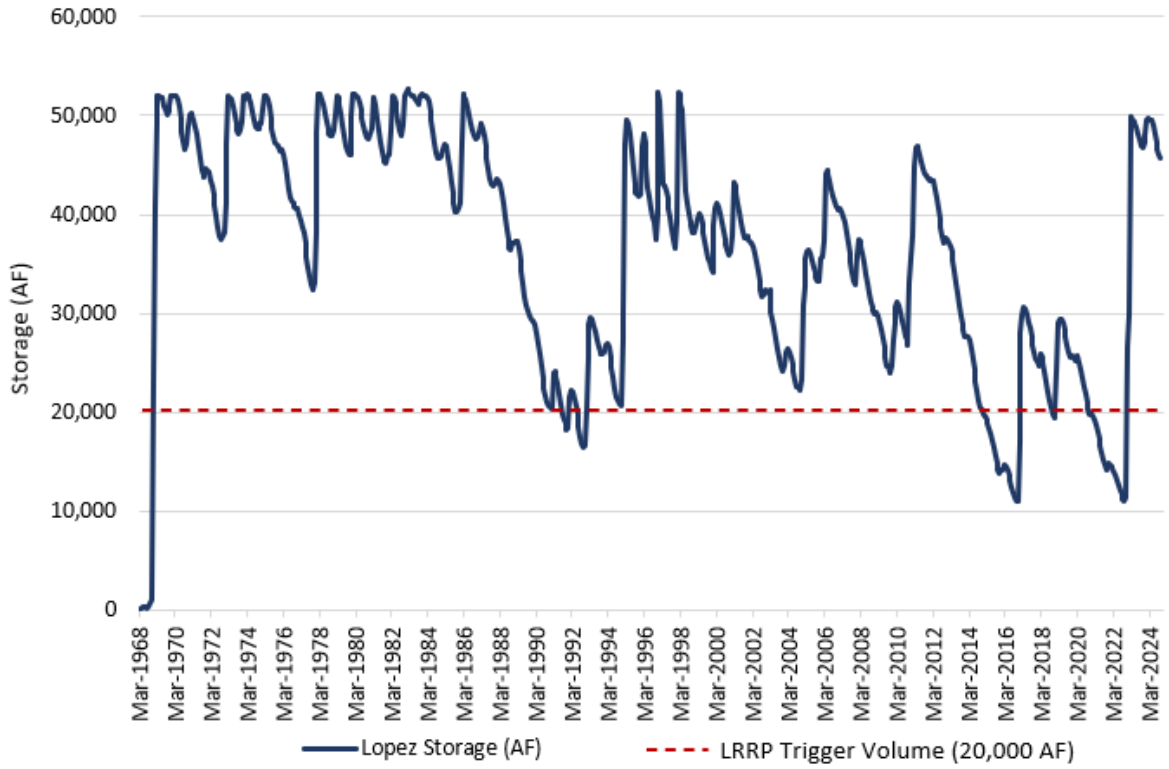


Figure ES- 2. Lopez Reservoir Storage, 1968-2024

Table ES- 3. DWR 7-1W Basis for Water Year Data (Reliability Assessment)

Submittal Table 7-1 Wholesale: Basis of Water Year Data (Reliability Assessment)			
Year Type	Base Year If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 1999-2000, use 2000	Available Supplies if	
		☐	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location _____
		☑	Quantification of available supplies is provided in this table as either volume only, percent only, or both.
		Volume Available *	% of Average Supply
Average Year	2007	8,730	100%
Single-Dry Year	2016	7,877	90%
Consecutive Dry Years 1st Year	2012	8,730	100%
Consecutive Dry Years 2nd Year	2013	8,730	100%
Consecutive Dry Years 3rd Year	2014	8,730	100%
Consecutive Dry Years 4th Year	2015	7,877	90%
Consecutive Dry Years 5th Year	2016	7,877	90%
***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.*			

Note: This table, and all following tables in this report, assumes that future downstream releases will remain at 4,200 AFY, not increase to 5,720 AFY as was mandated by the December 2024 court order. If future judicial orders require downstream releases greater than 4,200 AFY, then downstream releases will increase accordingly to comply with such orders.

Water Shortage Contingency Plan

The District has completed a comprehensive WSCP to meet CWC Section 10632 requirements. The WSCP is a proposed strategic plan that has been developed by the District to prepare for and respond to water shortages. A water shortage is when available water supply is insufficient to meet the normally expected customer water use at a given point in time. A water shortage may occur due to several reasons, such as water supply quality changes, climate change, drought, and catastrophic events (e.g., earthquake). The Zone 3 WSCP provides an updated water supply availability assessment and proposed plan to respond to actual conditions that include elements of Zone 3's LRRP. This level of detailed planning and preparation will help maintain reliable supplies and reduce the impacts of supply interruptions. Retail water agencies, including Cities of Arroyo Grande, Grover Beach, and Pismo Beach must prepare their respective WSCPs in their respective UWMPs.

Zone 3's WSCP shortage levels are based on the water supply shortage action levels defined in the LRRP. The water supply shortage reduction response strategies are defined in **Chapter 8** and include the initial prescribed municipal diversions (deliveries to the Zone 3 Contract Agencies) and the maximum downstream release reductions. The reduction and recovery triggers tie the amount of water within Lopez Reservoir to the Contract Agencies entitlement reductions and downstream releases and provide an initial framework for water supply planning. The proposed WSCP includes an adaptive management component that provides flexibility to modify the initial prescribed actions based on specific drought conditions.

The WSCP may be implemented when the total volume of water in the Lopez Reservoir falls below 20,000 AF and the Board of Supervisors declares a water shortage emergency related to Zone 3 and takes formal action by resolution outlining those specific procedures set forth in the LRRP that will be implemented. This is consistent with the action taken by the District during the last drought in 2021 with respect to the LRRP.

The initial prescribed actions under the WSCP are as follows:

- Mandatory reductions in entitlement water deliveries as set forth in Table 8-1 in **Chapter 8**
- Reductions in downstream releases as set forth in Table 8-2 in **Chapter 8**
- No new allocations of surplus water from unreleased downstream releases
- Extension of time that Contract Agencies can take delivery of existing unused entitlement water by allowing storage throughout the duration of the Drought Emergency Declaration, subject to evaporation losses if the water is not used in the year originally allocated

Chapter 1: Introduction

The District funds the operations of the Lopez Project, which includes Lopez Reservoir and Dam, Lopez Terminal Reservoir, Lopez Water Treatment Plant, and the water transmission system, which conveys wholesale water to its Contract Agencies.

The Lopez Dam was built as a water supply for the communities due to concerns for long-term viability of the groundwater basin. Under the Davis-Grunsky Act of 1960, the District received a grant to provide recreational facilities as a secondary purpose of the dam. Staff of the San Luis Obispo County Public Works Department perform the day-to-day operations and maintenance of Zone 3 facilities and support other related efforts.

The communities that serve Zone 3 contract water from the Lopez Reservoir include the Cities of Arroyo Grande, Pismo Beach, and Grover Beach; Oceano CSD; and CSA 12. CSA 12 subcontracts Zone 3 water to Avila Beach CSD, Port San Luis Harbor District, Avila Valley Mutual Water Company, and residential property owners located in the Avila Beach region.

The normal UWMP submittal cycle requires that UWMPs be prepared and adopted by each urban water supplier and then submitted to DWR. The CWC specifically states that the California Environmental Quality Act does not apply to the preparation and adoption of UWMPs (CWC Section 10652).

1.1 The California Water Code

In 1983, the State of California Legislature (Legislature) enacted the UWMP Act. The law required an urban water supplier providing water for municipal purposes to more than 3,000 customers or serving more than 3,000 acre-feet per year to adopt an UWMP every five years for periods ending in years five and zero, demonstrating water supply reliability under normal and drought conditions. Suppliers are required to update UWMPs at least once every five years on or before July 1 in years ending in six and one, incorporating updated and new information from the five years preceding each update. The UWMP Act applies to wholesale and retail suppliers.

Since the original UWMP Act was passed, it has undergone significant expansion, particularly since Zone 3's previous UWMP was prepared in 2020. Prolonged droughts, groundwater overdraft, regulatory revisions, and changing climatic conditions affect the reliability of each water supplier, as well as the statewide water reliability overseen by DWR, the State Water Resources Control Board, and the Legislature. Accordingly, the UWMP Act has grown to address changing conditions, and the current requirements are found in Sections 10610–10656 and 10608 of the CWC.

DWR provides guidance for urban water suppliers by preparing an UWMP Guidebook (Guidebook), conducting workshops, developing tools, and providing program staff to help water suppliers prepare comprehensive and useful water management plans, implement water conservation programs, and understand the requirements in the CWC. Suppliers prepare their UWMPs in accordance with the requirements and submit to DWR. UWMPs are reviewed by DWR to ensure the plans address the requirements identified in the CWC and submits a report to the Legislature summarizing the status of the plans for each five-year cycle. The Guidebook used to complete this 2025 UWMP was finalized in February 2026.

The purpose of this UWMP for Zone 3 is to evaluate long-term resource planning and establish management measures to ensure adequate water supplies are available to meet existing and future demands. The UWMP provides a framework to help water suppliers maintain efficient use of urban water supplies, promote conservation programs and policies, ensure that sufficient water supplies are available for future beneficial use, and provide a response mechanism during drought conditions or other water supply shortages.

The UWMP is a valuable planning tool used for multiple purposes, including:

- Providing a standardized methodology for water utilities to assess their water resource needs and availability
- Serving as a resource to the community and other interested parties regarding water supply and demand, conservation, and other water-related information
- Providing a key source of information for cities and counties when considering approval of proposed new developments and preparing long-range regional planning documents, such as city and county General Plans
- Informing other regional water planning efforts

CWC Section 10632 also includes updated requirements for suppliers to prepare a WSCP. The WSCP documents a supplier's plan to manage and mitigate a water shortage condition if one occurs because of drought or other impacts on water supplies. In the 2015 UWMP cycle, the WSCP was part of the UWMP. For the 2025 update, the WSCP is required to be a standalone document so that it can be updated independently of the UWMP but must be referenced in and attached to the 2025 UWMP. The WSCP is described in **Chapter 8** of this UWMP and serves as the standalone WSCP.

1.2 UWMP Organization

The UWMP has been prepared for Zone 3 in accordance with the DWR Guidebook. The UWMP includes references to the CWC. Below is a summary of the information included in the various chapters of the District's 2025 UWMP:

Chapter 1 — Introduction

Provides a discussion on the importance and extent of the agencies' water management planning efforts.

Chapter 2 — Plan Preparation

Provides information on the wholesale agency's process for developing the UWMP, including efforts in coordination and outreach.

Chapter 3 — System Description

Provides maps of the service area, a description of the service area and climate, the public water system, and the agency's organizational structure and history.

Chapter 4 — Water Use Characterization

Describes and quantifies the current and projected water uses within the agency's service area.

Chapter 5 — Senate Bill X7-7 Baseline, Targets, and 2020 Compliance

Focused on retail providers meeting Senate Bill 7 of Special Extended Session 7 (SB X7-7) goals, provides discussion on support from the wholesale agency to Contract Agencies to meet goals.

Chapter 6 — Water Supply Characterization

Describes and quantifies supply availability.

Chapter 7 — Water Service Reliability and Drought Risk Assessment

Describes the water service reliability through at least a 20-year planning horizon and includes the drought risk assessment for the next five years.

Chapter 8 — Water Shortage Contingency Plan

Provides the staged plan for dealing with water shortages, including a catastrophic supply interruption, and serves as the standalone WSCP.

Chapter 9 — Demand Management Measures

Describes efforts to promote conservation and to reduce demand on water supply, specifically addressing several demand management measures.

Chapter 10 — Plan Adoption, Submittal, and Implementation

Describes the steps taken to adopt and submit the 2025 UWMP and to make it publicly available, including a discussion of the District's plan to implement the 2025 UWMP.

Appendices

Includes supporting documents.

1.3 UWMPs in Relation to Other Efforts

This UWMP characterizes water use, estimates future demands and supply sources, and evaluates supply reliability for normal, single-dry, and five consecutive dry years. The UWMP also requires a standalone WSCP, which is provided in **Chapter 8**.

In addition to the 2025 UWMP, the District is involved in several other internal and external planning efforts. The District collaborates with a variety of stakeholders to achieve coordination and consistency between various planning documents locally and regionally.

The key documents that were leveraged in preparation of this UWMP are:

- 2007 Interim Downstream Release Schedule
- 2011 Lopez Pipeline Capacity Study
- 2014 Low Reservoir Response Plan
- 2019 Integrated Regional Water Management Plan
- 2020 Zone 3 UWMP[4]
- San Luis Obispo County Emergency Response Plan(s)
- San Luis Obispo County Multi-Jurisdictional Hazard Mitigation Plan

Please refer to **Chapter 11** for a complete list of documents referenced in this report.

1.4 UWMPS and Grant/Loan Eligibility

For a water supplier to be eligible for DWR grants or loans, it must have a current UWMP on file that meets the requirements set forth by the CWC. The supplier must also maintain a current UWMP throughout the term of any grants or loans received. The District has prepared this 2025 UWMP under guidance from the DWR Guidebook.

[4] Water Systems Consulting, September 2021

1.5 Demonstration of Consistency with the Delta Plan for Participants in Covered Actions

The District does not have a contract to receive water from the Sacramento-San Joaquin Delta through the State Water Project. Its sole responsibility is to provide Lopez Reservoir water to its Contract Agencies. Certain Zone 3 Contract Agencies are subcontractors to the District for State Water. However, since the District does not have a contract for State Water through the State Water Project, this assessment of consistency with the Delta Plan is not required.

Chapter 2: UWMP Preparation

This chapter provides information on the process for developing the UWMP, including coordination and outreach efforts.

2.1 Plan Preparation

The District prepared this 2025 UWMP in accordance with the CWC based on the DWR UWMP 2025 Guidebook and will submit it to DWR.

2.2 Basis for Preparing a Plan

The basis for preparing an Urban Water Management Plan is found within Sections 10617, 10620, and 10621 of the CWC. In accordance with the CWC, suppliers with 3,000 or more service connections, or those supplying 3,000 AFY or more, are required to prepare an UWMP every five years, in years ending in zero and five. The Guidebook prepared by DWR summarizes the information required in the 2025 UWMPs.

This UWMP reports solely on the Zone 3 service area. Each Zone 3 Contract Agency was notified of the preparation of this UWMP, and each Contract Agency that is required to prepare an UWMP (Cities of Arroyo Grande, Grover Beach, and Pismo Beach) will do so for its service area. The District will continue to support each Contract Agency in public outreach and water conservation efforts. The District has prepared this UWMP as an individual wholesale supplier, as indicated in Table 2-1.

Water volume is represented in units of AFY, unless otherwise noted, and data is presented from April to March, to reflect the District's typical "water year" reporting. DWR tables presenting this information are provided in Table 2-1 and Table 2-2 below. Table titles are consistent with DWR recommended tables and the Guidebook for ease of reference.

Table 2-1. DWR 2-2 Plan Identification

Submittal Table 2-2: Plan Identification			
Select Only One	**Type of Plan**		**Name of RUWMP or Regional Alliance** *if applicable* (select from drop down list)
☑	**Individual UWMP**		
	☐	Water Supplier is also a member of a RUWMP	
	☐	Water Supplier is also a member of a Regional Alliance	
☐	**Regional Urban Water Management Plan (RUWMP)**		

Table 2-2. DWR 2-3 Supplier Identification

Submittal Table 2-3: Supplier Identification	
Type of Supplier (select one or both)	
☑	Supplier is a wholesale supplier
☐	Supplier is a retail supplier
Fiscal or Calendar Year (select one)	
☐	UWMP Tables are in calendar years
☑	UWMP Tables are in fiscal years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
4/1	
Units of measure used in UWMP (Select from the drop down list).	
Unit	AF
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.	
NOTES: The reporting period is **not** the fiscal year, but rather the reporting "water year" for the District that spans April to March.	

2.3 Regional Planning

The District coordinated with multiple neighboring and stakeholder agencies to prepare the 2025 UWMP. Coordination efforts were conducted to do the following:

- Inform stakeholders of the District's efforts and activities
- Gather high-quality data for use in developing this UWMP
- Coordinate planning activities with other related regional plans and initiatives

The District is a wholesale supplier that provides treated potable water supplies to its Zone 3 Contract Agencies. As part of the development process, the District informed the Contract Agencies of Lopez Reservoir's projected water supplies during the Technical Advisory Committee and Advisory Committee meetings during the development of the UWMP and requested projected demands from the Contract Agencies.

The UWMP was developed as a tool for the District to coordinate efforts with its Contract Agencies and other regional planning efforts, which include the following:

- Northern Cities (groundwater) Management Area
- Nipomo Mesa (groundwater) Management Area
- San Luis Obispo County Master Water Report
- San Luis Obispo County Integrated Regional Water Management Plan

Chapter 3: System Description

This chapter provides a description of the Zone 3 water system, including descriptions and maps of the service area, descriptions of the Contract Agencies, and an overview of the Zone 3 organizational structure and history.

3.1 General Description

San Luis Obispo County is located on the Central Coast of California, bounded on the north by Monterey County, on the south by Santa Barbara County, on the east by Kern County, and on the west by the Pacific Ocean. The County has 3,300 square miles of land, 100 miles of coastline, and over 282,000 residents. Agriculture, tourism, and recreation are the principal sectors of the local economy.

Zone 3 was created to operate the Lopez Project and deliver water supplies to the five Contract Agencies. The Lopez Dam was built to provide an additional water supply to reduce the reliance on groundwater and provide recreational opportunities, which was a requirement of the State grant. Zone 3 is part of the San Luis Obispo County Flood Control and Water Conservation District and is administered by the San Luis Obispo County Department of Public Works.

The District operates Lopez Reservoir, in the Arroyo Grande Creek watershed for municipal and agricultural water supplies and recreation. Lopez Reservoir provides recreational opportunities, including boating, waterskiing, and recreational fishing. The Arroyo Grande Creek watershed provides habitat for fish and wildlife species, including anadromous steelhead (Oncorhynchus mykiss) and California red-legged frogs (Rana aurora draytonii). Both are listed for protection under the Federal Endangered Species Act. Steelhead habitat is restricted to the reach of Arroyo Grande Creek from Lopez Dam to the Pacific Ocean, a distance of about 13 miles. A service area/boundary map is included in **Section 3.2** as Figure 3-1.

Lopez Project operations and maintenance include:

- Operation of a regional water treatment plant, including dissolved air flotation, chlorine dosing/contact, membrane filtration, ammonia injection/mixing (prior to combining with State Water), in addition to filter backwash water disposal and water sampling activities
- Routine maintenance of the Lopez Dam, Terminal Reservoir, and distribution system, including maintenance of a concrete perimeter channel around the Terminal Reservoir

- Seasonally varying water releases to Arroyo Grande Creek for groundwater recharge and habitat and wildlife purposes

3.1.1 History

During the 1780's, Mission San Luis Obispo de Tolosa priests farmed vegetables and wheat at the mouth of Lopez Canyon. In the 1870's, Jesus Lopez and his wife homesteaded 320 acres, living off the land as a farmer and woodcutter. The current location of the Lopez Reservoir and Recreation area was part of an old Spanish land grant given to Jose Villavicencia. This property was later sold to the Steele brothers in 1871. A number of ranches and dairies, and a schoolhouse, were operated on the property thereafter.

The US Army Corps of Engineers first considered a reservoir and water supply project located in Lopez Canyon in 1917. In 1952, the District entered into an agreement with DWR to investigate the potential water resources of the County. The conclusions of the six-year water resources investigation, presented in a 1958 DWR report, revived interest in the Lopez Project among the South County water agencies.

3.2 Service Area Boundary Map

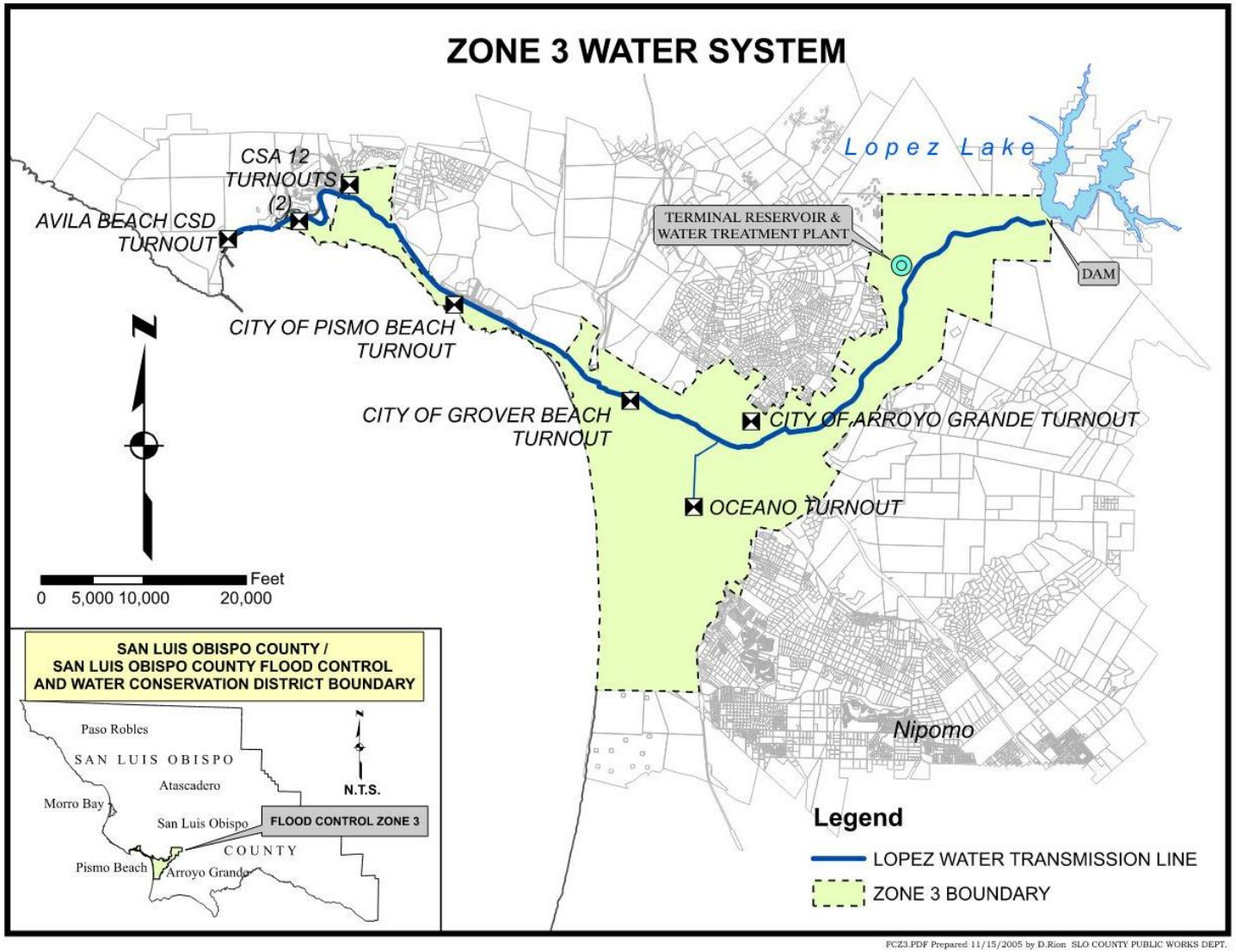


Figure 3-1. Zone 3 Service Area Boundary/System Map

3.3 Service Area Climate

The climate of Zone 3 is coastal, with mild and dry summers, cool winters, and an annual average of 20.9 inches of precipitation based on data collected at the Lopez Reservoir.[5] During the summer months, coastal fog helps reduce irrigation requirements by decreasing evapotranspiration (ETo). The normal year ETo for the Zone 3 area is approximately 43 inches.[6] Average monthly and annual total precipitation, temperature, and ETo data are provided in Table 3-1.

Table 3-1. Lopez Reservoir Average Monthly Climate Data

Month	Average Precipitation (inches)[5]	Average Temperature (°F)[7]	Average ETo (inches)[6]
January	4.78	52.8	2.14
February	3.53	53.8	2.54
March	3.71	55.6	3.46
April	1.05	57.4	4.54
May	0.38	59.9	4.95
June	0.15	63.2	4.98
July	0.08	66.1	5.06
August	0.02	67.1	4.53
September	0.19	66.4	3.71
October	1.06	63.5	3.27
November	1.40	57.9	2.38
December	4.61	52.6	1.85
Monthly Average	**1.75**	**59.7**	**3.62**
Annual Total	**21.0**	**--**	**43.4**

3.4 Service Area Population and Demographics

This section describes the service area of Zone 3 as a wholesale supplier, including current and projected population estimates, land usage, and other potential factors affecting the District's water management planning.

[5] San Luis Obispo County Public Works Monthly Precipitation Report (2007 to 2024)
[6] CIMIS, Monthly ETo Report for Sta. 202 (Nipomo), 2025.
[7] NOAA U.S. Climate Normals, San Luis Obispo AP Station (1991 to 2020)

3.4.1 Service Area Population

The District is a wholesale water provider. Details regarding housing, employment, demographics, and so forth will be addressed by the Contract Agencies in their corresponding UWMPs (City of Arroyo Grande, City of Grover Beach, City of Pismo Beach).

In the past 10 years, the County has grown at an annual rate of approximately 1%.[8] Much of the new population will occur in the North County, especially in the Atascadero and Paso Robles areas, and in Nipomo in the South County, where more housing is projected to be built. Estimates of current and projected population within the Zone 3 service area is estimated in Table 3-2. The District used the estimated population growth provided by the California Department of Finance and applied to Zone 3's service area population, as reported on the CA Water Board's Safe Drinking Water Information System (SDWIS).[9]

Table 3-2. Current and Projected Population

Population Served	2025	2030	2035	2040	2045	2050
Avila Beach CSD	1,630	1,639	1,666	1,696	1,731	1,772
Oceano CSD	7,601	7,642	7,766	7,904	8,065	8,254
Arroyo Grande	17,963	18,060	18,352	18,677	19,057	19,503
Grover Beach	12,701	12,769	12,976	13,206	13,475	13,791
Pismo Beach	8,036	8,079	8,210	8,356	8,526	8,726
TOTAL	**47,931**	**48,189**	**48,970**	**49,839**	**50,854**	**52,046**

3.4.2 Other Social, Economic, and Demographic Factors

As a wholesale supplier, the District does not evaluate social, economic, and demographic factors with respect to the management of Lopez Reservoir entitlements. For further description of how these factors impact supply management in Zone 3's service area, refer to the Contract Agencies' UWMPs.

3.5 Land Uses within the Service Area

Land use within the service area boundary of Zone 3 is managed by the Contract Agencies and the County. The District will support the land use authorities with land use evaluations

[8] California Department of Finance Population Projections, https://dof.ca.gov/forecasting/demographics/projections/.
[9] SDWIS California Public Water Supply Systems Search, https://sdwis.waterboards.ca.gov/PDWW/.

and characterization of their population, demographics, and land uses. For further description, refer to the Contract Agencies' UWMPs.

Chapter 4: Water Use Characterization

The water use characterization describes and quantifies the current and projected water uses within the Zone 3 service area. The analysis was completed with considerations of anticipated growth, regulatory requirements, and climate conditions. For purposes of the UWMP, the terms "water use" and "water demand" will be used interchangeably.

4.1 Non-Potable Versus Potable Water Use

Raw water from Lopez Reservoir is treated at Lopez Water Treatment Plant (LWTP), and potable water is delivered to the five Contract Agencies. The District also discharges raw water to the Arroyo Grande Creek for habitat conservation and groundwater recharge. The District does not provide recycled or raw water to its Contract Agencies.

4.2 Past, Current, and Projected Water Use by Sector

The projected water demand in Zone 3 is equivalent to the water entitlements for each Contract Agency and the required downstream releases to Arroyo Grande Creek, provided in Table 4-1. For specific information regarding water demand by land use category please refer to the Urban Water Management Plans (UWMPs) prepared by the Contract Agencies.

Table 4-1. DWR 4-1W Actual Demands for Water

Optional **Submittal Table 4-1 Wholesale: Total Uses for Potable and Non-Potable Water — Actual Water Code Section 10631(d)(1)**			
Use Type	Additional Description (as needed)	2025 Actual Water Use	
		Potable or Non-Potable[1]	Volume[2]
Sales to other agencies	Contract Agency Deliveries	Potable	2,482
Sales to other agencies	Lopez Surplus Usage	Potable	930
Wetlands or wildlife habitat (optional)	Downstream Releases to Arroyo Grande Creek[3]	Non-Potable	5,130
		Subtotal Potable	3,412
		Subtotal Non-Potable	5,130
		Total	8,542

NOTES:

[1] Recycled water demands are NOT reported in this table. Recycled water demands are reported in Table 6-4.

[2] Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.

[3] In 2025, the downstream release of 7.9 cfs (5,720 AFY) was required pursuant to the December 2024 district court order. The UWMP assumes that in the future years the downstream release will be 4,200 AFY.

4.2.1 Water Use Sectors Listed in Water Code

Total Contract Agency entitlements are provided in Table 4-1a.

Table 4-1a. Zone 3 Contract Agency Entitlements

Contract Agency	Contract Entitlement
City of Pismo Beach	892
Oceano CSD	303
City of Grover Beach	800
City of Arroyo Grande	2,290
CSA 12	245
TOTAL:	**4,530**

4.2.2 Water Use Sectors in Addition to those listed in Water Code

Transfers

Currently, State Water is conveyed through the Zone 3 system to the City of Pismo Beach, Oceano CSD, and Subcontractors of CSA 12, all of whom have State Water entitlements. Treated State Water enters the Zone 3 system just downstream of the LWTP via the Coastal Branch of the State Water Pipeline and is delivered to the aforementioned agencies with service via the Zone 3 Pipeline.

The District has completed two separate hydraulic studies to determine if additional capacity exists in the Central Coast Water Authority (CCWA) State Water Pipeline for supplemental water deliveries to CCWA subscribers, including Contract Agencies (served via the Lopez Pipeline). The first hydraulic study focused specifically on the Lopez Pipeline, while the second hydraulic study modeled the entire Coastal Branch Pipeline delivery system. Results indicate the potential for a marginal increase in deliveries of approximately 12% (+/-300 AFY).[10]

Wetlands or Wildlife Habitat

The District reserves up to 4,200 AFY for downstream releases to Arroyo Grande Creek to maintain varying flows in Arroyo Grande Creek in support of environmental needs and agricultural interests along Arroyo Grande Creek. A court order entered in December 2024 directed the County to develop, adopt, and implement a Flow Release Plan that included

[10] WSC, December 2011

minimum base flows and potential pulse flow releases from Lopez Dam. The order required a minimum base flow release of 7.9 cfs in years when Lopez Reservoir storage equals or exceeds 20,000 AF. A base flow release of 7.9 cfs correlates to a total release of 5,720 AFY. The County appealed the order, which was vacated by the United States Court of Appeals for the Ninth Circuit in December 2025. All following tables in this report assume that downstream releases in subsequent years will remain at 4,200 AFY, not increase to 5,720 AFY. If future judicial orders require downstream releases greater than 4,200 AFY, the downstream releases will increase accordingly to comply with such orders.

4.2.3 Past Water Use

The District is a wholesale agency and is not required to quantify past water use. As a wholesale agency, the District's past water use is equivalent to the Contract Agency entitlements. Only when Zone 3 was operating in accordance with certain policies and procedures set forth in the LRRP did Contract Agencies receive reduced water deliveries. The LRRP is discussed further in the WSCP (**Chapter 8**).

4.2.4 Distribution System Water Losses

The UWMP Guidebook does not require this section to be completed by wholesale suppliers.

4.2.5 Current Water Use

In 2025, the total water delivered to the Contract Agencies is shown in Table 4-1. Surplus water is calculated for each water year by subtracting from the safe yield of the reservoir the quantity of water released downstream and the quantity of entitlement deliveries. Based on the calculation there may be surplus water available to the Contract Agencies at the end of the year that they can be used in the following year. Surplus water is discussed further in **Chapter 6**.

4.2.6 Projected Water Use

Table 4-2 provides projected water use data for Zone 3 in five-year increments through 2050. The projected water deliveries are based on each Contract Agency's entitlement. The single dry year supply and demand comparison matches a normal year's supply and demand as the safe yield does not change. Both normal year and single dry year data are reported in **Chapter 7.**

Table 4-2. DWR 4-2W Projected Demands for Water

Optional **Submittal Table 4-2 Wholesale: Total Uses for Potable and Non-Potable Water — Projected Water Code Section 10631(d)(1)**							
Use Type		**Projected Water Use** (Report To the Extent that Records are Available)					
Drop down list These are the only Use Types that will be recognized by the WUEdata online submittal tool.	Additional Description (as needed)	**Potable or Non-Potable** (OPTIONAL) Drop down list	**2030 (AF)**	**2035 (AF)**	**2040 (AF)**	**2045 (AF)**	**2050 opt (AF)**
Add additional rows as needed							
Sales to other agencies	City of Pismo Beach	Potable	892	892	892	892	892
Sales to other agencies	Oceano CSD	Potable	303	303	303	303	303
Sales to other agencies	City of Grover Beach	Potable	800	800	800	800	800
Sales to other agencies	City of Arroyo Grande	Potable	2,290	2,290	2,290	2,290	2,290
Sales to other agencies	CSA 12 (Avila Beach CSD)	Potable	245	245	245	245	245
Wetlands or wildlife habitat	Downstream Releases	Non-Potable	4,200	4,200	4,200	4,200	4,200
		Subtotal Potable	4,530	4,530	4,530	4,530	4,530
		Subtotal Non-Potable	4,200	4,200	4,200	4,200	4,200
		Total	8,730	8,730	8,730	8,730	8,730
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.							

4.2.7 Characteristic Five-Year Water Use

As a wholesale supplier with fixed Lopez entitlements, the expected water use in Zone 3 is equal to the Contract Agency entitlements in future years. Table 4-3 provides the total gross water use in five-year increments without drought conditions.

Table 4-3. Five-Year Total Water Demand (Potable and Non-Potable)

Total Water Use						
	2025	2030	2035	2040	2045	2050
Potable and Raw Water	8,542[1]	8,730	8,730	8,730	8,730	8,730
Recycled Water Demand	0	0	0	0	0	0
TOTAL WATER DEMAND	8,542	8,730	8,730	8,730	8,730	8,730

[1]Actual water demand for 2025, from Table 4-1.

4.3 Water Use for Lower Income Households

UWMP Guidebook does not require this section to be completed by Wholesale Agencies. Refer to the Cities of Arroyo Grande, Pismo Beach, and Grover Beach respective UWMPs for any information regarding water use for lower income households.

4.4 Climate Change Considerations

The County recognizes that global climate change will have significant impacts locally and throughout California unless significant steps are taken to reduce greenhouse gas (GHG) emissions. Disrupted precipitation patterns are one of the anticipated impacts that may affect water supplies. In May 2010, the County adopted a GHG Inventory (Inventory) and Forecast as part of the Conservation and Open Space Element of the General Plan 11. The County Board of Supervisors originally adopted the Energy Wise Plan, or Climate Action Plan, in November 2011 and updated it in 2016.[11] The Climate Action Plan update reported overall GHG emissions have decreased approximately 7% between 2006 and 2013. The reduction in emissions is primarily due to community-wide emissions focused on transportation and mobile sources. Both plans demonstrate the County's continued commitment to addressing the challenges of climate change by reducing local GHG emissions and preparing the County to adapt to a changing climate. The Climate Action Plan also outlines the County's approach to reducing GHG emissions through a number of goals, measures, and actions that provide a road map to achieving the County's GHG reduction target of 15% below baseline levels by 2020, and up to 23% below baseline emissions by 2035.

Climate change projections forecast more extreme weather, including flooding and prolonged droughts. Surface storage capacity provides the greatest flexibility to water supply systems in the face of extreme weather, providing the ability to capture more winter runoff and control larger floods, as well as hold water in reserve storage for dry years and droughts.

[11] County of San Luis Obispo, 2011 and 2016.

Chapter 5: Senate Bill X7-7 Baselines, Targets, and 2025 Compliance

As a wholesale agency, the District has completed an assessment of its ongoing and proposed future measures, programs, and policies that will support the Contract Agencies to meet their SB X7-7 goals. Demand Management Measures (DMM) for Zone 3 are further discussed in **Chapter 9**.

5.1 Updated Calculations from the 2020 UWMP to the 2025 UWMP

As a wholesale water supplier, the District supplies potable water to retail water agencies that distribute water to their customers for consumptive use. Of the few Contract Agencies for Zone 3 that are required to prepare UWMPs (Cities of Arroyo Grande, Pismo Beach, and Grover Beach), none rely solely on Zone 3 water; they use a combination of Zone 3 water, State Water, and/or groundwater. As such, per capita baseline data for the Zone 3 water is not available. It is the responsibility of each Contract Agency that is required to prepare an UWMP to provide this information as part of its respective UWMP updates. The District has completed an assessment of its present and proposed future measures, programs, and policies that will help the Contract Agencies achieve SB X7-7 water use reduction targets.

5.1.1 Update of Target Method

Within Zone 3, retail agencies provide direct outreach programs to their consumers and to the general public. The District participates in the countywide Partners in Water Conservation (PIWC) group. Through its affiliation with PIWC, the District proportionally contributes financially to a water-wise water conservation website aimed at increasing the public's water conservation awareness. Additionally, the District conducts public outreach within Zone 3. When prudent, such as during times of drought, the District contributes financially to promote water conservation through public service announcements and direct mail campaigns.

5.1.2 Policies That Encourage Demand Reduction within the Zone 3 Service Area

The District supports its Zone 3 Contract Agencies through its own public outreach program and/or by assisting in funding or attending the Contract Agencies' outreach programs. On June 28, 2012, the District, by staff assignment in Procedural Memorandum AD-42, designated a conservation coordinator. Funding is allocated during the annual budget process to be used by the conservation coordinator to implement Best Management Practices (BMPs) to meet the coverage requirements for maintaining Assembly Bill (AB) 1420

compliance. AB 1420 (Stats. 2007, ch. 628) amended the UWMP Act, CWC 10610 et seq., to require, effective January 1, 2009, that the terms of and eligibility for any water management grant or loan made to an urban water supplier and awarded or administered by DWR, the State Water Resources Control Board, or California Bay-Delta Authority (CBDA) or its successor agency (collectively referred to as "Funding Agencies"), be conditioned on the implementation of the water Demand Management Measures (DMMs) described in CWC Section 10631(f). For the purpose of AB 1420, BMPs are equated with DMMs. Water management grants and loans include programs and projects for surface water or groundwater storage, recycling, desalination, water conservation, water supply reliability and water supply augmentation. This funding includes, but is not limited to, funds made available pursuant to Public Resources Code Section 75026 (Integrated Regional Water Management [IRWM] Program).

5.1.3 Recycled Water Programs within the Service Area

The District does not currently provide wholesale recycled water supplies to its Contract Agencies. The County has identified implementing recycled water projects as one of the key strategies in the 2012 Master Water Report[12] and the 2019 IRWM Plan[13] for providing long-term water reliability and supply for the entire San Luis Obispo County. The 2014 Regional Recycled Water Strategic Plan (RRWSP) is one of the implementation projects funded by the San Luis Obispo IRWM Plan through the Round 2 IRWM Regional Planning Grant from DWR.[14]

The RRWSP's approach builds upon the technical information developed by each agency. This work also updates relevant information for previously identified projects and identifies potential modifications to those projects to lower costs while maintaining potential benefits. The RRWSP identifies high-priority projects based on costs and benefits and defines critical next steps for each project. The RRWSP also addresses policy, regulatory, permitting, legal, and funding/financing considerations for different types of recycled water projects.

The RRWSP covers region-wide recycled water opportunities and has focused evaluations within four study areas:

- City of Morro Bay
- Nipomo Community Services District (CSD)
- Northern Cities—Arroyo Grande, Grover Beach, Pismo Beach, Oceano CSD, and South San Luis Obispo County Sanitation District (SSLOCSD)
- Templeton CSD

[12] Carollo, et al., May 2012.
[13] San Luis Obispo County Flood Control and Water Conservation District, May 2020.
[14] Cannon, June 2014.

Although the District currently does not operate any recycled water programs, one of the Zone 3 Contract Agencies is currently working on developing an indirect potable reuse program through the Central Coast Blue Project. Central Coast Blue is a regional recycled water project that would develop a sustainable water supply and help protect the Santa Maria Groundwater Basin (SMGB). Due to increases in project costs and an unexpected loss of grant funding, the project has been paused in the design and permitting phase.

The project would consist of advanced treatment of water from the Pismo Beach wastewater treatment plant (WWTP) in phase I and from SSLOCSD WWTP in phase II, if it is deemed feasible and necessary. Injection of the purified effluent into the SMGB would create a seawater barrier to reduce the risk of seawater intrusion and improve ground water supply sustainability for the region. Currently, the water from both WWTPs is being treated and discharged to the ocean through a joint ocean outfall. Tasks related to the development of the project that were performed prior to the pause include feasibility study analysis, preliminary design, pilot plant development and operation, funding appropriation, cost/benefit sharing analysis, groundwater modeling, aerial geophysics investigation, and environmental review.

Chapter 6: Water Supply Characterization

The water supply characterization is an assessment of Zone 3's water supply during a normal year, a single-dry year, a drought period lasting five consecutive years, and future projections through 2050. As part of the water supply analysis, this chapter includes a water service reliability and risk assessment of Lopez Reservoir to understand the effects of short- and long-term water management decisions.

6.1 Water Supply Analysis Overview

6.1.1 Specific Analysis Applicable to All Water Supply Sources

The source of water for Zone 3 is exclusively surface water from Lopez Reservoir. The District does not purchase or import supplemental water, extract groundwater, or supplement with recycled water and does not plan to in the foreseeable future. Zone 3 was established to operate the Lopez Project and does not supply to retail customers.

In addition to Lopez Project water, Zone 3 Contract Agencies have the following other sources:

- City of Pismo Beach: State Water, Groundwater
- City of Arroyo Grande: Groundwater
- City of Grover Beach: Groundwater
- Oceano Community Services District (CSD): State Water, Groundwater
- County Service Area (CSA) 12: State Water (Subcontractors to CSA 12 have State Water contracts)

6.2 Urban Water Management Plan Water Supply Characterization

This section provides narratives that further quantify water supply availability for Zone 3 as required under the CWC.

6.2.1 Purchased or Imported Water

Surface water from the Lopez Project is the sole source of water provided by Zone 3, and Zone 3 does not hold a contract for purchased or imported water. As mentioned earlier, State Water is wheeled through the Lopez Pipeline system to the Contract Agencies that have contracts for imported State Water.

6.2.2 Groundwater

The water supply for Zone 3 is exclusively surface water from Lopez Reservoir. The District does not extract groundwater and is not planning to develop groundwater supplies as an

additional source of water for the Zone 3 Contract Agencies, as shown in Table 6-1. The District supports the efforts of its Contract Agencies to reduce overdraft by implementing conjunctive use projects to optimize and best manage their groundwater sources. The County and the City of Arroyo Grande partnered to financially support the grant funded Groundwater Sustainability Plan for the Arroyo Grande Creek subbasin which is downstream of the Lopez Dam. The Groundwater Sustainability Plan was completed in August 2022. The District cannot control how much groundwater the Contract Agencies extract from the groundwater basin and has limited authority in this regard. Several Zone 3 Contract Agencies — Cities of Grover Beach, Arroyo Grande, and Pismo Beach; Oceano CSD; and portions of CSA 12 — use groundwater as part of their municipal supply portfolio. The District expects that those agencies which are required to prepare UWMPs (Cities of Arroyo Grande, Grover Beach, Pismo Beach), will provide detailed information regarding groundwater resources in their respective UWMPs. Oceano CSD and the Cities of Grover Beach, Arroyo Grande, and Pismo Beach pump groundwater from the Northern Cities Management Area portion of the Santa Maria Groundwater Basin (SMGB). District staff will continue to work with the Contract Agencies to promote effective management of groundwater supplies within the region.

In 2012, the County prepared a comprehensive update to the original 1972 Master Water Plan, which had been previously updated in 1986 and 1998. The 2012 Master Water Report highlights major changes in the water resources picture for the County[12], including construction of the State Water and Nacimiento pipelines, groundwater basin litigation, new water users, new water regulations, development of the Integrated Regional Water Management Plan, and the completion of various local and subregional water management studies and plans. Development of the updated County Master Water Report in 2012 had an overall objective of ensuring effective and collaborative management of the County's water resources now and into the future and included detailed information regarding local member agencies' efforts to manage the local groundwater supplies.

Table 6-1. DWR 6-1W Groundwater Volume Pumped

Submittal Table 6-1 Wholesale: Groundwater Volume Pumped							
☑	Check the box if the Supplier does not pump groundwater.						
☐	Check the box if all or part of the groundwater described below is desalinated. (OPTIONAL)						
Groundwater Type **Drop Down List** May use each category multiple times	Potable or Non-Potable (OPTIONAL) Drop down list	Location or Basin Name	2021 (AF)	2022 (AF)	2023 (AF)	2024 (AF)	2025 (AF)
		Total	0	0	0	0	0

6.2.3 Surface Water

Lopez Reservoir has a storage capacity of approximately 49,388 acre-feet (AF) and provides water for municipal supply, recreational, and environmental uses. Lopez Reservoir covers an area of about 918 acres and is located primarily within the Arroyo Grande Creek drainage area, consisting of a 67 square mile (43,000 acre) watershed that drains into Lopez Reservoir. The dam and reservoir were constructed on Arroyo Grande Creek, approximately 8 miles upstream from the Arroyo Grande community and approximately 13 miles from the mouth of the creek, where it discharges to the Pacific Ocean. Construction on the Lopez Project started in May 1967 and was completed in January 1969.

Pictured above: Lopez Reservoir, May 2016 (~29% capacity)

The Lopez Dam is constructed of select fill materials with a length of 1,120 feet and a vertical height of 166 feet. A seismic retrofit of the dam was completed in 2002. A 20-inch diameter buried steel transmission main with a total length of 16 miles carries water from the dam to the 844 AF Terminal Reservoir. From the Terminal Reservoir, raw water undergoes treatment at the Lopez Water Treatment Plant (LWTP) before being delivered to the Contract Agencies through the Lopez Pipeline. The LWTP has the capacity to treat up to 6.7 million gallons per day (MGD), equivalent to 7,505 AFY.

As previously noted, the safe yield of Lopez Reservoir is 8,730 AFY, which reflects the sustainable water supply during drought conditions. The safe yield is derived from two historical studies: Lopez Project Hydrology Review conducted in June 1962 and Hydrologic Balance of Arroyo Grande Groundwater Basin conducted in November 1962. The 2013 Lopez Lake Spillway Raise Project Report reaffirmed the safe yield for Lopez Reservoir.[15] The District operates Lopez Reservoir based on the contracts with the agencies to stay within the defined safe yield. Of the 8,730 AFY of safe yield, 4,530 AFY (approximately 52% of the reservoir's safe yield) is entitled by agreements to the Contract Agencies. The remaining

[15] Stetson Engineers, Inc., 2013

4,200 AFY is reserved for downstream users, including releases to maintain stream flows and groundwater recharge. The releases are adjusted (increased or decreased) as necessary in response to changing agricultural needs, changes in weather conditions, and/or other factors that may influence surface flows within the creek system. The adaptive management of downstream releases has generally resulted in annual releases of less than 4,200 AF. A recent order has directed the District to increase their downstream releases to 7.9 cfs, which correlates to a total release of 5,720 AFY, to support ecological conditions downstream; the County has appealed the order and is awaiting a decision on the matter. Any unused safe yield (unused agency water plus unreleased water for downstream beneficial uses) is offered to the Contract Agencies each year as surplus water and can be purchased in the following water year.

Zone 3's water supplies for past, current, and projected demands are shown in Table 6-2.

Table 6-2. Water Supplies for Past, Current, and Projected (AFY)

Contract Agency	2020	2025	2030	2035	2040	2045	2050
City of Pismo Beach	892	892	892	892	892	892	892
Oceano CSD	303	303	303	303	303	303	303
City of Grover Beach	800	800	800	800	800	800	800
City of Arroyo Grande	2,290	2,290	2,290	2,290	2,290	2,290	2,290
CSA 12 (Avila Beach CSD)	245	245	245	245	245	245	245
Downstream Releases	4,200	5,130[3]	4,200	4,200	4,200	4,200	4,200
Available Surplus[1]	1,803[2]	930[4]	0	0	0	0	0
TOTAL	**10,533**	**10,590**	**8,730**	**8,730**	**8,730**	**8,730**	**8,730**

1) As presented in Table 6-2, it is assumed that in the future, 4,200 AFY will be reserved for downstream releases and no surplus water will be available to Contract Agencies. When less water is released from Lopez Reservoir for downstream releases and/or contractors do not use their full entitlement, surplus water may be made available to Contract Agencies.
2) Surplus water made available to the Contract Agencies from the previous year (2019).
3) Downstream releases were temporarily increased to 7.9 CFS as a result of a preliminary injunction order from the United States District Court for the Central District of California that directed the County to develop, adopt, and implement a Flow Release Plan that included minimum base flows and pulse flow releases from Lopez Dam.
4) Surplus water made available to the Contract Agencies from the previous year (2024).

6.2.4 Stormwater

The District recognizes stormwater as a potential source of water supply for the Contract Agencies. Beneficial reuses typically include blending with other water supplies for groundwater recharge, redirecting it into constructed wetlands or landscaping, or diverting it to a treatment facility for subsequent reuse. In their respective UWMPs, individual Contract Agencies will address whether they have or are developing beneficial ways to reuse stormwater.

A watershed-based approach to stormwater management would have multiple benefits for Zone 3, including recharged groundwater aquifers and enhanced local water supplies and water quality of the creek. The District and the City of Arroyo Grande completed a Stormwater Resources Plan (SWRP) for the Arroyo Grande Creek Watershed. The overarching purpose of this SWRP is to develop strategies to best manage the potential risks and opportunities presented by stormwater runoff within the Arroyo Grande Creek Watershed located downstream of Lopez Lake.

Picture above: Lopez Lake and Watershed

The District does not plan on implementing additional stormwater capture beyond what naturally flows to Lopez Reservoir. The District continues to encourage its Contract Agencies to develop additional reuse opportunities if they become available. New County regulations for new development will also require stormwater management improvements to retain more stormwater on-site for additional percolation.

6.2.5 Wastewater and Recycled Water

The District does not provide wastewater treatment or recycled water. As a wholesale supplier, the District does not provide this source of water supply to its Contract Agencies.

Wastewater Collection, Treatment, and Disposal

Three wastewater treatment plants (WWTP) serve Zone 3 Contract Agencies:

- South San Luis Obispo County Sanitation District (SSLOCSD) WWTP: Serving the Cities of Arroyo Grande and Grover Beach, and Oceano CSD
- City of Pismo Beach WWTP: Serving the City of Pismo Beach
- Avila Beach CSD WWTP: Serving Avila Beach CSD and Port San Luis

SSLOCSD Collection System and WWTP

The SSLOCSD trunk sewer system collects wastewater from individual sewer collection systems in the Cities of Arroyo Grande and Grover Beach, and Oceano CSD. The SSLOCSD trunk sewer system is approximately 9 miles long, with varying mains between 18 and 30 inches in diameter. The SSLOCSD treatment plant is rated at 5 MGD average daily flow and 9 MGD peak wet weather flow. The WWTP provides secondary treatment using a fixed film reactor. Effluent is chlorinated and dechlorinated prior to discharge.

Plant effluent is discharged through the existing joint outfall line (with City of Pismo Beach WWTP) to the Pacific Ocean. This is a joint outfall shared between SSLOCSD WWTP and Pismo Beach WWTP. The combined capacity of this outfall is estimated at 16 MGD on a peak flow basis. The outfall extends approximately 4,000 feet offshore into about 60 feet of water depth. The SSLOCSD WWTP currently serves a population of approximately 38,000 people.

City of Pismo Beach Collection System and WWTP

The collection system consists of 35 miles of gravity sewer ranging in diameter from 4 to 16 inches, over 450 manholes, 4.5 miles of sewer force mains, and nine lift stations. The Pismo Beach WWTP has capacity to treat an average of 1.9 MGD to secondary effluent standards. The treatment plant was replaced in 2015 with a new secondary plant (oxidation ditches).

Currently, all effluent is discharged to the Pacific Ocean via the joint outfall shared with the SSLOCSD. The secondary process includes an oxidation ditch extended aeration process, followed by secondary clarification, chlorination and dechlorination. The WWTP currently serves a population of approximately 8,600.

Avila Beach CSD Collection System and WWTP

The collection system consists of approximately 9,300 linear feet of gravity sewer ranging in diameter from 4 to 10 inches, 40 manholes, and one lift station. The WWTP is a 50,000 GPD package membrane bioreactor producing high quality effluent, with the potential for future recycled water production. Effluent is currently chlorinated and dechlorinated prior to discharge through an ocean outfall. The outfall is 12-inch diameter and extends approximately 540 feet beyond the Avila Pier. The WWTP currently serves approximately 800 permanent residents but is designed to handle peak summer tourist demands.

Recycled Water Coordination

The City of Pismo Beach has been a driving force for the Central Coast Blue Project. Central Coast Blue is a regional recycled water project that would develop a sustainable water supply and help protect the Santa Maria Groundwater Basin (SMGB). Due to increases in project costs and an unexpected loss of grant funding, the project has been paused in the design and permitting phase. The intent of Central Coast Blue is to enable Pismo Beach and the SSLOCSD to construct an advanced treatment facility (ATF) to produce advanced purified water that can be used to augment its water supply. The advanced treated water will be injected into the groundwater basin to recharge the aquifer and develop a seawater intrusion barrier to improve groundwater supply reliability for the area.

Please refer to the Contract Agencies' UWMP for more detailed information about the current findings for potential and future use of recycled water.

Potential, Current, and Projected Recycled Water Uses

In general, using unrestricted recycled water (defined by Title 22, California Code of Regulations as meeting a coliform bacteriological quality of 2.2 most probable number) for landscape/turf irrigation is a potential use in all three WWTP service areas. However, studies have shown that there are significant costs associated with pipeline and pump station infrastructure relative to irrigation demand.

Avila Beach CSD upgraded its wastewater treatment plant in 2023 to produce higher quality effluent that could potentially serve as a recycled water source for irrigation of the adjacent golf course. Although the plant is capable of producing recycled water for reuse applications, effluent is currently discharged through the existing ocean outfall. Additional studies are underway to evaluate options for expanding treatment plant capacity and supplying recycled water to users in the surrounding area.

The Central Coast Blue Project would provide the opportunity to capture treated WWTP effluent currently discharged to the ocean and put it toward beneficial reuse through injection of advanced purified water into the SMGB to prevent seawater intrusion and recharge the groundwater basin. The first phase of Central Coast Blue consists of advanced treatment of water from the Pismo Beach WWTP. The second phase includes treating SSLOCSD WWTP, if that is deemed feasible and beneficial. Refer to the City of Pismo Beach UWMP for additional information.

As a wholesale entity, it is difficult to project to what extent a Contract Agency may employ recycled water projects in the coming years. As such, the District is not in the position to forecast the extent and timing of such reuse programs. The District supports and encourages optimization of water resources throughout the County and would encourage all Contract Agencies to develop recycled water programs where feasible, including Central Coast Blue and the Avila Beach CSD WWTP. It is expected that with climate change and continued demands on local water resources, that development of recycled water programs will become more viable (and essential) in future years.

6.2.6 Actions to Exchange and Optimize Future Recycled Water Use

As the District does not produce recycled water or provide recycled water to the Zone 3 Contract Agencies, there are no specific plans for optimizing the use of recycled water in the Contract Agencies' service areas. Please refer to the Contract Agencies' UWMPs for more information about how recycled water use will be optimized in their respective service areas.

6.2.7 Desalinated Water Opportunities

The mission of Zone 3 is solely to serve water from Lopez Reservoir to its five Contract Agencies. The supply and safe yield of this reservoir (along with the Contract Agencies' conjunctive use of groundwater and State Water) is adequate to meet contract obligations. In March 2016, the District completed a Diablo Canyon Desalination Pipeline Feasibility Study that summarized the hydraulic feasibility and planning-level cost estimates for delivering desalinated water from Diablo Canyon Power Plant near Avila Beach to current Zone 3 Contract Agencies along the Lopez Pipeline.[16] The project would deliver desalinated water (seawater treated at the Diablo Canyon Power Plan by filtration, ultraviolet exposure, and reverse osmosis) to the Lopez Pipeline and further diversify the Contract Agencies' water supply. The feasibility study identified upgrades to the Zone 3 conveyance system that would be required for the Lopez Pipeline to allow for additional capacity and higher pressures. The District Board of Supervisors (BOS) approved a $900,000 budget adjustment to carry out the next steps in the project, including preparation of an Environmental Impact Report and a Coastal Development Permit (CDP) application. The County is currently in Phase 2 of the Desalination Executable Solution and Logistics (DESAL) Plan, which includes procurement of a consultant, beginning public engagement, identification and analysis of concept alternatives, and ranking/selection of a preferred project.

Previously, in 2008, the Cities of Arroyo Grande and Grover Beach and the Oceano CSD jointly participated in the detailed evaluation of a potential seawater desalination project to supplement their existing potable water sources. At that time, projections of water supply shortfalls in the region warranted a more detailed study and consideration of desalination (and recycled water) as a supplemental water supply. The 2008 Desalination Funding Study was funded by a Proposition 50 grant and was further advanced from a prior February 2006 initial desalination study.[17] The City of Grover Beach "opted out" of the study.

Each of the agencies identified its desired allocation of production water from the desalination facility

The total capacity of the desalination plant study was for a yield of 2,300 AFY, with each agency's share in the plant capacity as follows:

- City of Arroyo Grande: 750 AFY
- City of Grover Beach: 800 AFY
- Oceano CSD: 750 AFY

[16] WSC, March 2016
[17] Wallace Group, 2008.

The study revealed several opportunities and challenges associated with the development of a desalination facility, including:

- How seawater would be collected through a series of on-beach gallery wells
- Impacts of pipeline construction on the beach and through environmentally sensitive areas (such as the lagoon)
- Site concerns and competing space requirements at the SSLOCSD WWTP
- Complex permitting process
- Extensive energy consumption
- High cost of water per AF

After careful consideration of the findings of the Desalination Feasibility Study, the participating agencies chose not to pursue this desalination project as a viable water supply alternative. However, the need for augmenting water supplies for the future is still a key concern.

6.2.8 Water Exchanges and Transfers

Exchanges

During the years in which the annual yield of Lopez Reservoir exceeds the water deliveries and downstream releases, Contract Agencies are given the option to purchase surplus water (see 6.2.3). The current water supply contracts with the Agencies (Article 4[A], September 19, 2000, Water Supply Contracts) state as follows: "Surplus water shall be calculated for each water year by subtracting from the safe yield of the project an amount equal to the sum of the quantity of water released downstream during the immediately prior water year, which shall not exceed 4,200 AF unless legally required, and the quantity of entitlement water delivered to Zone 3 Contract Agencies during the immediately prior water year, excluding downstream releases and entitlement deliveries that occur during the period of time that the District determined that continuous spillway flow was occurring at Lopez Dam."[18]

Each year, the District Board of Supervisors declares surplus water (unused safe yield from the previous year) available during any given water year. Table 6-2 shows past, current, and projected available surplus amounts to Contract Agencies. It is important to state that the District provides the entitled amount to the Contract Agencies, and surplus water is not a guaranteed source of water from year to year. Ultimately, the Contract Agencies are responsible for obtaining additional water sources when demands exceed their entitlement.

The current Zone 3 contracts allow for surplus water to be made available to outside entities. However, selling surplus water to agencies that are not Contract Agencies is not practicable

[18] San Luis Obispo County, September 19, 2000

because typically there is not enough additional surplus water to warrant a sale. Additionally, there may be hydraulic limitations to the transmission line, making it impracticable.

The costs of the surplus water for Contract Agencies are very low compared to other potential water sources because they only pay for the treatment costs associated with the surplus water, and capital costs are excluded. Surplus water is not guaranteed every year, and it is unlikely surplus water will be available after a succession of dry years.

The District and the Contract Agencies amended and re-signed their entitlement contracts in 2022 to provide individual Contract Agencies with the ability to store unused Lopez Reservoir entitlement water or surplus water within the reservoir for use in future years. The updated contracts also allow for District-initiated water exchanges, allowing the District to provide State water to a Contract Agency during a LWTP shutdown or other incident that prevents delivery of Zone 3 water.

Transfers

Transfer opportunities within Zone 3 consist of only State Water and conjunctive use of groundwater supplies. One key aspect to the ability to take advantage of State Water transfers is the capacity of the Zone 3 Pipeline. The District completed a hydraulic study to determine if additional capacity exists in this pipeline for supplemental water deliveries to the Contract Agencies. Following this initial study, a hydraulic model and detailed study was conducted by the District to assess hydraulic capacity in the entire Central Coast Water Authority (CCWA) State Water delivery system. Both studies addressed hydraulic capacity relative to both State Water and Zone 3 Water delivery opportunities in the Lopez Pipeline. The most recent CCWA delivery system study and report were completed in 2012. Results indicate the potential for only a marginal increase in capacity for surplus deliveries of approximately 12% (approximately 300 AFY).[10] However, the District is exploring options with CCWA to increase State Water delivery capacity via the CCWA delivery system.

Emergency Interties

The Lopez Project is connected to the State Water Pipeline, which allows the District to deliver State Water to the Contract Agencies if it experiences supply interruption or a water treatment plant failure. Individual Contractors have emergency interties between their distribution systems that allow for the transfer of water during emergency conditions. Refer to the individual Agencies' UWMPs for details regarding their interties with other agencies.

6.2.9 Future Water Initiatives

The District does not expect future water supply projects or programs to provide a quantifiable increase to the agencies' water supply. However, each Contract Agency

certainly may be embarking upon projects to augment potable water supply, such as recycled water, stormwater recharge, desalination, or injection of recycled water for formation of a seawater barrier (Central Coast Blue) to enhance groundwater extraction by Contract Agencies. When Contract Agencies need water beyond their entitlements, they will have no choice but to optimize management of their existing water supplies and develop alternative water source supplies if/when needed.

As mentioned previously, the District and the Contract Agencies amended and re-signed their entitlement contracts in 2022 to provide individual Contract Agencies with the ability to store unused Lopez Reservoir entitlement water within the reservoir for use in future years to enhance agencies' multi-year water supply planning.

6.2.10 Summary of Existing and Planned Sources of Water

Lopez Reservoir is part of a 67 square mile watershed and has a full storage capacity of 49,388 AF. On average, the reservoir contains 39,000 AF of water. In 2020, Lopez Reservoir levels declined to 19,826 AF of stored water, which falls under the 20,000 AF trigger described in the WSCP. The Contract Agencies chose to voluntarily reduce their entitlements pursuant to the LRRP ahead of a statewide drought declaration. In August 2021, the District BOS adopted a resolution to operate Zone 3 in accordance with certain policies and procedures set forth in the LRRP, as storage in Lopez Reservoir continued to decline. For further information regarding water shortage response actions, see the District's WSCP in **Chapter 8**.

Zone 3 was created to deliver water from Lopez Reservoir to its five Contract Agencies. As shown in Table 6-3, there are ample drought reserves beyond the safe yield of the reservoir. Table 6-4 shows the projected water supply for Zone 3 in Lopez Reservoir, which is equal to the annual safe yield of the reservoir. In recent years, several Contract Agencies have identified near-term and future potential shortfalls in water supply. These agencies served by Zone 3 have other water supply sources, including State Water and local groundwater.

In 2008/2009, the Contract Agencies commenced on an evaluation study to consider raising the spillway elevation of Lopez Reservoir to increase the safe yield of the reservoir and thus increase water supply entitlements to the Contract Agencies.[19] This effort was funded by the Contract Agencies, and the initial phase of the study was completed in 2009. The project study considered raising the spillway of Lopez Dam between 3 and 5 feet. This would increase gross reservoir storage by at least 2,850 AF. The increase in annual safe yield was estimated to be between 671 and 1,371 AF, which would only materialize after a full reservoir level was achieved. An additional study completed in 2013 evaluated the potential to raise

[19] San Luis Obispo County, Dept of Public Works, January 2009.

the spillway by 2 to 12 feet. Findings from this study indicated that a 6-foot increase in spillway height would allow for an increased annual withdrawal of 565 AFY. These studies found no obvious technical flaws with the proposed project.

The costs for further study, as well as environmental studies and permitting, are expected to be extensive; therefore, efforts to consider raising the spillway are inactive at this time. The project also has the potential to delay or significantly impact the draft Habitat Conservation Plan for Lopez Reservoir.

Climate Change Effects

As discussed in Chapter 4, climate change projections forecast more extreme weather, including flooding and prolonged droughts. Surface storage capacity, as is provided by Lopez Reservoir, provides the greatest flexibility to water supply systems in the face of extreme weather, providing the ability to capture more winter runoff and control larger floods, as well as hold water in reserve storage for dry years and droughts.

Regulatory Conditions and Project Development

The District and the County are awaiting the decision of their appeal of the November 2024 District court order that would require a 36% increase to downstream releases, in addition to requiring two "pulse flows" to take place annually. The potential increase in volume of downstream releases could potentially impact the District's ability to deliver 100% of entitlements to Zone 3 Contract Agencies without exceeding the safe yield of Lopez Reservoir.

At this time, the District does not anticipate any additional regulatory or project-specific development that will affect characterization of future water supply availability.

Table 6-3. DWR 6-8W Actual Water Supplies

Submittal Table 6-8 Wholesale: Water Supplies — Actual Water Code Section 10631(b)				
Water Supply		2025		
Drop down list These are the only water supply categories that will be recognized by the WUEdata online submittal tool	Additional Description (as needed)	**Potable or Non-Potable** (after treatment if treated) (OPTIONAL) Drop Down list	Actual Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)
Surface water (not desalinated)	Arroyo Grande Creek and Watersheds (Lopez Reservoir)	Potable	43,269	8,730
		Subtotal Potable	43,269	8,730
		Subtotal Non-Potable	0	0
		Total	43,269	8,730
DWR NOTES: **Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3. **Total Entitlement**: e.g. Water Right, Groundwater Allocation, Contracted Amount.				
NOTES: Actual volume of Lopez Reservoir reported above was measured in March 2026.				

Table 6-4. DWR 6-9W Projected Water Supplies

Submittal Table 6-9 Wholesale: Water Supplies — Projected Water Code Section 10631 (b)						
Water Supply		**Projected Water Supply (Report to the Extent Practicable)**				
Drop down list May use each category multiple times.These are the only water supply categories that will be recognized by the WUEdata online submittal tool	Additional Detail on Water Supply	**2030** Reasonably Available Volume (AF)	**2035** Reasonably Available Volume (AF)	**2040** Reasonably Available Volume (AF)	**2045** Reasonably Available Volume (AF)	**2050 (opt)** Reasonably Available Volume (AF)
Add additional rows as needed						
Surface water (not desalinated)	Arroyo Grande Creek and Misc. Watersheds/Lopez Reservoir	8,730	8,730	8,730	8,730	8,730
	Subtotal Potable	8,730	8,730	8,730	8,730	8,730
	Subtotal Non-Potable	0	0	0	0	0
	Total	8,730	8,730	8,730	8,730	8,730
DWR NOTES: **Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in a Submittal Table 2-3.						

6.3 Energy Intensity

Water supplies from the Lopez Reservoir are treated at the LWTP before being delivered to the Zone 3 Contract Agencies. Conveyance from the Lopez Reservoir to the LWTP flows by gravity through the 16-mile transmission pipeline. The LWTP is a 6-MGD water treatment facility that was upgraded in 2007 from a gravity multimedia filtration system to a low-pressure membrane filtration process. The membrane filtration process requires a considerably greater amount of energy than does the preexisting gravity multimedia filtration process. Figure 6-1 shows the process flow diagram for the LWTP. Table 6-5 provides a breakdown of electricity use using the water supply process approach.

Table 6-5. DWR O-1A Energy Intensity – Water Supply Process Approach

Submittal Table O-1A - Water Supply Process Approach Energy Intensity						
Reporting Period: 06/2024 – 05/2025	Water Management Process				Non-Consequential Hydropower (if applicable)	
Lopez Water Treatment Plant	**Conveyance**	**Treatment**	**Distribution**	**Total Utility**	**Hydropower**	**Net Utility**
Volume of Water Entering Process (AF)	4,530	4,530	4,530	4,530	0	4,530
Energy Consumed (kWh)	0	1,453,696	0	1,453,696	0	1,453,696
Energy Intensity (kWh/AF)	0	321	0	321	0	321

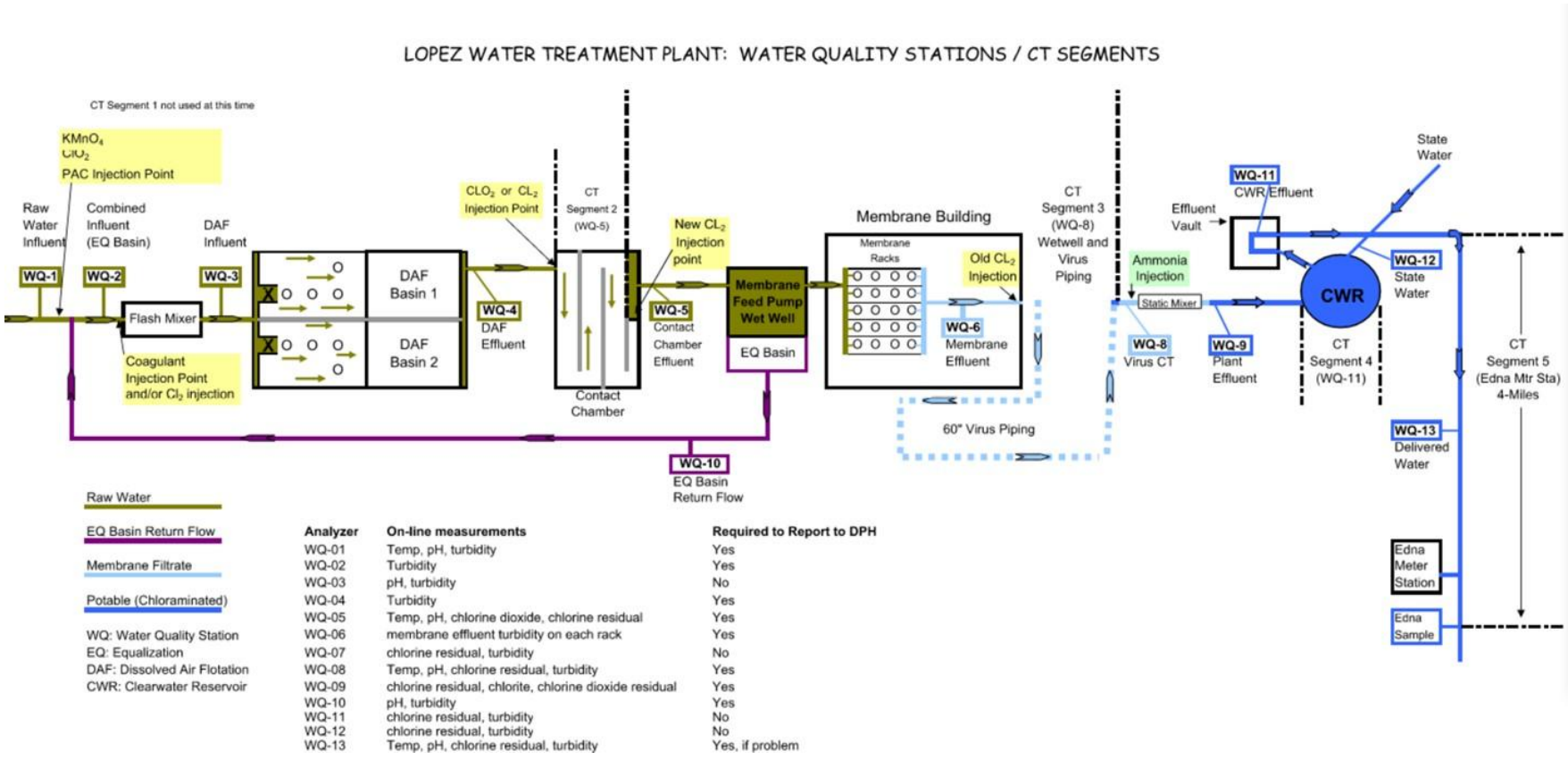
LWTP currently receives energy from Pacific Gas and Electric Company (PG&E) under PG&E's E19S rate schedule. The rate schedule is a time-of-use schedule that is dependent on the time of year and time of day of energy usage. In 2008, the District completed a Solar Energy Evaluation because of the availability of $2 million in stimulus grants for solar energy implementation in the County. The solar energy evaluation for LWTP indicated that under normal operations, the plant required more than 1.5 million kilowatt-hours (kWh) of electricity, costing the District over $200,000. The evaluation found that implementing solar energy was not feasible unless there was available funding to complete the purchase and installation of a solar energy power generation plant or if the District was able to acquire stimulus grant funds to reduce costs of the power purchase agreement energy rates. The District installed a battery storage system in 2023 that is used to reduce peak usage at the LWTP. The battery storage system is able to provide 7 to 14 hours of backup power in the event of an outage, and will provide energy savings of approximately $655,000 after 10 years

and $1,415,000 after 20 years.[20] A summary of LWTP energy costs from June 2024 to May 2025 calendar year is provided in Table 6-6.

Table 6-6. LWTP June 2024-May 2025 Energy Usage and Costs

LWTP Flow	Energy Usage (kWh)	Energy Cost
Average Daily	4,038	$902
Peak Daily	4,647	$1,302
Average Monthly	121,141	$27,067
Peak Monthly	139,398	$39,066
TOTAL YEAR	**1,453,696**	**$324,801**

[20] San Luis Obispo County Public Works, May 19, 2023



Analyzer	On-line measurements	Required to Report to DPH
WQ-01	Temp, pH, turbidity	Yes
WQ-02	Turbidity	Yes
WQ-03	pH, turbidity	No
WQ-04	Turbidity	Yes
WQ-05	Temp, pH, chlorine dioxide, chlorine residual	Yes
WQ-06	membrane effluent turbidity on each rack	Yes
WQ-07	chlorine residual, turbidity	No
WQ-08	Temp, pH, chlorine residual, turbidity	Yes
WQ-09	chlorine residual, chlorite, chlorine dioxide residual	Yes
WQ-10	pH, turbidity	Yes
WQ-11	chlorine residual, turbidity	No
WQ-12	chlorine residual, turbidity	No
WQ-13	Temp, pH, chlorine residual, turbidity	Yes, if problem

Figure 6-1. Lopez Water Treatment Plant Process Flow Diagram

Chapter 7: Water Service Reliability and Drought Risk Assessment

This chapter describes the long-term reliability of the Zone 3 water supply. Shorter-term reliability planning that may require immediate action, such as responding to drought or a catastrophic supply interruption, is addressed in the WSCP (**Chapter 8**).

The water service reliability and risk assessment synthesizes the details embedded in the other sections of the District's UWMP and provides a rationale for future decision making related to supply management, demand management, and project development.

7.1 Water Service Reliability Assessment

The District has completed an assessment of water service reliability for the Lopez Reservoir. The service reliability assessment considered hydrological variability, regulatory variability, climate conditions, and other factors that have the potential to affect the District's ability to supply entitlements to the Contract Agencies.

7.1.1 Constraints on Water Sources

Water supply to the Lopez Reservoir is provided by runoff from the Arroyo Grande Creek and several other creek watershed areas. The amount of runoff to Lopez Reservoir is directly impacted by cyclic and variable rainfall and rainfall intensities, droughts and other weather-related variables, and thus the Zone 3 water supply will always see occasional constraints on its water supply, even with the best management of this water resource.

The annual safe yield of the Reservoir is 4,200 AFY greater than the entitlements held by Contract Agencies (4,530 AFY). This 4,200 AFY is earmarked to provide Arroyo Grande Creek releases for stream flow/environmental purposes as well as groundwater recharge and water supply to downstream agricultural users. The water supply demand within Zone 3 is equivalent to the entitlements held by the Contract Agencies (4,530 AFY). These entitlements will remain constant at 4,530 AFY through the year 2050 and likely beyond, unless there are changes to future water supply conditions that require the District to reduce entitlements to the Contract Agencies or allow the District to accommodate increasing entitlements to the Contract Agencies. Historically, the District has been able to deliver full entitlements to the Zone 3 Contract Agencies except during the longest drought years on record (2015/2016), when the District was operating Zone 3 in accordance with certain policies and procedures set forth in the LRRP. In 2015, entitlements were reduced by 10% in response to the ongoing drought conditions and declining reservoir levels. Because of the continued decline through 2016 in Lopez Reservoir storage, the District considered reducing

entitlements by 20% but never implemented this 20% reduction given rising storage levels in the Reservoir at the beginning of 2017. Reduced deliveries remained in effect until April 2017 when the County's declared drought emergency proclamation was rescinded and the provisions of the LRRP were no longer in effect.

At the end of 2020, the Lopez Reservoir dropped below 20,000 acre-feet (AF), which is one of the two required triggers in the LRRP. Water storage in Lopez Reservoir continued to decline until January 2023, reaching a historical low level of 10,840 AF in December 2022. In 2020, the Contract Agencies chose to voluntarily reduce their entitlements pursuant to the LRRP ahead of a statewide drought declaration. In August 2021, the District BOS adopted a resolution to operate Zone 3 in accordance with certain policies and procedures set forth in the LRRP.

In years when surplus water is available from the Lopez Reservoir, the actual demand may be higher to reflect purchases from the surplus account, as Contract Agencies can request surplus to meet demands beyond their entitlement for that year.

Planned Actions & Water Management Strategies

In October 2025, the District prepared a draft Habitat Conservation Plan (HCP) for the Lopez Dam project for the purpose of complying with the Endangered Species Act (ESA) and providing incidental take authorization for steelhead trout, red-legged frog, and pond turtle for covered actions in Arroyo Grande Creek. The draft was submitted to resource agencies for review and comment. It is presently under review. The District intends to work with the resource agencies to complete the permitting process as soon as practicable. The HCP is intended to provide a plan for the operation of the Lopez Reservoir that fulfills the contractual water supply obligations to the Zone 3 Contract Agencies, provides releases for downstream agricultural users, and creates habitat enhancement for steelhead trout, red-legged frogs, and other environmentally sensitive biota in the lower Arroyo Grande Creek.

In addition, the District is actively working with the State Water Resources Control Board (SWRCB) to update and align its water rights permit with current operations. This coordinated approach ensures the District's water rights documentation remains consistent with how the system is operated and managed.

In February 2007, District prepared an Interim Downstream Release Schedule (IDRS) optimizes storage and stream/reservoir management to meet the needs of municipal, agricultural, and environmental demands in the interim. The IDRS was followed by the development of the 2014 LRRP, as more specifically described in the Footnotes of the Executive Summary. The purpose of the 2014 LRRP is to limit both municipal diversions and downstream releases to preserve or extend water supplies in the Reservoir above the

minimum pool for three to four years under continuing drought conditions, and neither the IDRS nor any provisions of the LRRP are intended to increase municipal supplies beyond current contractual entitlements. The components of the 2014 LRRP are described in the WSCP (**Chapter 8**) and included as **Appendix D**.

Water Quality

The District does not anticipate that water quality will affect water management strategies and/or supply reliability except when the Lopez Reservoir reaches very low storage levels. One of the District's goals is to ensure the safety of the public by meeting current and forthcoming drinking-water regulations established by the State of California. The Zone 3 LWTP produces potable water that meets current water quality standards. The following water quality reports have been conducted:

- In March 2003, the State Water Board Division of Drinking Water (DDW) assessed the Lopez Project's raw-water sources and prepared a Drinking Water Source Assessment of the Lopez Reservoir. The study concluded that there have been no contaminants detected in the water supply; however, the source was still considered vulnerable to activities located near the drinking-water source.
- The SWRCB requires a Sanitary Survey Report to be completed for the Lopez Project every five years. These Sanitary Survey Reports identify existing and potential future sources of water contamination, provide baseline water quality and watershed conditions, and provide recommended management practices to protect the water quality of the Lopez Reservoir. The latest study was released in March 2021 and concluded that the water system is designed, constructed, operated, and managed well and that all sources, storage, tanks, booster stations, and distribution systems meet state requirements.[21] The water quality monitoring results indicate that the treated water meets all applicable guidelines for maximum contaminant levels (MCLs).

In 2015, the County issued Waterline Disinfection Procedures, which outline the minimum requirements to be followed by laboratory personnel, water operators, inspectors, and contractors for the disinfection and testing of new and repaired potable-water mains, including fire hydrants. These procedures are based on the American Water Works Association (AWWA) Standards for Disinfecting Water Mains (C651).

[21] County of San Luis Obispo, March 2021

7.1.2 Year Type Characterization

During a normal water year, the Lopez Reservoir is reliably able to deliver contract entitlements totaling 4,530 AFY and release up to a maximum of 4,200 AFY for downstream needs, the total (8,730 AFY) of which equals the safe yield of the Reservoir. Historically, the District has been consistently able to deliver full entitlements to the Zone 3 Contract Agencies since the Reservoir has been in operation. The District has reduced water entitlements by 10% during the drought periods in 2015/2016 and 2021/2023. During the drought period beginning in 2021, the Contract Agencies voluntarily reduced their water deliveries by 10%, ahead of a statewide drought declaration.

If the District is implementing the reductions in the LRRP, the amount of water available varies depending on the total amount of water stored in the reservoir. When reservoir storage is above 15,000 AF, 100% of the Contract Agencies' entitlements are available for delivery. If the LRRP is in effect and the storage in the Lopez Reservoir drops below 15,000 AF, entitlements decrease by 10%; entitlements decrease by 20% when storage in the reservoir reaches 10,000 AF. At the end of December 2020, the Lopez Reservoir dropped below the 20,000 AF level and continued to decline until January 2023, reaching a low level of 10,840 AF in December 2022. Reservoir storage began to increase beginning in January 2023, and the reservoir returned to maximum capacity by March 2023.

Section 8.3 contains tables that provide the percent reduction in entitlements (municipal diversions) and downstream releases that would occur if the reductions in the LRRP were in effect.

Types of Years

The demand within Zone 3 is equivalent to the entitlements held by the Contract Agencies. The municipal entitlements to the Lopez Reservoir will remain constant at 4,530 AFY through the year 2050, unless there are changes to future water supply conditions that limit the District's ability to provide entitlements to the Contract Agencies. Table 7-1 provides the basis for a water year data reliability assessment by showing a normal water year, a single dry water year, and multiple dry water years and how such dry years may impact water deliveries.

Table 7-1. DWR 7-1W Basis for Water Year Data (Reliability Assessment)

OPTIONAL Submittal Table 7-1 Wholesale: Basis of Water Year Data (Reliability Assessment)			
Year Type	**Base Year** If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2024-2025, use 2025	**Available Supplies if Year Type Repeats**	
		☐ Check the box if quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. **Location:** [insert location from UWMP]	
		Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available (AF)	**% of Average Supply**
Average Year	2007	8,730	100%
Single-Dry Year	2016	7,877	90%
Consecutive Dry Years 1st Year	2012	8,730	100%
Consecutive Dry Years 2nd Year	2013	8,730	100%
Consecutive Dry Years 3rd Year	2014	8,730	100%
Consecutive Dry Years 4th Year	2015	7,877	90%
Consecutive Dry Years 5th Year	2016	7,877	90%

DWR NOTES: Supplier may use multiple versions of Submittal Table 7-1 W if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If a Supplier uses multiple versions of Submittal Table 7-1 W, in the "Note" section of each submittal table, state that multiple versions of Submittal Table 7-1 W are being used and identify the particular water source that is being reported in each submittal table.
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table reports the unit of measure selected in Submittal Table 2-3.

A normal year represents the average water supply available to the supplier. Based on historic data (1969-2025), the average storage in the Lopez Reservoir is 36,900 AF. Based on the calculated average water supply, 2007 was a representative normal year for Zone 3.

The “single dry year” is the year that represents the lowest water supply available to the supplier. At the end of calendar year 2022, the Lopez Reservoir reached a historic low of 10,840 AF. The single dry year demand (deliveries to Contract Agencies) was reduced by 10% compared to a normal year’s demand.

The five consecutive-year drought is defined as the driest five-year historical sequence for the supplier (CWC Section 10612). To complete the water supply reliability assessment, the District used the five-consecutive-year dry period based on the lowest average water supply available in the Lopez Reservoir.

Sources for Water Data

The District maintains a rain gauge station at the Lopez Dam. Figure 7-1 illustrates Lopez Reservoir annual rainfall data from 1968 through 2024. Zone 3 also collects daily reservoir level data. Figure 7-2 illustrates the Lopez Reservoir storage from 1968 through 2024.

Figure 7-1. Lopez Dam Rainfall Data, 1968-2024

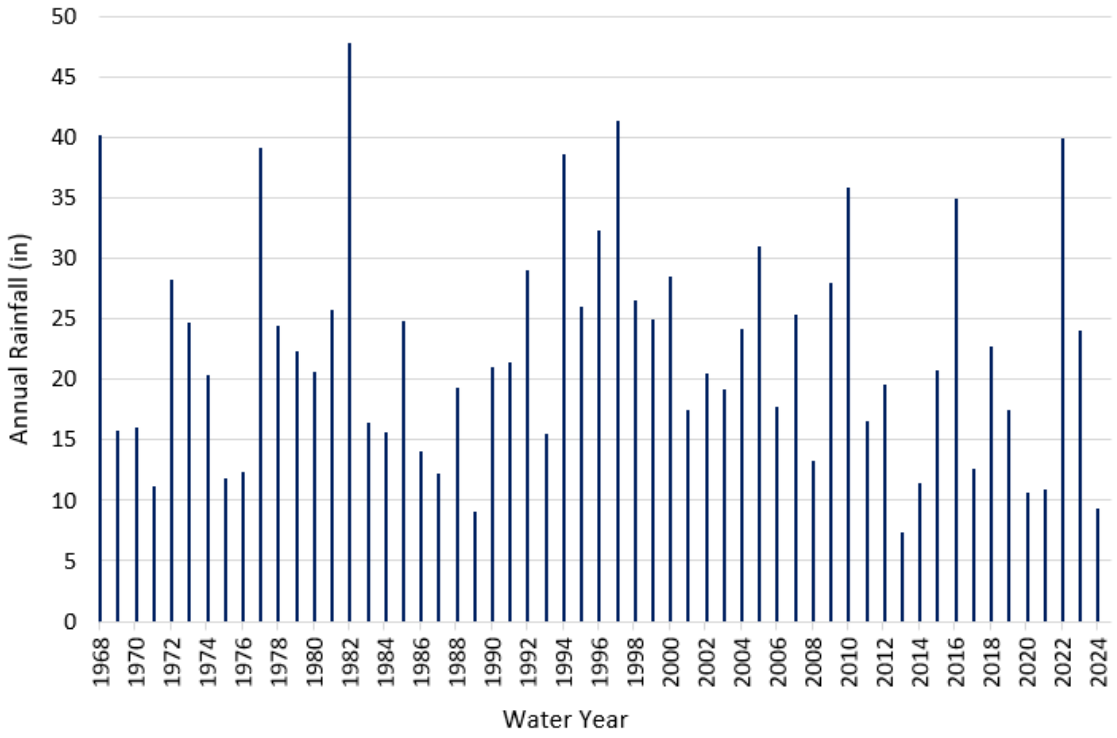
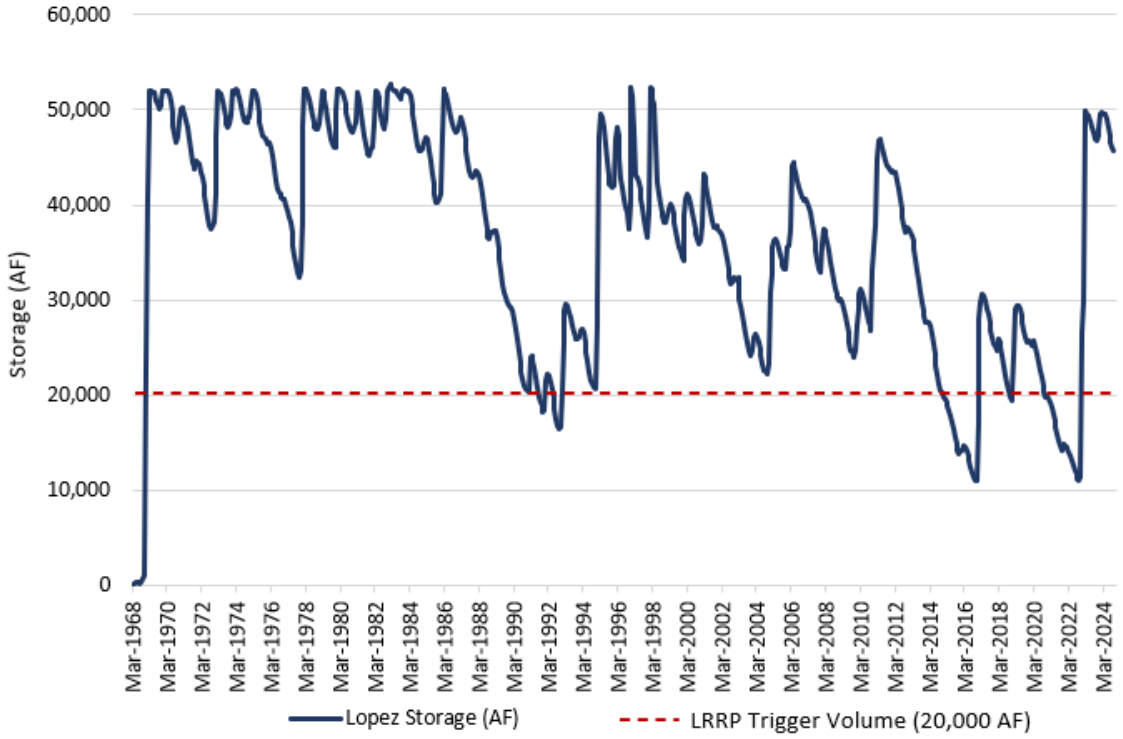


Figure 7-2. Lopez Reservoir Storage Data, 1968-2024.



7.1.3 Water Service Reliability

Water Service Reliability – Normal Year

Table 7-2 shows the normal-year supply-and-demand comparison; as stated, Zone 3 supply and demand are projected to match the safe yield, which is a combination of Contract Agencies' entitlements and that required for downstream releases.

Table 7-2. DWR 7-2W Normal Year Supply and Demand Comparison

	2030	2035	2040	2045	2050
Supply Totals	8,730	8,730	8,730	8,730	8,730
Demand Totals	8,730	8,730	8,730	8,730	8,730
Difference	0	0	0	0	0

Water Service Reliability – Single Dry Year

The single dry year supply and demand in comparison to a normal-year's supply and demand includes a 10% reduction in deliveries to the Contract Agencies and a 9.5% reduction in downstream releases. A single dry year supply and demand comparison is provided in Table 7-3.

Table 7-3. DWR 7-3W Single Dry Year Supply and Demand Comparison

	2030	2035	2040	2045	2050
Supply Totals	7,877	7,877	7,877	7,877	7,877
Demand Totals	7,877	7,877	7,877	7,877	7,877
Difference	0	0	0	0	0

Water Service Reliability – Five Consecutive Dry Years

Table 7-4 compares multiple dry years with demands. Based on historical records, the only limiting factor to the Contract Agencies' water supply is based on contracted amounts, which are tied to the safe yield of the Lopez Reservoir. As shown in Table 7-4, conditions arising from a 5-year drought do impact water entitlements as planned for within the LRRP and the WSCP. The WSCP is provided in **Chapter 8**.

Table 7-4. Multiple Dry Years Supply and Demand Comparison

		2030	2035	2040	2045	2050
First Year	Supply Totals	8,730	8,730	8,730	8,730	8,730
	Demand Totals	8,730	8,730	8,730	8,730	8,730
	Difference	0	0	0	0	0
Second Year	Supply Totals	8,730	8,730	8,730	8,730	8,730
	Demand Totals	8,730	8,730	8,730	8,730	8,730
	Difference	0	0	0	0	0
Third Year	Supply Totals	8,730	8,730	8,730	8,730	8,730
	Demand Totals	8,730	8,730	8,730	8,730	8,730
	Difference	0	0	0	0	0
Fourth Year	Supply Totals	7,877	7,877	7,877	7,877	7,877
	Demand Totals	7,877	7,877	7,877	7,877	7,877
	Difference	0	0	0	0	0
Five Year	Supply Totals	7,877	7,877	7,877	7,877	7,877
	Demand Totals	7,877	7,877	7,877	7,877	7,877
	Difference	0	0	0	0	0

7.1.4 Descriptions of Management Tools and Options

As stated, the District cannot project demand for the individual Contract Agencies, although the purpose of Zone 3 is to provide an important source of water to the Contract Agencies. The Contract Agencies rely on multiple sources of water and assess demand through their own models. The District continues to increase implementation of its Demand Management Measures (DMMs) and its conservation policies, which encourage the exploration of

recycled water, enhanced groundwater management, and improvements to regional management and coordination to maximize the beneficial use of local water resources. The District has also implemented provisions in the 2014 LRRP during water supply shortages caused by prolonged drought conditions to ensure that the Lopez Reservoir continues to be a viable water supply source for the Contract Agencies.

7.2 Drought Risk Assessment

CWC Section 10635(b) requires every urban water supplier to include, as part of its UWMP, a Drought Risk Assessment (DRA) for its water service area to incorporate in the development of the DMMs and water supply projects and programs. The DRA allows suppliers to consider how to manage their water supplies under stressed hydrologic conditions in relation to variations in demand, and it supports the evaluation of the supplier's WSCP.

7.2.1 Data, Methods, and Basis for Water Shortage Conditions

The District collects daily data to trend historic rainfall, evaporation, inflow and total outflow, deliveries to the Terminal Reservoir, downstream releases, and Lopez Reservoir storage. These data are available from 1968 through 2025.

The District utilizes the Lopez Reservoir database to track trending rises and falls in Lopez storage volume to help Zone 3 and the Contract Agencies predetermine potential drought periods. Measured data includes:

- Lake elevation
- Lopez Reservoir capacity
- Total discharge (downstream, pipeline, spillway, other)
- Evaporation
- Precipitation
- Daily outflow
- Stream inflow

The DRA is based on the driest five-year historic sequence experienced by Zone 3, as required by CWC Section 10612. CWC Section 10635 requires that the analysis consider plausible changes on projected supplies and demands caused by climate change, anticipated regulatory changes, and other locally applicable criteria.

For Zone 3, years 2012-2016 represent the driest five consecutive years on record for the Lopez Reservoir. The District used this five-year historic sequence to complete its DRA. During this drought period, the District reduced Lopez water deliveries by 10%, in accordance with the LRRP staged reduction limits. The Lopez Reservoir storage volume

reached a historic low of 10,830 AF at the end of 2022. The historic low was a result of the dry period from 2012 to 2016 being followed by cycles of limited rainfall and dry years, which caused reservoir storage to oscillate between 11,000 AF and 30,000 AF for 4 years.

7.2.2 DRA Water Source Reliability

Table 7-5 provides a comparison of Zone 3's total water supply and water use. The District is under contractual obligation to supply 4,530 AFY of water to its Contract Agencies and provide downstream release of up to 4,200 AFY for agricultural and environmental demands. As stipulated in Article 4 of the Contract between the District and its Contract Agencies[18], entitlements may be reduced during droughts or under other shortage conditions. The District has a comprehensive action plan to reduce entitlements based on Lopez Reservoir storage levels as part of the LRRP. Should such shortages occur, and the District reduces contract entitlements and downstream releases in accordance with the LRRP, it is the responsibility of the Contract Agency to reduce demand and/or secure alternative water sources accordingly.

7.2.3 Total Water Supply and Use Comparison

Demand projections for Zone 3 Contract Agencies are assumed to be equal to the contract entitlements. Contract Agency entitlements along with downstream releases are equal to the safe yield of Lopez Reservoir. The District will not consider operating under the 2014 LRRP unless the total volume of water in the Lopez Reservoir drops below 20,000 AF and the District BOS declares a drought emergency related to Zone 3 and takes formal action by resolution outlining those specific procedures set forth in the LRRP that will be implemented.

The District cannot project demands for the individual Contract Agencies, as the purpose of Zone 3 is to provide an important source of water to its Contract Agencies. The District will continue to provide support to their retail Contract Agencies with their planning and projections.

Table 7-5. Five-Year Drought Risk Assessment Tables (per Water Code §10635(b))

2026 (YEAR 1)	Gross Water Use	8,730
	Total Supplies	8,730
	Surplus/Shortfall without WSCP Action	0
	Planned WSCP Actions (Use Reduction and Supply Augmentation)	
	WSCP (Supply Augmentation Benefit)	0
	WSCP (Use Reduction Savings Benefit)	0
	Revised Surplus/Shortfall	0
	Resulting Percent Use Reduction from WSCP Action	0%
2027 (YEAR 2)	Gross Water Use	8,730
	Total Supplies	8,730
	Surplus/Shortfall without WSCP Action	0
	Planned WSCP Actions (Use Reduction and Supply Augmentation)	
	WSCP (Supply Augmentation Benefit)	
	WSCP (Use Reduction Savings Benefit)	
	Revised Surplus/Shortfall	0
	Resulting Percent Use Reduction from WSCP Action	0%
2028 (YEAR 3)	Gross Water Use	8,730
	Total Supplies	8,730
	Surplus/Shortfall without WSCP Action	0
	Planned WSCP Actions (Use Reduction and Supply Augmentation)	
	WSCP (Supply Augmentation Benefit)	
	WSCP (Use Reduction Savings Benefit)	
	Revised Surplus/Shortfall	0
	Resulting Percent Use Reduction from WSCP Action	0%
2029 (YEAR 4)	Gross Water Use	8,730
	Total Supplies	7,877
	Surplus/Shortfall without WSCP Action	-853
	Planned WSCP Actions (Use Reduction and Supply Augmentation)	
	WSCP (Supply Augmentation Benefit)	
	WSCP (Use Reduction Savings Benefit)	853
	Revised Surplus/Shortfall	0
	Resulting Percent Use Reduction from WSCP Action	10%
2030 (YEAR 5)	Gross Water Use	8,730
	Total Supplies	7,877
	Surplus/Shortfall without WSCP Action	-853
	Planned WSCP Actions (Use Reduction and Supply Augmentation)	
	WSCP (Supply Augmentation Benefit)	
	WSCP (Use Reduction Savings Benefit)	853
	Revised Surplus/Shortfall	0
	Resulting Percent Use Reduction from WSCP Action	10%

Chapter 8: Water Shortage Contingency Plan

This chapter provides a summary of the San Luis Obispo County Flood Control and Water Conservation District (District) Water Shortage Contingency Plan (WSCP), including shortage stages and shortage response actions.

California Water Code (CWC) Section 10632 requires that every urban water supplier that serves more than 3,000 acre-feet per year or has more than 3,000 connections prepare and adopt a stand-alone WSCP as part of its Urban Water Management Plan (UWMP). This WSCP is a proposed plan for a range of water shortage situations, including supply shortages of greater than 50%. The WSCP will be updated based on new requirements every five years and will be adopted as a current update for submission to the California Department of Water Resources (DWR).

The WSCP is a proposed strategic plan that has been developed by the District for Zone 3 to prepare for and respond to water shortages. A water shortage is when the available water supply is insufficient to meet the normally expected customer water use (demand) at a given point in time, which may occur for several reasons, such as water supply quality changes, climate change, drought, and catastrophic events (e.g., earthquake). The WSCP provides an updated water supply availability assessment and structured steps that the District can employ to respond to actual conditions that include elements of the 2014 Low Reservoir Response Plan (LRRP). This level of detailed planning and preparation will help maintain reliable supplies and reduce the impacts of supply interruptions.

The District's WSCP is organized into the following main sections to align with the CWC Section 16032 requirements:

Water Supply Reliability Analysis

Summarizes the Zone 3 water supply reliability analysis and identifies key issues that may trigger a shortage condition.

Annual Water Supply and Demand Assessment Procedures

Describes the key data inputs, evaluation criteria, and methodology for assessing the system's reliability for the coming year and the steps to formally declare water shortage levels and response actions.

Standard Shortage Stages

Establishes water shortage levels to clearly identify and trigger shortage response actions.

Shortage Response Actions

Describes the response actions that may be implemented or considered for each stage to reduce gaps between supply and demand as well as to minimize social and economic impacts on the community.

Communication Protocols

Describes communication protocols at each stage to ensure that customers, the public, and government agencies are informed of shortage conditions and requirements.

Compliance and Enforcement

This section is not applicable to wholesalers such as the District.

Legal Authority

Lists the legal ordinance that grants the District the authority to declare a water shortage and implement and enforce response actions.

Financial Consequences of WSCP Implementation

Describes the anticipated financial impact of implementing water shortage stage measures and identifies mitigation strategies to offset financial burdens.

Monitoring and Reporting

This section is not applicable to wholesalers such as the District.

WSCP Refinement Procedures

Describes the factors that may trigger updates to the WSCP and outlines how to complete an update.

Special Water Feature Distinctions

This section is not applicable to wholesalers such as the District.

Plan Adoption, Submittal, and Availability

Describes the process for the adoption, submittal, and availability of the WSCP after each revision.

For the WSCP sections identified above that are not required to be completed by wholesale water suppliers, the District will continue to provide support to its Contracting Retail Water Agencies (Contract Agencies) in complying with these sections in their WSCP documents.

8.1 Water Supply Reliability Analysis

This section was completed pursuant to CWC Section 10632(a)(1) and describes the key findings from the water supply reliability analysis discussed in **Chapter 7** and conducted pursuant to CWC Section 10635.

The District is under contractual obligation to supply 4,530 acre-feet per year (AFY) of water to its Contract Agencies subject to certain conditions under which such supply may be reduced, including, without limitation, temporary or short-term limitations based on drought conditions. Zone 3 Contract Agencies include the Cities of Arroyo Grande, Pismo Beach, and Grover Beach, and the communities of Oceano (Oceano Community Services District [CSD]) and Avila Beach (County Service Area [CSA] 12). CSA 12 subcontracts Zone 3 water to the Avila Beach CSD, the Port San Luis Harbor District, and the Avila Valley Mutual Water Company (MWC), as well as residential property owners located in the Avila Beach region.

As indicated above, the Contract between the District and its Contract Agencies permits reduced entitlements during droughts and other shortage conditions. More specifically, Article 4(B) authorizes the District to reduce entitlements following written notice.[22] Should such shortages occur, it is the responsibility of the Contract Agencies to reduce demand and/or secure alternative sources accordingly.

The District adopted an Interim Downstream Release Schedule (IDRS) in 2007 and plans to optimize storage and stream/reservoir management to meet the needs of municipal, agricultural, and environmental demands prior to the approval of the Project's Habitat Conservation Plan (HCP). This plan included a conceptual-level LRRP which consists of a methodology to assess near-term reservoir levels and a set of example actions that could be taken to mitigate the impacts of low reservoir levels. In 2014, Contract Agencies and District staff developed the stand-alone LRRP, building upon the conceptual LRRP from the 2007 IDRS. The District could choose to implement the 2014 LRRP if the Lopez Reservoir storage volume dropped below 20,000 AF and the District Board of Supervisors (BOS) declared an emergency related to Zone 3. Although the District never formally adopted the 2014 LRRP, the District has implemented a number of its policies in the past. Most recently, on August 24, 2021, the District BOS approved Resolution No. 2021-183 adopting certain policies and procedures set forth in the LRRP in response to the recent drought to ensure that the Lopez Reservoir continued to be a viable water supply for the Contract Agencies.

Although the District cannot project demand for the individual Contract Agencies, the purpose of Zone 3 is to provide an important source of water to agencies. The Contract Agencies rely on multiple sources of water and assess demand through the development of

[22] San Luis Obispo County, September 19, 2000.

their own projection models. The District will provide support to its Zone 3 Contract Agencies while continuing to implement its Demand Management Measures and its conservation policies, which encourage the exploration of recycled water, enhanced groundwater management, and improvements to regional management and coordination to maximize the use of local water resources.

8.2 Annual Water Supply and Demand Assessment

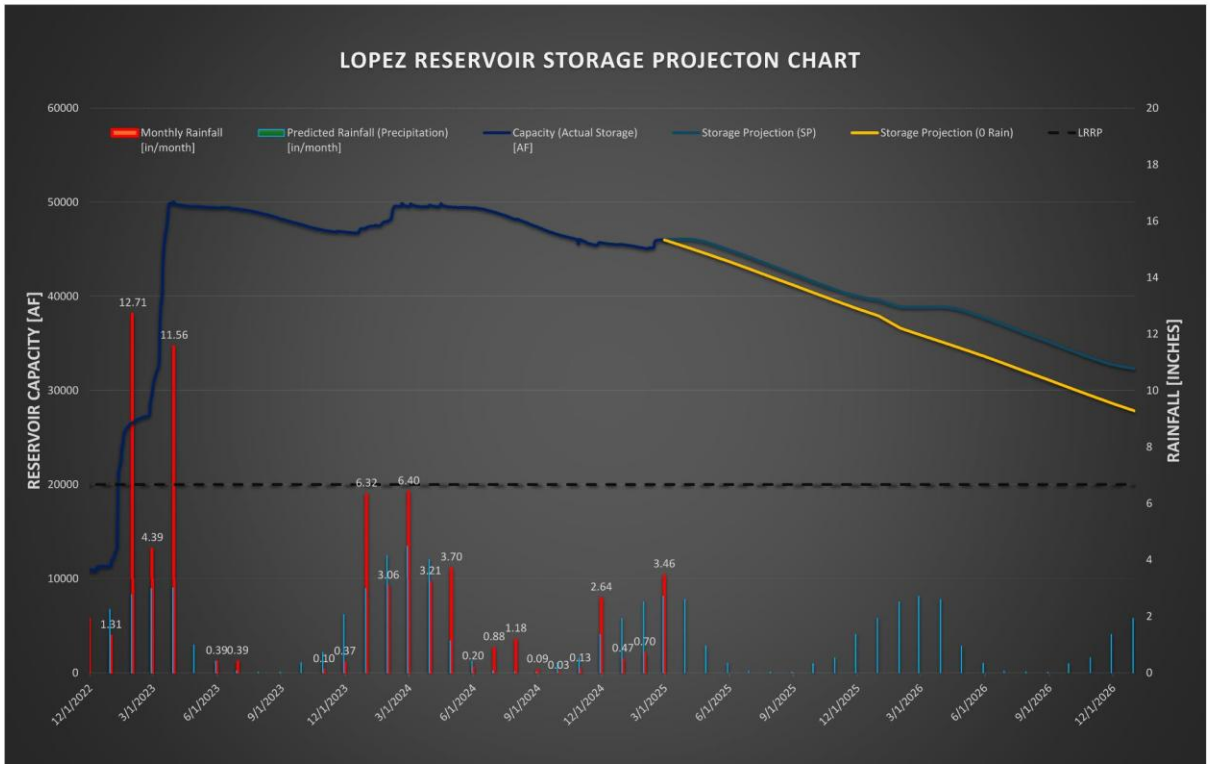
As a wholesale supplier, the District's Zone 3 water supply equals the demand of the Contract Agencies. The purpose of the LRRP is to limit downstream releases and municipal diversion from the Lopez Reservoir to extend supplies for three to four years under continuing drought conditions. The WSCP is a proposed plan to provide an initial set of prescribed actions that incorporate the adaptive management framework described in the 2014 LRRP and that the District could implement during a water shortage. The adaptive management approach allows for modifications to the prescribed actions if needed for Zone 3 to achieve their three- to four-year targets discussed in the LRRP.[23]

The District trends monthly storage levels within Lopez Reservoir and reviews them at the Zone 3 Technical Advisory Committee (TAC) meetings. The District may consider implementing the WSCP if the total volume of water in the Lopez Reservoir falls below 20,000 AF and the District BOS has declared a water emergency related to Zone 3 and takes formal action by resolution outlining those specific procedures set forth in the LRRP that will be implemented. Additional details regarding the level triggers are included in the LRRP (**Appendix D**).

The Zone 3 TAC meets monthly to review general operations and water supply management items related to the Lopez Reservoir. During these monthly meetings, the TAC reviews the Zone 3 Monthly Operations Report and Lopez storage projections for that month. The Lopez storage projection tool, provided in Figure 8-1, is based on predicted rainfall, inflow based on predicted rainfall, the current downstream release requests, and municipal usage. The District utilizes these tools to assess current Lopez Reservoir storage levels and predict the short-term water supply availability to assist the Zone 3 Contract Agencies in anticipating drought conditions. The District plans to report on the implementation of the WSCP as part of its annual assessment to the DWR.

[23] Resolution No. 2014-377 granted the County Director of Public Works the exclusive authority to make adjustments to entitlement and surplus water deliveries described in the initial prescribed actions in accordance with the adaptive management provisions of the LRRP in coordination with the Zone 3 Technical Advisory Committee and the Zone 3 Advisory Committee (i.e. neither Committee has decision-making authority notwithstanding the language in the 2014 LRRP).

Figure 8-1. Zone 3 Lopez Reservoir Storage Projection



1. Storage projection is based on predicted rainfall from longrangeweather.com, inflow based on predicted rainfall, 25-26 downstream release requests, and municipal usage.
2. Municipal Usage is based on Jan 2015- Dec 2024 average monthly deliveries.
3. Predicted inflow is based off of historical precipitation and storage data. Antecedent moisture conditions are factored into the model. The first rainstorms after months without rain will cause less inflow than rainstorms during the rainy season. If average daily rainfall is below 1 inch, the model will multiply the predicted inflow by 0.1, if the average is above 1 inch, the inflow is multiplied by 1.25.

8.3 Six Standard Water Shortage Levels

CWC Section 10632(a)(3)(B) authorizes suppliers to continue using their existing water shortage levels that may have been included in past WSCPs. The District has elected to include the existing water supply shortage action levels defined in the 2014 LRRP as the basis for their WSCP shortage levels.

The water supply shortage reduction response strategies are defined in Table 8-1 and Table 8-2. These include the prescribed municipal diversion (deliveries to the Zone 3 Contract Agencies) reductions and the downstream release reductions.

Table 8-3 and Table 8-4 provide a crosswalk that translates the LRRP water storage strategies to the WSCP water shortage levels mandated by the statute.

To provide the District, Zone 3 Contract Agencies, and agricultural stakeholders with the flexibility to adapt to changing drought conditions and to address environmental requirements, the WSCP includes an adaptive management component that allows the initial prescribed actions to be modified based on specific drought conditions that are consistent with the adaptive management strategy defined in the 2014 LRRP. However, consistent with the action taken by the District BOS in 2014, it is anticipated that any such modifications would be undertaken by the District in coordination with the Zone 3 Contract Agencies rather than by the advisory committees directly.

Table 8-1. Prescribed Municipal Diversion Reduction Strategy

Amount of Water in Storage (AF)	Municipal Diversion Reduction (%)	Municipal Diversion (AFY)
20,000	0%	4,530
15,000	10%	4,077
10,000	20%	3,624
5,000	35%	2,941
4,000	100%	0

Table 8-2. Initial Prescribed Downstream Release Reduction Strategy

Amount of Water in Storage (AF)	Downstream Release Reduction (%)	Downstream Releases[1] (AFY)
20,000	9.5%	3,800
15,000	9.5%	3,800
10,000	75.6%	1,026
5,000	92.9%	300
4,000	100%	0

[1] Downstream releases represent the maximum amount of water that can be released. The actual releases may be less if releases can be reduced while still meeting the needs of the agricultural stakeholders and environmental requirements.

Table 8-3. Relationship between Zone 3 Low Reservoir Response Plan (LRRP) Municipal Diversion Reductions and 2025 WSCP Mandated Shortage Levels

WSCP Shortage Level	Percent Shortage Range (%)	LRRP Shortage Level	LRRP Water Shortage Amount (AF)	Municipal Diversion Reductions
1	Up to 10%	1	20,000	0% Reduced Diversion
		2	15,000	10% Reduced Diversion
2	Up to 20%	3	10,000	20% Reduced Diversion
3	Up to 30%			
4	Up to 40%	4	5,000	35% Reduced Diversion
5	Up to 50%	5	4,000	100% Reduced Diversion
6	> 50%			

Table 8-4. Relationship between Zone 3 LRRP Downstream Release Reductions and 2025 WSCP Mandated Shortage Levels

WSCP Shortage Level	Percent Shortage Range (%)	LRRP Shortage Level	LRRP Water Shortage Amount (AF)	Downstream Release Reductions
1	Up to 10%	1	20,000	9.5% Reduced Releases
		2	15,000	9.5% Reduced Releases
2	Up to 20%	N/A	-	-
3	Up to 30%			
4	Up to 40%			
5	Up to 50%			
6	> 50%	3	10,000	75.6% Reduced Releases
		4	5,000	92.9% Reduced Releases
		5	4,000	100% Reduced Releases

8.4 Shortage Response Actions

The District may consider implementing the WSCP provisions if the total volume of water in the Lopez Reservoir falls below 20,000 AF, the BOS declares an emergency related to Zone 3, and the BOS takes formal action by resolution outlining those specific procedures set forth in the LRRP that will be implemented. The initial prescribed actions, once the District takes action to implement the WSCP, are as follows:

- Mandatory reductions in Contract Agency entitlements as set forth in Table 8-1.

- Reductions in downstream releases as set forth in Table 8-2 with actual releases timed to best meet the needs of agricultural stakeholders and to address environmental requirements.
- No new allocations of surplus water from unreleased downstream releases.
- Extension of the time that Contract Agencies can take delivery of existing unused water by allowing storage throughout the duration that the Drought Emergency Declaration is in effect, subject to evaporation losses if the water is not used in the year in which it was originally allocated.

8.4.1 Demand Reduction

As a wholesale supplier, the District provides the Contract Agencies with Lopez Reservoir water based on their contract entitlements, and as such, cannot quantify actual water use reductions pursuant to Chapter 10632(8) of the CWC. Such reductions would be implemented by the Contract Agencies. The District will, however, monitor and assess actual metered deliveries relative to each Contract Agency's entitlement during drought and normal water years. Reduction and Recovery Triggers, based on the LRRP and the amount of water in Lopez Reservoir, provide the District, Zone 3 Contract Agencies, and agricultural stakeholders an initial framework for water supply planning. The District, in coordination with Zone 3 TAC, will review the hydrologic conditions and Lopez Reservoir levels and, if necessary, utilize adaptive management of municipal diversions and downstream releases to meet WSCP objectives. This assumes that the District has taken the necessary actions to approve and implement the WSCP.

8.4.2 Supply Augmentation

The mission of Zone 3 is solely to serve water from the Lopez Reservoir to its five Contract Agencies. The supply and safe yield of this reservoir are adequate to meet contract obligations. The Contract Agencies utilize other sources, including groundwater and State Water, to meet overall water demands in their respective service areas.

The City of Pismo Beach is working on a groundwater supply augmentation project called Central Coast Blue. Central Coast Blue is a recycled water project in the planning and design phase that will develop a sustainable water supply and help protect the Santa Maria Valley Groundwater Basin (SMGB). The intent of Central Coast Blue is to enable Pismo Beach to construct an advanced treatment facility (ATF) to produce advanced purified water (APW) to augment its water supply through injection to recharge the aquifer and develop a seawater intrusion barrier to improve water supply reliability for the area. Please refer to the Contract Agencies' UWMP for more detailed information about the current findings for the use of recycled water.

Some of the Zone 3 Contract Agencies receive imported State Water, which is delivered to the Agencies through the Zone 3 transmission system. The District completed a hydraulic study for the Lopez pipeline to initially evaluate whether additional capacity was available in the pipeline and supplemental water deliveries to the Contract Agencies would be achievable. After this initial study, a hydraulic model and detailed study were conducted by the District to assess hydraulic capacity in the entire Coastal Branch of the State Water Project operated by the Central Coast Water Authority (CCWA). Both studies addressed hydraulic capacity related to State Water and Zone 3 Water deliveries, and the results indicated the potential for only a marginal increase in capacity for surplus deliveries of approximately 12% (~300 AFY). However, the District is exploring options with CCWA to increase State Water delivery capacity via the Coastal Branch delivery system.

In December 2019, the District contracted with North American Weather Consultants, Inc., to implement a potential three-year cloud-seeding program for the Lopez Reservoir. Year 1 was completed between January 2020 and April 15, 2020. Year 2 began in December 2020 and ran through April 15, 2021. The cloud-seeding process aids in precipitation formation by enhancing ice crystal production in clouds. When the ice crystals are formed, they turn into snowflakes and precipitate to the ground. The project objective is to increase precipitation in the Lopez Lake watershed during winter precipitation events. The seeding program uses a combination of ground-seeding sites and aircraft. The results published in the Year 1 Annual Report indicate that the Lopez Reservoir watershed is ideal for cloud-seeding operations and recommended continuing the cloud-seeding program for the 2020-2021 season.[24]

Recommended adjustments to the program include extending the cloud-seeding period and transitioning to a ground-based network that would be more effective at mitigating the high variability in the monthly precipitation and would be more reliable and efficient when seeding coastal storms. The District's Cloud Seeding Program is in the experimental stage of development and, based on the results of the program, could be integrated into the normal water management plan but will be based on the desire of the Contract Agencies as they fund 100% of the cloud-seeding efforts.

In October 2022, the County BOS approved another three-year contract with North American Weather Modification, Inc.; however, the cloud seeding project has been suspended as of January 2023 due to significant rainfall received in 2022 through 2024.

8.4.3 Operational Changes

The Lopez Pipeline that delivers Zone 3 water to the Contract Agencies also receives State Water that is delivered to State Water Contractors. During short-term disruptions to

[24] North American Weather Consultants, Inc., July 2020

treatment at the Lopez Water Treatment Plant (LWTP), State Water can continue to supply the system, thus providing additional continuity of potable water service to Contract Agencies. It is also noted that each Contract Agency provides their own emergency water storage within their respective water distribution systems. The ability for Zone 3 to take State Water is limited by the capacity of their State Water turnout and available capacity of the Coastal Branch pipeline.

8.4.4 Additional Mandatory Restrictions

As a wholesale supplier, the District does not have the authority to impose mandatory restrictions on outdoor water use, residential, or other mandatory restrictions that require enforcement and penalties. Please refer to the UWMPs prepared by the Contract Agencies for details regarding restrictions.

8.4.5 Emergency Response Plan

Zone 3 recognizes the potential for a catastrophic interruption of supply, which may result from an earthquake, treatment plant failure, regional power outage, or terrorist attack. The water treatment plant is fully automated and equipped with a complete Supervisory Controls and Data Acquisition (SCADA) system to keep the plant processes under control and constantly monitored. In the event of a water treatment process disruption at the Zone 3 LWTP, the 2.25-million gallon (MG) clear-well reservoir provides about 12 hours of treated-water storage. As water deliveries to Contract Agencies are relatively constant throughout the day and night, the estimated 12-hour duration for storage would be similar whether such disruption occurred in the evening or daytime. However, during peak summer days when Contract Agencies are drawing more water, the 12-hour buffer provided by the clear-well reservoir would likely be reduced. In the event of an emergency, Zone 3 staff will work diligently to ensure that the plant processes come back online expeditiously. Contract agencies are responsible for providing their own emergency water storage and emergency provisions to ensure water supply reliability within their respective water distribution system networks.

A catastrophic event could result in a failure of the 16-mile conveyance pipeline between the Lopez Reservoir and the Terminal Reservoir. In the event the conveyance pipeline has ruptured or failed, Zone 3 has the capability to treat raw water at the LWTP from Terminal Reservoir, immediately adjacent to the LWTP, and continue deliveries to the Contract Agencies. The Terminal Reservoir has a maximum storage capacity of 844 AF; however, as the system flows by gravity, only about 48 AF from the Terminal Reservoir can be delivered to the LWTP. This equates to approximately 3.5 days of water supply deliveries to the Contract Agencies.

In the event of a widespread power outage, the LWTP is equipped with a permanent on-site 900-kW emergency generator, sufficient to power the entire water treatment plant. The District also recently installed a battery energy-storage system, which provides 7 to 14 hours of backup power in the event of an outage. The battery and backup power ensures minimal down time and continuous operations at the LWTP. Since Zone 3 water is delivered by gravity to the distribution system, power is not needed to continue serving water to the Contract Agencies.

Earthquakes and other events have the potential to disrupt Zone 3 deliveries through the Lopez Pipeline. Should a disruption or line breakage occur, Zone 3 contracts with local Contractors to expedite emergency repair as needed. Such Contractors are fully equipped with labor, equipment, and materials to quickly repair damage to pipelines. In addition, the County has mutual aid agreements with the other Counties.

Zone 3 completed SCADA improvements to the Lopez transmission main. The SCADA system allows for remote monitoring of the Lopez pipeline and LWTP to verify any abnormal conditions, such as loss of system pressure and leakage from the pipeline. The SCADA improvements allow for quick response to isolated reaches of pipeline and provide the ability to notify Contract Agencies should the nature of the emergency warrant their involvement.

During an emergency or major disruption in potable-water supply to Contract Agencies, or prolonged shortage due to drought conditions, it will be the responsibility of Contract Agencies (retailers) to notify their customers of the water shortage and to mandate such prohibitions. District staff notifies all Contract Agencies immediately in the event of an emergency, water quality issue, or water service disruption.

8.4.6 Seismic Risk Assessment and Mitigation Plan

CWC Section 10632.5(a) requires a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities. Pursuant to CWC Section 10644, a copy of the most recent adopted local hazard mitigation plan or multi-hazard mitigation plan under the Federal Disaster Mitigation Act of 2000 may be used to comply with this section if the Hazard Mitigation Plan (HMP) addresses seismic risk.

The County's most recent multi-jurisdictional HMP was adopted in 2019. The HMP addresses seismic risk assessment and identification of vulnerabilities to hazards, including specific critical infrastructure and specific populations at risk. The HMP includes an update to potential solutions and mitigation actions to address the County's identified

vulnerabilities. The HMP is included as **Appendix E** to address seismic risk assessment and mitigation actions applicable to Zone 3's service area.

In addition to the HMP, the District has prepared several other reports that address seismic risks and mitigation plans that are relevant to the Zone 3 service area.

- In 2025, the County updated their Emergency Response Plan (ERP) that outlines the strategies, resources, plans, and procedures that will be used to prepare for and respond to an emergency event, including earthquakes.[25] The ERP reported that a dam failure is highly unlikely to occur during a seismic event. The Lopez Reservoir is an earthen-filled dam that underwent a seismic retrofit in 2002 to meet current seismic standards. The Lopez Drive Bridge is also currently undergoing seismic retrofits to prevent collapse and loss of access following a seismic event. The ERP indicates that earthen-filled dams within the County are well constructed to survive the maximum credible earthquake from active fault systems. In the event of a seismic event, damage assessments for the dams, including the Lopez and Terminal dams, are one of the first actions taken by the County.
- The Dam and Levee Failure Evacuation Plan was last updated in 2016 and defines the emergency management procedures and organizational response for overall coordination of public protective actions that may need to be employed in the event of a dam or levee failure; this includes the Lopez and Terminal dams.[26] The District also updated the Lopez Dam Flooding and Evacuation Brochure in February 2020 to provide information to the public in the unlikely event of an emergency evacuation; this is included as **Appendix F**.

8.4.7 Shortage Response Action Effectiveness

As part of the WSCP, each supplier is required to estimate the extent to which that action will reduce the gap between supply and demand. As a wholesaler, Zone 3's water supply equals the demand during each prescribed response action. During a water supply shortage, Zone 3 plans to operate under the water shortage response action levels defined in **Section 8.3** of the WSCP and plans to reduce Contract Agencies' deliveries accordingly. It is the responsibility of the Contract Agencies to quantify the gap between supply and demand.

8.5 Communication Protocols

CWC Section 10632(a)(5) states that the supplier is required to identify communication protocols and procedures to inform customers; the public; interested parties; and local,

[25] Ron Coleman and Danielle Ruedas, July 8, 2025.
[26] San Luis Obispo County Public Works, March 2016.

regional, and stage governments regarding predicted shortages, triggered response actions, and shortage emergencies.

Assuming the District has taken the necessary actions to implement the WSCP, the District intends to use the LRRP and Adaptive Management Flow Chart shown in Figure 8-2 as a guide to navigate through periods of reduced water supply availability caused by drought conditions, but likely subject to the limitations contained within the adopted resolution required to implement the WSCP, e.g. a limitation that neither the TAC nor the Advisory Committee (AC) has the authority to employ an adaptive management strategy without District approval notwithstanding the chart contained within the LRRP and reproduced below (rather, Zone 3 will seek input from the Zone 3 TAC and AC members either at the monthly TAC meetings or quarterly AC meetings as to whether adaptive management is needed based on a review of the current hydrologic conditions prior to implementation). At the same meetings, Zone 3 will provide notification and seek input regarding any triggers or anticipated triggers under the LRRP. When a response action is triggered or anticipated to be triggered, Zone 3 staff will notify the Contract Agencies and, if needed, recommend an adaptive management strategy after reviewing the current hydrologic conditions. It is the responsibility of the Contract Agencies to notify their customers during a predicted water supply shortage.

If there is an emergency water supply shortage, the District will notify operations staff immediately. Depending on the type of water supply emergency shortage, public communications may be required and will follow the notification procedures outlined in the ERP, HMP, or Dam and Levee Failure Evacuation Plan. Contract Agencies are responsible for notifying their customers during an emergency or major disruption in potable-water supply.

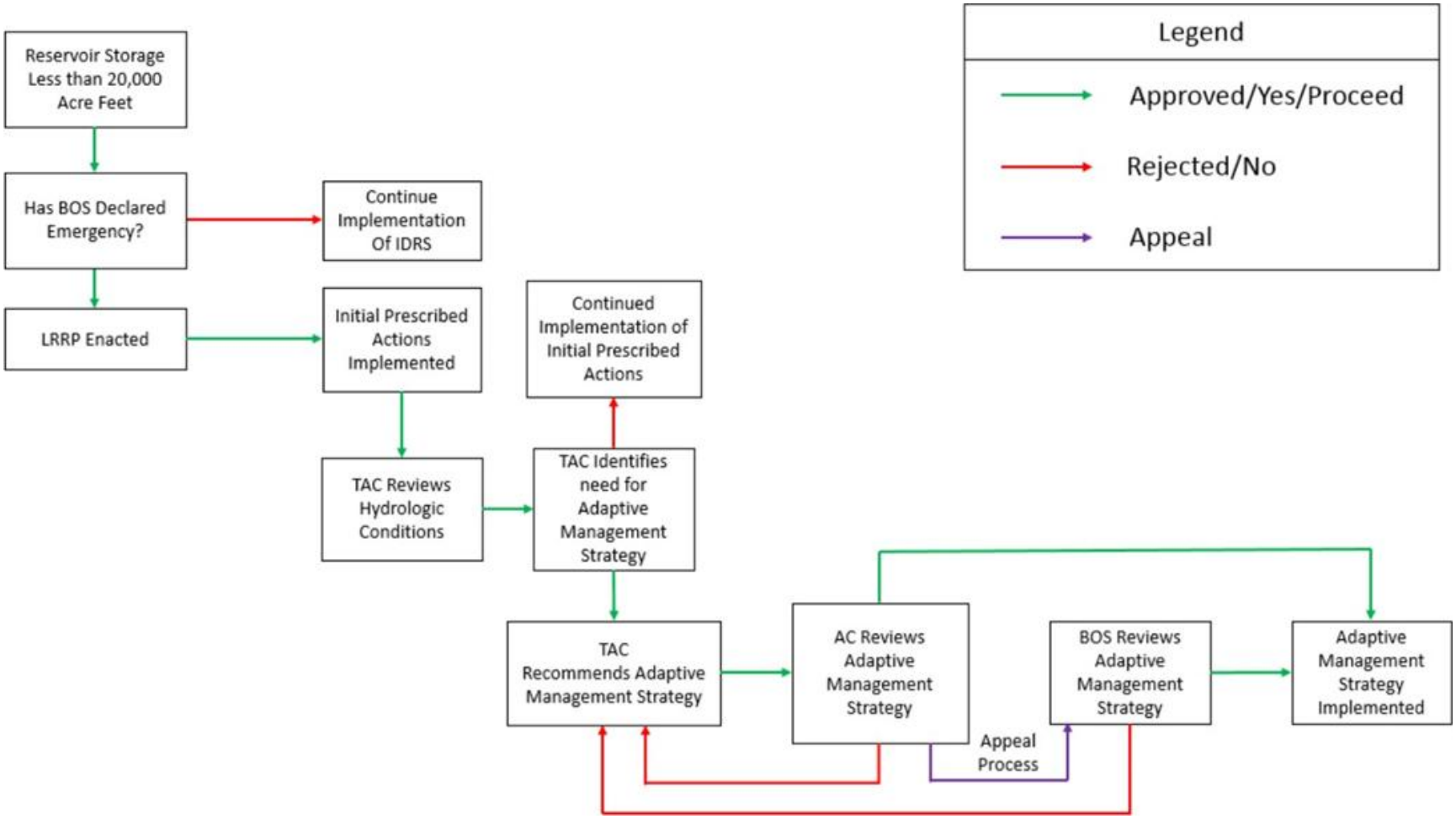


Figure 8-2. LRRP Enactment and Adaptive Management Flow Chart

8.6 Compliance and Enforcement

As a wholesale supplier, the District does not have the authority to enforce restrictions and customer compliance. The contracts between the District and the Contract Agencies contain a drought clause that provides for the reduction of Zone 3 water deliveries.

As the wholesale agency, it is the responsibility of the District to provide adequate notice to the Contract Agencies regarding any projected reductions in deliveries. It is then the responsibility of the Contract Agency to determine appropriate steps to supplement Lopez supplies with alternate sources and/or impose water demand restrictions and prohibitions on their customers.

8.7 Legal Authorities

A description of the District's legal authorities and their role with implementing the shortage response actions specified in this WSCP are provided below.

Zone 3 Technical Advisory Committee: The TAC is composed of technical operations staff from Zone 3 Contract Agencies who meet monthly to discuss matters related to the Lopez Project and provide recommendations to the Zone 3 AC. Any updates or changes made to the LRRP with respect to the WSCP by the District would be developed in coordination with the TAC and Zone 3 AC.

Zone 3 Advisory Committee: The AC is an advisory body composed of elected officials representing each of the Contract Agencies as well as one agriculture representative and one member at large, who hold bimonthly public meetings to advise the District on matters relating to the Lopez Project and Zone 3 Water Supply Contracts.

Zone 3 Contract Agency Governing Boards: The Zone 3 Contract Agency Governing Boards have the governing authority over each of their agencies and the authority to impose demand-reduction measures as necessary to respond to Zone 3 water delivery reductions.

San Luis Obispo County Board of Supervisors (BOS): The BOS sitting as the Board of Supervisors for the San Luis Obispo County Flood Control as Water Conservation District, is the governing authority for Zone 3 that can provide formal approval and adoption of the WSCP. The Board of Supervisors, either sitting as the District Board or County Board, must declare a water emergency related to Zone 3 and take formal action by resolution outlining those specific procedures set forth in the 2014 LRRP that will be implemented when the reservoir is at 20,000 acre feet or less in order to implement the WSCP.

In the event that a water shortage emergency is declared by the BOS, the Zone 3 Water Supply Contracts between the District and Contract Agencies allow for water entitlement

reductions and corresponding notifications to each Contract Agency of the District's intent. Actual amounts of reduced entitlements would likely be determined in accordance with the 2014 LRRP during such drought years. The provision in the contract between the District and the Zone 3 Contract Agencies that authorizes the District to reduce entitlements in response to shortages reads as follows in pertinent part:

"Article 4(B) Entitlements. [...] Notwithstanding the foregoing, the aggregate Entitlements available under this Contract and under the Water Supply Contracts may be reduced, following written notice given to the Agency from the District, due to (1) permanent or long-term restrictions imposed upon the District caused by (i) extreme changes in long-term meteorological patterns that reduce the Safe Yield assumptions for the Project; or (ii) multi-year drought conditions; or (2) temporary or short-term limitations based upon (i) reduced ability of the Project either to treat or distribute water because of force majeure; (ii) drought conditions; or (iii) water quality standards which reduce the safe, treated output of the Project at the time."[27]

A list of current contacts for the Zone 3 Contract Agencies is provided below.

- San Luis Obispo CSA 12 (Subcontractors) – John Diodati
- City of Arroyo Grande – Bill Robeson
- City of Grover Beach – Greg Ray
- City of Pismo Beach – Rosemarie Gaglione
- Oceano Community Services District – Will Clemens

8.8 Financial Consequences of WSCP

CWC Section 10632(a)(8) requires a discussion of the financial consequences of, and responses to, drought conditions, including potential revenue reductions and expense increases resulting from the activated shortage response actions and associated mitigation actions. As a wholesale supplier, the District has established fixed costs for the Zone 3 water entitlements regardless of how much water is delivered to the Contract Agencies. It is up to

[27] Article 5 limits the District's liability for shortages: "Article 5. Water Shortages. From time to time during the term of this Contract, there may occur a shortage in the quantity of Project water available for delivery to the Agency by the District under this Contract, including, without limitation, for the reasons enumerated in Article 4(B). In such event, no liability shall accrue against the District or any of its officers, agents, or employees for any damage, direct or indirect, arising from a shortage on account of any reason beyond the control of the District. In any water year during which such a shortage has caused a reduction as described in said Article 4(B), so that the total quantity of the Entitlements available for the District to distribute is less than the total established in said Article 4(B), following giving of notice by the District as provided in Article 4(B), the Proportionate Share of the Agency and each Other Agency under its Water Supply Contract shall be applied to such reduced amount in determining the volume of Project water to be delivered to the Agency and such Other Agencies in such water year." (Zone 3, Executed September 19, 2000)

each retail Contract Agency to assess and manage financial impacts resulting from reduced water deliveries.

Turnouts between the District and the Contract Agencies are metered, and customers served by the Contract Agencies are fully metered. The District has implemented a preventative maintenance schedule for annual meter testing and weekly inspections for leaks, as well as a process for responding to and fixing reported leaks and breaks. Zone 3 water costs are established based on the fixed capital costs of the system and variable operations and maintenance costs associated with the Lopez Reservoir, LWTP, and potable water transmission facilities to each of the Contract Agencies. As the water supply to the Zone 3 Contract Agencies is fully allocated, new transfers are not allowed (unless an existing Contract Agency relinquishes a portion of their entitlement to a new Contract Agency). As a wholesale supplier, the District does not have the authority to set commodity rates for the purposes of promoting water efficiency and conservation.

8.9 Monitoring and Reporting

As a wholesale supplier, the District is not required to monitor and report on implementation of response actions.

8.10 WSCP Refinement Procedures

As discussed in previous sections, the LRRP is the basis of the WSCP and includes an adaptive management component so the prescribed water shortage response actions can be modified as needed to best reflect current storage in the Lopez Reservoir. Refer to the LRRP in **Appendix D** for specific details regarding the adaptive management approach.

8.11 Special Water Feature Distinction

As a wholesale supplier, the District does not directly manage artificial water features. Please refer to the retail Zone 3 Contract Agencies for details regarding any special water features within their service areas.

8.12 Plan Adoption, Submittal, and Availability

Although the District BOS adopted the WSCP subject to the process described below, the District will not implement the WSCP until both triggers identified in the 2014 LRRP are met and the BOS takes formal action by resolution outlining those specific procedures set forth in the 2014 LRRP that will be implemented similar to that reflected in Resolution No. 2021-183 (included in **Appendix D**). The adoption of the WSCP does not constitute the adoption of the LRRP. The WSCP is a proposed plan developed by the District to prepare for and respond to water supply shortages and has incorporated components of the 2014 LRRP. The

BOS was responsible for final adoption of the WSCP and any proposed updates thereafter. The steps required for adoption of the WSCP are summarized below:

1. Proposed draft developed under the guidance of the Zone 3 TAC
2. Proposed draft provided to the agricultural stakeholders for review
3. Policy direction that may be provided by any of the Contract Agencies' Governing Boards considered in the draft WSCP
4. Zone 3 AC review and approval
5. Final approval by the BOS
6. Final adopted WSCP posted on the County's web page for Zone 3

The final 2025 WSCP will be made available on the County's website (see below) and at the County of San Luis Obispo Public Works Office, between the hours of 8:00 am and 5:00 pm PST, for public review within 30 days of adoption.

https://www.slocounty.ca.gov/departments/public-works/forms-documents/committees-programs/flood-control-zones/zone-3-lopez-water-project/plans-reports

Chapter 9: Demand Management Measures

The District supports the ongoing efforts implemented by the Zone 3 Contract Agencies in water conservation, public education, and outreach. As a wholesale supplier, the District has provided narrative descriptions for their system metering, public education and outreach, water conservation program coordination, staffing support, and other applicable DMMs.

9.1 DMMs for Wholesale Suppliers

Wholesale suppliers are required to provide narrative descriptions of four specific kinds of DMMs:

- Metering
- Public education and outreach
- Water conservation program coordination and staffing support
- Other applicable DMMs

In addition, the wholesale supplier shall provide a narrative description of asset management and wholesale supplier assistance programs. Wholesale suppliers are also required to address their DMM implementation over the past five years.

9.1.1 Metering

Zone 3 serves five Contract Agencies through the Lopez Pipeline, which is fully metered. There are 32 meters spread among the 5 Contract Agencies located at each turnout. All connections between Zone 3 and the Contract Agencies are metered.

The number of meters serving each Contract Agency is as follows:

- County Service Area (CSA) 12: 24
- City of Arroyo Grande: 2
- City of Grover Beach: 1
- City of Pismo Beach: 4
- Oceano CSD: 1

As a wholesale agency, the District does not have the authority to set commodity rates for the purpose of promoting water efficiency and conservation. Zone 3 water rates are based upon the fixed capital costs of providing the agency's full entitlement and variable operating/maintenance costs associated with quantity of water delivered to the agency for Lopez Reservoir, the LWTP, and water transmission facilities used to convey treated potable water to the Contract Agencies. Also, the water supply to Contract Agencies is fully

allocated, and as such, no new connections will be allowed (unless an existing Contract Agency relinquishes a portion of their allocation to a new Contract Agency).

The District completed a water audit in 2015. The water audit recommended that all meters ±6% out of calibration should be replaced and that the District consider automatic meters to replace the existing manual meters to increase efficiency in the meter reading process. Since 2015, the District has replaced all meters with manual reading meters and implemented a preventative maintenance schedule for annual meter testing and weekly inspections for leaks, as well as a process for responding to and fixing reported leaks and breaks. The inspections are conducted by each reach of pipeline, or "Unit." The Units are segments of delivery pipeline that are divided for retail agency accounting and billing purposes. Expenditures for inspecting for and repairing leaks/breaks are covered by the Unit budget allocations.

9.1.2 Public Education and Outreach

The District continues to provide public education and outreach for water conservation to all areas throughout the County. In addition, the District directly supports the ongoing efforts of their Contract Agencies' respective public education and outreach programs to their consumers. The bulleted list below provides a general overview of the District's efforts. Additional examples are provided in **Sections 5.1.2** and **9.1.3**.

- The District, as a wholesaler, participates in the countywide Partners in Water Conservation (PIWC) Group, and through that affiliation, proportionally contributes financially to a water-wise conservation website aimed at increasing the public's water conservation awareness. The District developed water conservation campaign billboards that were placed throughout the County in 2021, in Cayucos, Avila Beach, Shandon, and Santa Margarita. The billboards were removed in Spring 2025, as drought conditions have eased.
- The District has previously conducted public outreach at farmers' markets within Zone 3. Water conservation was part of the Farmers' Market in 2021 during Public Works Week.
- During times of drought, the District contributes financially to promote water conservation through public service announcements, direct mail campaigns, and installation of billboards throughout the County.
- The District has a designated water conservation coordinator. The roles and responsibilities of this coordinator are discussed in the section below.
- The District has consistently advertised water conservation through the radio as part of their public education and outreach.

Conservation Coordinator Responsibilities

On June 28, 2012, the District (Procedural Memorandum AD-42) designated a conservation coordinator. Funding is allocated during the annual budget process to be used by the conservation coordinator to implement Best Management Practices (BMPs) to meet the coverage requirements for maintaining AB 1420 compliance.

The District has a budget for conservation efforts in its Flood Control General Fund. Specific responsibilities of the conservation coordinator include management of community outreach messaging campaign(s), social media posts, outreach to the Zone 3 Advisory Council, and oversight of the water conservation website. The conservation coordinator is also assigned to monitor and participate in PIWC, which consists of the conservation coordinators from various water purveyors throughout the County. PIWC jointly sponsors education and outreach programs regarding conservation for the general public through the https://www.SLOWaterWiseLandscaping.com/ website.

The District participates in additional education and outreach efforts, including radio ads, various demonstration programs like sustainable landscaping tours and fair exhibits, and collaborative water conservation meetings with the Contract Agencies. In addition, the County hosts a website dedicated to water conservation:

https://www.slocounty.ca.gov/Departments/Public-Works/Services/Water-Conservation.aspx

Moving forward, the District will continue to encourage conservation in its policies and to cooperate with its individual Contract Agencies. The District will also continue to investigate new ways to promote water conservation. These efforts in Zone 3 are also described in the District's updated Integrated Regional Water Management (IRWM) report.

Water Conservation Coordinator Contact:

Laura Holder 805-781-5135

lholder@co.slo.ca.us

9.1.3 Other DMMs

The District continues to support its Contract Agencies with activities that allow the Contract Agencies to meet their water use targets. These additional measures may include, but are not limited to, water surveys and residential plumbing retrofits. However, the District does not directly implement any additional DMMs.

The following is a list of ways the County supports the Contract Agencies:

- The County has a conservation element of the General Plan, which includes various policies and implementation strategies related to water conservation. Various County departments have been identified as being responsible for implementing the identified strategies over time.
- The County organized and facilitated a Drought Task Force, which had members from the County Office of Emergency Services, Public Works Department, County Fire, County Agricultural Commissioner, County Planning and Building, Farm Advisor, County Health Agency, Groundwater Sustainability Advisor, and County Counsel. The members collaborate and share information with the Contract Agencies regarding drought management strategies, including development of water conservation programs and incentives.
- The County adopted the County-wide water conservation program, which incorporates the efficient use of water and water-saving practices into the County Land Use Ordinance.

The County adopted the State's new Model Water Efficient Landscape Ordinance on November 24, 2015, which applies to new development projects that involve over 500 square feet of landscaping. The State has passed an updated Model Water Efficient Landscape Ordinance, effective January 2, 2025; however, this updated ordinance has not yet been adopted by San Luis Obispo County. The update focused on making the ordinance easier to understand and did not change any requirements from the 2015 version.

9.1.4 Asset Management

The District maintains a Geographic Information System (GIS) database of the Zone 3 assets and completes an annual investigation evaluating the condition of the District's assets. The County maintains a 5-year capital improvement replacement program, which currently includes the following items:

- Spillway Physical Investigation per Division of Safety of Dams - Main Dam
- Spillway Repairs per Division of Safety of Dams - Main Dam
- Geotechnical Testing & Seismic Alternatives Study for Terminal Dam
- Lopez Water Treatment Plant Perimeter Security Fencing - Phase II
- Lopez Water Treatment Plant: Replace Carbon Feed System (Non-auger)
- Lopez Water Treatment Plant: Upgrade Equalization Pump
- Dam Intakes #2 & #3 Valve Maintenance
- Lopez Water Treatment Plant Membrane Rack Valve Installation
- Terminal Dam Piezometer Replacement Project
- Lopez Water Treatment Plant Membrane Rack Piping Replacements

- Fire Flow Tank Repair or Replacement (if needed)
- Habitat Conservation Plan – Instream Studies of Arroyo Grande Creek

Due to the ongoing court proceedings regarding the judicial release order and the preliminary injunction, improvements are currently limited to operations and maintenance activities only. The capital improvement program is expected to resume after the court proceedings are resolved.

9.1.5 Wholesale Supplier Assistance Programs

The District supports its Contract Agencies with attendance and financial contribution to public outreach and education programs. In addition, the District maintains a water conservation website and funds a water conservation coordinator position that is dedicated to supporting ongoing water conservation programs. During the Technical Advisory Committee (TAC) meetings, the District provides a Monthly Operations Report that includes current and projected water production for the Contract Agencies. Zone 3 also has an Advisory Committee (AC) that discusses the technical aspects of water delivery and supply-related issues, as well as upcoming events and the needs of the Contract Agencies. Lopez Reservoir water data are also publicly available and can be downloaded from the District's website:

https://www.slocounty.ca.gov/departments/public-works/forms-documents/water-resources/lopez-reservoir-daily-summaries-(april-2000-curren

9.2 Existing DMMs for Retail Suppliers

As a wholesale agency, the District is not required to implement Retail Supplier DMMs in Zone 3. However, the County does participate in some public outreach, education, and maintenance activities that align with Retail Supplier DMMs. These activities are discussed below.

9.2.1 Implementation Over the Past Five Years

The following is a description of the 2025 DMMs and the actions taken by the District within the past five years.

DMM A — Water Survey Programs for Single-Family Residential and Multifamily Residential Customers (Applies to Retail Water Agencies)

The District does not have any direct customers in Zone 3 and does not have the authority to conduct water audits/surveys for customers within the Contract Agencies' service areas. Therefore, no efforts were completed by the District for DMM A.

DMM B — Residential Plumbing Retrofit (Applies to Retail Water Agencies)

The District does not have any direct customers or the authority to conduct plumbing retrofits for customers within the Contract Agencies' service areas. Therefore, no efforts were completed by the District for DMM B. The City of Arroyo Grande is the only Contract Agency to operate a mandatory plumbing retrofit program; the program requires sellers to update plumbing fixtures to high-efficiency fixtures prior to change of ownership of a residence.

DMM C — System Water Audits, Leak Detection, and Repairs

In 2015, the District completed a water loss audit on the Zone 3 Lopez Distribution System using the AWWA Water Loss Software. The completed audit was used to determine the current volume of apparent and real water loss and proposed improvements for reducing these system losses. Wholesale suppliers are not required to complete a water loss audit for the 2025 UWMP, but the District reports the estimated losses in the Annual Water Shortage Assessment Report that is submitted to DWR.

An estimate of existing conservation savings on water uses within the supplier's service area as a result of implementing the DMM, and the effect of the savings on the supplier's ability to further reduce demand, is not available or applicable, given that contracts with Contract Agencies specify a certain quantity (allocation) of water to be supplied.

DMM D — Metering With Commodity Rates for All New Connections and Retrofit of Existing Connections

All connections between Zone 3 and the Contract Agencies are metered. The District does not have the authority to set commodity rates for the purposes of promoting water efficiency and conservation. Zone 3 water rates are flat rates established on the basis of actual capital and operating/maintenance costs associated with the Lopez Reservoir, the LWTP, and potable water conveyance facilities. Also, the water supply to Contract Agencies is fully allocated, and as such, no new connections will be allowed (unless an existing Contract Agency relinquishes a portion of their allocation to a new Contract Agency). As discussed in **Section 9.1.1**, the District has replaced all Zone 3 water meters since 2015.

DMM E — Large Landscape Conservation Programs and Incentives

The District assists with public outreach and education, which includes education material dedicated to drought-tolerant landscapes and high-efficiency irrigation systems. The District does not provide incentives or manage these programs, as this is the responsibility of the individual Contract Agencies. Almost all of the Contract Agencies in Zone 3 operate a "Cash for Grass" program, which provides a cash incentive for property owners to remove their existing grass landscaping and replace it with drought-tolerant plants or mulch.

DMM F — High-Efficiency Washing Machine Rebate Programs (Applies to Retail Water Agencies)

The District assists with preparing educational material dedicated to high-efficiency washing machines to be used for public outreach and education. The District does not provide rebates or incentives or manage these programs, as this is the responsibility of the individual Contract Agencies. The Cities of Pismo Beach and Arroyo Grande both offer high-efficiency washing machine rebates.

DMM G — Public Information Programs

In cooperation with water retailers in the County, the District funds and supports many public information programs. Such programs include the spring newsletter prepared by the PIWC and the distribution of pamphlets at various public events. In the past, programs also included participation in low-water-landscape exhibits at the annual Home Show and Mid-State Fair.

The District has a budget for conservation efforts in its Flood Control General Fund. The District conservation coordinator monitors and participates in the activities of the PIWC group, who jointly sponsor education and outreach programs regarding conservation for the general public. Additionally, conservation information is included with the annual consumer confidence reports sent to customers.

DMM H — School Education Programs

The District defers to the individual Contract Agencies to conduct school education programs in their respective service areas, as the water conservation programs vary per agency. The District encourages the Zone 3 Contract Agencies to provide ongoing water conservation education programs for schools. Otherwise, no efforts were completed by the District for DMM H.

DMM I — Conservation Programs for Commercial, Industrial, and Institutional Accounts (Applies to Retail Water Agencies)

The District does not have any commercial, industrial, or institutional accounts. The District assists its Contract Agencies through public outreach and education, who do have these accounts and develop their own programs. Otherwise, no efforts were completed by the District for DMM I.

DMM J — Wholesale Agency Assistance Programs

Please refer to **Section 9.1.6**.

DMM K — Conservation Pricing

As a wholesaler, the District does not have the authority to set rates for retail water customers. This authority lies with the individual retail water agencies and cities. Therefore, no efforts were completed by the District for DMM K. The District's pricing for water sold to is Contract Agencies is described in **Section 9.1.1**.

DMM L — Conservation Coordinator

Please refer to **Section 9.1.2**.

DMM M — Water Waste Prohibition

While, as a wholesaler, the District does not have the authority to implement water waste prohibitions for retail water customers, the District will work with Contract Agencies to develop a model water waste prohibition ordinance if requested by the Contract Agencies. This model ordinance will include standard uses to be prohibited during identified shortage stages and will be shared with all member agencies.

Please refer to the Contract Agencies' UWMPs for descriptions of their specific water waste prohibitions.

Some noted prohibition examples include:

- Use of potable water for street cleaning.
- Unauthorized use of water from any fire hydrant.
- Use of potable water to wash sidewalks or roadways where air-blowers or sweeping provide a reasonable alternative.
- Use of potable water for construction purposes, such as consolidation of backfill, unless no other source of water or method can be used.
- Restaurant water service to patrons unless upon request.
- Hydrant flushing except where required for public health and safety.
- Refilling existing private pools except to maintain water levels.
- Use of potable water for planting of turf and other new landscaping unless it consists of low-water- using, drought-tolerant plants.
- Use of water for washing cars, boats, sidewalks, driveways, or other exterior surfaces without a quick-acting shut-off nozzle on the hose.
- Operation of any ornamental fountains or car washes unless the water is recirculated.

Depending on the nature of the water shortage and at the discretion of the governing body, the above-mentioned measures can be modified. Often-used variations include banning

water use for planting any new landscaping, limiting landscape watering to specific days of the week, and discontinuing operation of all fountains.

The County has updated its conservation element of the General Plan to include various policies and implementation strategies related to water conservation. The County has implemented additional County-wide conservation programs, which are noted in **Section 9.1.2**. In 1990, a Water Conservation Policy was adopted by the BOS. If necessary, this policy could be updated with specific water waste prohibitions.

DMM N — Residential Ultralow-Flush Toilet Replacement Program (Applies to Retail Agencies)

The District assists with public outreach and education, which includes education material dedicated to residential ultralow-flush toilet replacement programs. The District does not provide rebates or incentives or manage these programs, as this is the responsibility of the individual Contract Agencies.

Ultralow-flush toilet replacement programs have continued to be implemented by the individual retail water agencies. As a result of past droughts and limits on local water supplies, as well as changes to the plumbing code, many residential toilets have already been replaced. In other parts of the County, the County Planning Department has implemented ordinances, including retrofit at time of sale, as well as requirements for new developments to retrofit existing homes and businesses to offset new water demands. When appropriate, the District will work with its Contract Agencies to help ensure effective implementation of this measure.

9.2.2 Implementation to Achieve Water Use Targets

This section is not required for a wholesale supplier. Estimations of the expected water savings from DMMs from each retail agency's implementation plans for a particular DMM may be found in the UWMP report for each applicable Contract Agency.

Chapter 10: Plan Adoption, Submittal, and Implementation

10.1 Inclusion of All 2025 Data

The District has included all requisite 2025 data in the development of this UWMP.

10.2 Notice of Public Hearing

10.2.1 Notice to Cities and Counties

On **November 12, 2025,** the District notified their Contract Agencies of their intent to update the UWMP. This letter served as the 60-day noticing required by the CWC. Copies of the letters distributed to the Contract Agencies are provided in **Appendix A** to this UWMP. A public hearing was held on **July XX, 2026,** at the San Luis Obispo County BOS meeting prior to the UWMP adoption. Table 10-1 shows the notification provided to the Contract Agencies.

Table 10-1. Notification to Cities and Counties

City	60-Day Notice	Notice of Public Hearing	Other
City of Arroyo Grande	Yes	Yes	
City of Grover Beach	Yes	Yes	
City of Pismo Beach	Yes	Yes	

County	60-Day Notice	Notice of Public Hearing	Other
County of San Luis Obispo	Yes	Yes	Dept. of Public Works
County of San Luis Obispo	Yes	Yes	Dept. of Planning and Building

Other	60-Day Notice	Notice of Public Hearing	Other
Oceano Community Services District	Yes	Yes	
Avila Beach Community Services District	Yes	Yes	
Port San Luis Harbor District	Yes	Yes	

10.2.2 Notice to the Public

A public hearing to consider adoption of the final UWMP was held by the County BOS on **July XX, 2026.** Per CWC Section 10642 pursuant to Section 6066 of the Government, publication

of notice to the public pursuant to this chapter was published once a week for two successive weeks. The hearing notices are attached as **Appendix C.**

10.3 Public Hearing and Adoption

The 2025 UWMP and WSCP were placed on the agenda, noticed, and reviewed in a public hearing at the regularly scheduled County BOS meeting on **July XX, 2026**. This hearing provided the Cities and Counties and other members of the public with an opportunity to review the staff report and attend the hearing to provide comment. The public hearing took place before the adoption, allowing an opportunity for the report to be modified in response to public input before its adoption. Immediately following the public hearing, the 2025 UWMP and WSCP were adopted by the County's BOS.

Copies of the Resolution of Plan Adoption signed by the County BOS and the attached cover letter addressed to DWR are included as **Appendix B** of the UWMP. The UWMP includes all applicable information necessary to meet the requirements of CWC Division 6, Part 2.6 (Urban Water Management Planning). The 2025 UWMP and WSCP were submitted to the DWR within 30 days of adoption.

10.4 Plan Submittal

A copy of the Adoption Resolution is included in **Appendix B**. A hard copy of the Final 2025 Zone 3 UWMP and WSCP was sent to the California State Library, DWR (electronically using the WUEdata reporting tool), and all Cities and Counties within District's Zone 3 service area within 30 days of adoption.

10.5 Public Availability

To fulfill the requirements of CWC Section 10642 of the UWMP Act, Zone 3 made the final 2025 UWMP available online (see below) and at the County of San Luis Obispo Public Works Office, between the hours of 8:00 am and 5:00 pm PST, for public review within 30 days of adoption.

https://www.slocounty.ca.gov/departments/public-works/forms-documents/committees-programs/flood-control-zones/zone-3-lopez-water-project/plans-reports

10.6 Amending the UWMP or WSCP

Amendments to the Zone 3 2025 UWMP and WSCP will be made on an as-needed basis. Should the District need to amend the adopted 2025 UWMP or WSCP in the future, the District will hold a public hearing for review of the proposed amendments to the document. The District will send a 60-day notification letter to all Cities and Counties within the District's Zone 3 service area and notify the public in the same manner as set forth in **Chapter 2** of this UWMP. Once the amended document is adopted, a copy of the finalized version will be sent to the California State Library, DWR (electronically using the WUEdata reporting tool), and all Cities and Counties within Zone 3's service area within 30 days of adoption. The finalized version will also be made available to the public both online on the District's website and in person at County's Public Works Office during normal business hours.

Chapter 11: References and Links

California Department of Finance. (2025). State Population Projections for 2020-2070. Retrieved from https://dof.ca.gov/forecasting/demographics/projections/.

Cannon. (June 2014). *Regional Recycled Water Strategic Plan for the County of San Luis Obispo*.

Carollo. (2012). *San Luis Obispo County Master Water Report*. Retrieved from: https://www.slocounty.ca.gov/departments/public-works/services/plans-reports/master-water-report

CIMIS. (2025). Monthly ETo Report for Station #202 (Nipomo). Retrieved from https://cimis.water.ca.gov/UserControls/Reports/MonthlyReportViewer.aspx.

Coleman, Ron & Danielle Ruedas. (July 2025). *Lopez Project Water System Emergency Response Plan*.

Department of Water Resources. (March 2021). *Urban Water Management Plan Guidebook 2025*.

National Oceanic and Atmospheric Administration. (1991 to 2020). United States Climate Normals, San Luis Obispo AP Station. Retrieved from https://www.ncei.noaa.gov/access/us-climate-normals/#dataset=normals-monthly&timeframe=30&station=USW00093206.

North American Weather Consultants, Inc. (July 2020). *Cloud Seeding Annual Report: Lopez Lake Drainage 2020 Winter Season*.

Safe Drinking Water Information System. (2025). Public Water Supply System Search. Retrieved from https://sdwis.waterboards.ca.gov/PDWW/.

San Luis Obispo County. (September 19, 2000). *Contract Amendment between San Luis Obispo County Flood Control and Water Conservation District and Contract Agencies*.

San Luis Obispo County Department of Planning and Building. (November 2011). *EnergyWise Plan*.

San Luis Obispo County Flood Control and Water Conservation District. (August 2020). 2019 *Integrated Regional Water Management Plan*.

San Luis Obispo County Flood Control and Water Conservation District. (2007). *Interim Downstream Release Schedule*.

San Luis Obispo County Public Works Department. (May 2023). *Energy Storage System Installed at Lopez Water Treatment Plant*. Retrieved from: https://www.slocounty.ca.gov/departments/public-works/department-news/2023/energy-storage-system-installed-at-lopez-water-tre

San Luis Obispo County Public Works Department. (January 2009). *Lopez Reservoir Expansion – Spillway Raise Project Advisory Group Recommendations*.

San Luis Obispo County Public Works Department. (March 2021). *Lopez Lake and Lopez Terminal Watershed Sanitary Survey Five Year Update (2016-2020)*.

San Luis Obispo County Public Works Department. (2007 to 2024). *Monthly Precipitation Report*.

Stetson Engineers, Inc. (2013). *Lopez Lake Spillway Raise Project Report*.

Wallace Group. (2008). *Desalination Funding Study*.

Water Systems Consulting, Inc. (December 2011). *Capacity Assessment of the Coastal Branch, Chorro Valley, & Lopez Pipelines*.

Water Systems Consulting, Inc. (March 2016). *Technical Memorandum: Diablo Canyon Power Plant Desalination Hydraulic Feasibility Analysis*.

Water Systems Consulting, Inc. (September 2021). *2020 Urban Water Management Plan: San Luis Obispo County Flood Control and Water Conservation District Zone 3*.

Appendix A: 60-Day Stakeholder Notification Letters

SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
Department of Public Works
John Diodati, *Director*

November 12, 2025

USPS DELIVERY

Brad Hagemann, General Manager
Avila Beach Community Services District
100 San Luis Street,
Abila Beach, CA 93424

2025 URBAN WATER MANAGEMENT PLAN UPDATE & WATER SHORTAGE CONTINGENCY PLAN NOTIFICATION

Zone 3 of the Flood Control and Water Conservation District (FCWCD) is in the process of preparing and updating its 2025 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of Zone 3's UWMP is required every five (5) years. Zone 3 of the FCWCD encompasses the area served by the Lopez water system, including the Cities of Arroyo Grande, Grover Beach, and Pismo Beach, and the unincorporated communities of Oceano and Avila Beach.

Water Code Section 10621(b) requires an urban water supplier updating its UWMP and WSCP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as FCWCD's notice that it is preparing and updating its 2025 UWMP and WSCP, to be adopted before the July 1, 2026, deadline. The UWMP and WSCP process is intended to be a collaborative effort between all project stakeholders to the extent practicable.

Copies of FCWCD's draft 2025 UWMP and WSCP are anticipated to be available for review on the FCWCD's website in the spring of 2026, and the District will subsequently hold a noticed public hearing on the 2025 UWMP and WSCP in advance of its proposed adoption. The District invites you to submit comments and consult with the FCWCD regarding its 2025 UWMP and WSCP update.

The District's website (https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Flood-Control-Zones/Zone-3-Lopez-Water-Project.aspx) will give updates on the 2025 UWMP and WSCP. If you have any questions, comments, or input regarding Zone 3's UWMP and WSCP, please contact Laura Holder, Utilities Division Program Manager, via email at LHolder@co.slo.ca.us or by phone at (805) 781-5135.

Sincerely,

LAURA HOLDER
Utilities Division Program Manager

CF 340.142.01

SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
Department of Public Works
John Diodati, *Director*

November 12, 2025

USPS DELIVERY

Bill Robeson, Director
City of Arroyo Grande Public Works Department
1375 Ash Street
Arroyo Grande, CA 93420

2025 URBAN WATER MANAGEMENT PLAN UPDATE & WATER SHORTAGE CONTINGENCY PLAN NOTIFICATION

Zone 3 of the Flood Control and Water Conservation District (FCWCD) is in the process of preparing and updating its 2025 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of Zone 3's UWMP is required every five (5) years. Zone 3 of the FCWCD encompasses the area served by the Lopez water system, including the Cities of Arroyo Grande, Grover Beach, and Pismo Beach, and the unincorporated communities of Oceano and Avila Beach.

Water Code Section 10621(b) requires an urban water supplier updating its UWMP and WSCP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as FCWCD's notice that it is preparing and updating its 2025 UWMP and WSCP, to be adopted before the July 1, 2026, deadline. The UWMP and WSCP process is intended to be a collaborative effort between all project stakeholders to the extent practicable.

Copies of FCWCD's draft 2025 UWMP and WSCP are anticipated to be available for review on the FCWCD's website in the spring of 2026, and the District will subsequently hold a noticed public hearing on the 2025 UWMP and WSCP in advance of its proposed adoption. The District invites you to submit comments and consult with the FCWCD regarding its 2025 UWMP and WSCP update.

The District's website (https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Flood-Control-Zones/Zone-3-Lopez-Water-Project.aspx) will give updates on the 2025 UWMP and WSCP. If you have any questions, comments, or input regarding Zone 3's UWMP and WSCP, please contact Laura Holder, Utilities Division Program Manager, via email at LHolder@co.slo.ca.us or by phone at (805) 781-5135.

Sincerely,

LAURA HOLDER
Utilities Division Program Manager

CF 340.142.01

SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
Department of Public Works
John Diodati, *Director*

November 12, 2025

USPS DELIVERY

Greg Ray, City Engineer
City of Grover Beach Public Works Department
154 S. Eight Street
Grover Beach, CA 93433

2025 URBAN WATER MANAGEMENT PLAN UPDATE & WATER SHORTAGE CONTINGENCY PLAN NOTIFICATION

Zone 3 of the Flood Control and Water Conservation District (FCWCD) is in the process of preparing and updating its 2025 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of Zone 3's UWMP is required every five (5) years. Zone 3 of the FCWCD encompasses the area served by the Lopez water system, including the Cities of Arroyo Grande, Grover Beach, and Pismo Beach, and the unincorporated communities of Oceano and Avila Beach.

Water Code Section 10621(b) requires an urban water supplier updating its UWMP and WSCP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as FCWCD's notice that it is preparing and updating its 2025 UWMP and WSCP, to be adopted before the July 1, 2026, deadline. The UWMP and WSCP process is intended to be a collaborative effort between all project stakeholders to the extent practicable.

Copies of FCWCD's draft 2025 UWMP and WSCP are anticipated to be available for review on the FCWCD's website in the spring of 2026, and the District will subsequently hold a noticed public hearing on the 2025 UWMP and WSCP in advance of its proposed adoption. The District invites you to submit comments and consult with the FCWCD regarding its 2025 UWMP and WSCP update.

The District's website (https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Flood-Control-Zones/Zone-3-Lopez-Water-Project.aspx) will give updates on the 2025 UWMP and WSCP. If you have any questions, comments, or input regarding Zone 3's UWMP and WSCP, please contact Laura Holder, Utilities Division Program Manager, via email at LHolder@co.slo.ca.us or by phone at (805) 781-5135.

Sincerely,

LAURA HOLDER
Utilities Division Program Manager

CF 340.142.01

SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
Department of Public Works
John Diodati, *Director*

November 12, 2025

USPS DELIVERY

Peter Brown, General Manager
Oceano Communities Services District
1655 Front St.
Oceano, CA 93445

2025 URBAN WATER MANAGEMENT PLAN UPDATE & WATER SHORTAGE CONTINGENCY PLAN NOTIFICATION

Zone 3 of the Flood Control and Water Conservation District (FCWCD) is in the process of preparing and updating its 2025 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of Zone 3's UWMP is required every five (5) years. Zone 3 of the FCWCD encompasses the area served by the Lopez water system, including the Cities of Arroyo Grande, Grover Beach, and Pismo Beach, and the unincorporated communities of Oceano and Avila Beach.

Water Code Section 10621(b) requires an urban water supplier updating its UWMP and WSCP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as FCWCD's notice that it is preparing and updating its 2025 UWMP and WSCP, to be adopted before the July 1, 2026, deadline. The UWMP and WSCP process is intended to be a collaborative effort between all project stakeholders to the extent practicable.

Copies of FCWCD's draft 2025 UWMP and WSCP are anticipated to be available for review on the FCWCD's website in the spring of 2026, and the District will subsequently hold a noticed public hearing on the 2025 UWMP and WSCP in advance of its proposed adoption. The District invites you to submit comments and consult with the FCWCD regarding its 2025 UWMP and WSCP update.

The District's website (https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Flood-Control-Zones/Zone-3-Lopez-Water-Project.aspx) will give updates on the 2025 UWMP and WSCP. If you have any questions, comments, or input regarding Zone 3's UWMP and WSCP, please contact Laura Holder, Utilities Division Program Manager, via email at LHolder@co.slo.ca.us or by phone at (805) 781-5135.

Sincerely,

LAURA HOLDER
Utilities Division Program Manager

CF 340.142.01

SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
Department of Public Works
John Diodati, *Director*

November 12, 2025

USPS DELIVERY

Rosemarie Gaglione, Director
City of Pismo Beach Public Works Department
760 Mattie Road
Pismo Beach, CA 93449

2025 URBAN WATER MANAGEMENT PLAN UPDATE & WATER SHORTAGE CONTINGENCY PLAN NOTIFICATION

Zone 3 of the Flood Control and Water Conservation District (FCWCD) is in the process of preparing and updating its 2025 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of Zone 3's UWMP is required every five (5) years. Zone 3 of the FCWCD encompasses the area served by the Lopez water system, including the Cities of Arroyo Grande, Grover Beach, and Pismo Beach, and the unincorporated communities of Oceano and Avila Beach.

Water Code Section 10621(b) requires an urban water supplier updating its UWMP and WSCP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as FCWCD's notice that it is preparing and updating its 2025 UWMP and WSCP, to be adopted before the July 1, 2026, deadline. The UWMP and WSCP process is intended to be a collaborative effort between all project stakeholders to the extent practicable.

Copies of FCWCD's draft 2025 UWMP and WSCP are anticipated to be available for review on the FCWCD's website in the spring of 2026, and the District will subsequently hold a noticed public hearing on the 2025 UWMP and WSCP in advance of its proposed adoption. The District invites you to submit comments and consult with the FCWCD regarding its 2025 UWMP and WSCP update.

The District's website (https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Flood-Control-Zones/Zone-3-Lopez-Water-Project.aspx) will give updates on the 2025 UWMP and WSCP. If you have any questions, comments, or input regarding Zone 3's UWMP and WSCP, please contact Laura Holder, Utilities Division Program Manager, via email at LHolder@co.slo.ca.us or by phone at (805) 781-5135.

Sincerely,

LAURA HOLDER
Utilities Division Program Manager

CF 340.142.01

SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
Department of Public Works
John Diodati, *Director*

November 12, 2025

USPS DELIVERY

Jennifer L. Szeliga, Business Manager
Port San Luis Harbor Office
PO Box 249
Avila Beach, CA 93424

2025 URBAN WATER MANAGEMENT PLAN UPDATE & WATER SHORTAGE CONTINGENCY PLAN NOTIFICATION

Zone 3 of the Flood Control and Water Conservation District (FCWCD) is in the process of preparing and updating its 2025 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of Zone 3's UWMP is required every five (5) years. Zone 3 of the FCWCD encompasses the area served by the Lopez water system, including the Cities of Arroyo Grande, Grover Beach, and Pismo Beach, and the unincorporated communities of Oceano and Avila Beach.

Water Code Section 10621(b) requires an urban water supplier updating its UWMP and WSCP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as FCWCD's notice that it is preparing and updating its 2025 UWMP and WSCP, to be adopted before the July 1, 2026, deadline. The UWMP and WSCP process is intended to be a collaborative effort between all project stakeholders to the extent practicable.

Copies of FCWCD's draft 2025 UWMP and WSCP are anticipated to be available for review on the FCWCD's website in the spring of 2026, and the District will subsequently hold a noticed public hearing on the 2025 UWMP and WSCP in advance of its proposed adoption. The District invites you to submit comments and consult with the FCWCD regarding its 2025 UWMP and WSCP update.

The District's website (https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Flood-Control-Zones/Zone-3-Lopez-Water-Project.aspx) will give updates on the 2025 UWMP and WSCP. If you have any questions, comments, or input regarding Zone 3's UWMP and WSCP, please contact Laura Holder, Utilities Division Program Manager, via email at LHolder@co.slo.ca.us or by phone at (805) 781-5135.

Sincerely,

LAURA HOLDER
Utilities Division Program Manager

CF 340.142.01

SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
Department of Public Works
John Diodati, *Director*

November 12, 2025

USPS DELIVERY

Trevor Keith, Director of Planning & Building
County of San Luis Obispo, Planning and Building Department
976 Osos Street, Room 200
San Luis Obispo, CA 93408

2025 URBAN WATER MANAGEMENT PLAN UPDATE & WATER SHORTAGE CONTINGENCY PLAN NOTIFICATION

Zone 3 of the Flood Control and Water Conservation District (FCWCD) is in the process of preparing and updating its 2025 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of Zone 3's UWMP is required every five (5) years. Zone 3 of the FCWCD encompasses the area served by the Lopez water system, including the Cities of Arroyo Grande, Grover Beach, and Pismo Beach, and the unincorporated communities of Oceano and Avila Beach.

Water Code Section 10621(b) requires an urban water supplier updating its UWMP and WSCP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as FCWCD's notice that it is preparing and updating its 2025 UWMP and WSCP, to be adopted before the July 1, 2026, deadline. The UWMP and WSCP process is intended to be a collaborative effort between all project stakeholders to the extent practicable.

Copies of FCWCD's draft 2025 UWMP and WSCP are anticipated to be available for review on the FCWCD's website in the spring of 2026, and the District will subsequently hold a noticed public hearing on the 2025 UWMP and WSCP in advance of its proposed adoption. The District invites you to submit comments and consult with the FCWCD regarding its 2025 UWMP and WSCP update.

The District's website (https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Flood-Control-Zones/Zone-3-Lopez-Water-Project.aspx) will give updates on the 2025 UWMP and WSCP. If you have any questions, comments, or input regarding Zone 3's UWMP and WSCP, please contact Laura Holder, Utilities Division Program Manager, via email at LHolder@co.slo.ca.us or by phone at (805) 781-5135.

Sincerely,

LAURA HOLDER
Utilities Division Program Manager

CF 340.142.01

SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
Department of Public Works
John Diodati, *Director*

November 12, 2025

USPS DELIVERY

John Diodati, Director of Public Works (County Service Area 12)
County of San Luis Obispo, Public Works Department
976 Osos Street, Room 206
San Luis Obispo, CA 93408

2025 URBAN WATER MANAGEMENT PLAN UPDATE & WATER SHORTAGE CONTINGENCY PLAN NOTIFICATION

Zone 3 of the Flood Control and Water Conservation District (FCWCD) is in the process of preparing and updating its 2025 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of Zone 3's UWMP is required every five (5) years. Zone 3 of the FCWCD encompasses the area served by the Lopez water system, including the Cities of Arroyo Grande, Grover Beach, and Pismo Beach, and the unincorporated communities of Oceano and Avila Beach.

Water Code Section 10621(b) requires an urban water supplier updating its UWMP and WSCP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as FCWCD's notice that it is preparing and updating its 2025 UWMP and WSCP, to be adopted before the July 1, 2026, deadline. The UWMP and WSCP process is intended to be a collaborative effort between all project stakeholders to the extent practicable.

Copies of FCWCD's draft 2025 UWMP and WSCP are anticipated to be available for review on the FCWCD's website in the spring of 2026, and the District will subsequently hold a noticed public hearing on the 2025 UWMP and WSCP in advance of its proposed adoption. The District invites you to submit comments and consult with the FCWCD regarding its 2025 UWMP and WSCP update.

The District's website (https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Flood-Control-Zones/Zone-3-Lopez-Water-Project.aspx) will give updates on the 2025 UWMP and WSCP. If you have any questions, comments, or input regarding Zone 3's UWMP and WSCP, please contact Laura Holder, Utilities Division Program Manager, via email at LHolder@co.slo.ca.us or by phone at (805) 781-5135.

Sincerely,

LAURA HOLDER
Utilities Division Program Manager

CF 340.142.01

Appendix B: Resolution(s)

Appendix C: Public Hearing Notice(s)

Appendix D: 2014 Low Reservoir Response Plan

BEFORE THE BOARD OF SUPERVISORS

of the

SAN LUIS OBISPO COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

Tuesday, August 24, 2021

PRESENT: Supervisors John Peschong, Bruce S. Gibson, Dawn Ortiz-Legg, Debbie Arnold and Chairperson Lynn Compton

ABSENT: None

RESOLUTION NO. 2021-183

RESOLUTION ADOPTING CERTAIN POLICIES AND PROCEDURES IN THE LOW RESERVOIR RESPONSE PLAN (LRRP) FOR THE SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT ZONE 3, AUTHORIZING THE DIRECTOR OF PUBLIC WORKS TO IMPLEMENT THE LRRP; AND FINDING THAT THE PROJECT IS EXEMPT FROM SECTION 21000 ET SEQ. OF THE CALIFORNIA PUBLIC RESOURCES CODE (CEQA)

The following Resolution is hereby offered and read:

WHEREAS, the San Luis Obispo County Flood Control and Water Conservation District ("District") constructed, owns and operates the Lopez Dam and Reservoir, the Lopez Water Treatment Facilities, and the Lopez Water Conveyance System; and

WHEREAS, the District and the City of Grover Beach, the City of Pismo Beach, the City of Arroyo Grande, the Oceano Community Services District and County of San Luis Obispo Service AreaNo. 12 (collectively, the "Zone 3 Contractors") entered into Water Supply Contracts in or around August 2000, providing that the District shall supply certain quantities of water to the Zone 3 Contractors,and providing that the Zone 3 Contractors shall make certain payments to the District, and setting forth the terms and conditions of such supply and payment (collectively, the "Water Supply Contracts"); and

WHEREAS, the Water Supply Contracts provide for the distribution of Entitlement water(a combined 4,530 acre-feet per year among the Zone 3 Contractors) and Surplus Water to the Zone 3 Contractors as well as for the distribution of certain downstream releases (not to exceed 4,200 acre-feet per year unless required by law) subject to the priorities, conditions and limitations set forth therein; and

WHEREAS, on July 13, 2021, the San Luis Obispo County Board of Supervisors ("Board") proclaimed a local emergency due to ongoing drought conditions; and

WHEREAS, Article 4 of the Water Supply Contracts provides that the District can curtail delivery of water to the Zone 3 Contractors in certain situations, including but not limited to, drought conditions; and

WHEREAS, the District and the Zone 3 Contractors prepared a Low Reservoir Response Plan in 2014, attached hereto as Attachment 1 ("LRRP"), in consultation with local agricultural operations, for the purpose of providing some predictability regarding the quantities of water that will be delivered to the Zone 3 Contractors during droughts and other declared emergencies when less than twenty thousand (20,000) acre-feet of water is stored in the Lopez Reservoir; and

WHEREAS, on December 16, 2014, the District adopted a resolution similar to this Resolution, namely Resolution No. 2014-377 ("Prior Adoption Resolution"), adopting certain policies and procedures set forth in the LRRP in response to the last drought (proclamation of local emergency declared by the Board on March 11, 2014, and terminated on May 23, 2017); and

WHEREAS, on August 22, 2017 and notwithstanding the termination of the proclamation of local emergency and the fact that the LRRP was therefore no longer in effect by its terms, the District adopted Resolution No. 2017-218 ("2017 Resolution") pursuant to which it authorized the Director of Public Works to continue to implement the policies and procedures adopted in the Prior Adoption Resolution, particularly those provisions related to the availability of Emergency Drought Relief Water based on certain findings therein, and the District continued to make such water available until March 31, 2018;and

WHEREAS, consistent with the intent of LRRP as further described in the Prior Adoption Resolution, implementation of the initial prescribed actions and adaptive management approach together provided that the needs of the Zone 3 Contractors and the beneficiaries of downstream releases were met during the last drought; and

WHEREAS, all of the Zone 3 Contractors adopted resolutions supporting, endorsing, or approving the LRRP when it was originally developed in 2014 and the Zone 3 Advisory Committee did, at itsJuly 15, 2021 meeting, approve a recommendation that the District again implement the LRRP due to the current drought.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED by the Board of Supervisors of the San Luis Obispo County Flood Control and Water Conservation District, State of California, that:

1. Pursuant to the July 13, 2021 County of San Luis Obispo proclamation of a local emergency due to ongoing drought conditions and Article 4 of the Water Supply Contracts, the District plans to reduce water Entitlements (as defined in the Water Supply Contracts), as described in the initial prescribed actions set forth in the LRRP ("Initial Prescribed Actions"), subject to any adjustments made through implementation of the adaptive management provision contained in the LRRP in accordance with Paragraph 4 below, provided that Entitlement and Surplus Water deliveries do not vary more than ten percent (10%) from the amounts described in the Initial PrescribedActions.

2. The District plans to use its authority pursuant to the July 13, 2021 County of San Luis Obispo proclamation of a local emergency due to ongoing drought conditions to make available "Emergency Drought Relief Water" as necessary to implement the Extended Delivery Provision described in Section 3.6 of the LRRP.

3. The District is relying on the commitments of the Zone 3 Contractors to request and accept only an amount of "Surplus Water" attributable to each agency's unused Entitlement from the previous Water Year, and makes this Resolution based, in part, on these commitments.

4. The Director of Public Works has the exclusive authority to make adjustments to the Entitlement and Surplus Water deliveries described in the Initial Prescribed Actions in accordance with the adaptive management provision of the LRRP and in coordination with the Zone 3 Technical Advisory Committee and the Zone 3 Advisory Committee provided that Entitlement and Surplus Water deliveries do not vary more than ten percent (10%) from the amounts described in the Initial Prescribed Actions.

5. If the Zone 3 Advisory Committee submits a request to the District and the Director of Public Works determines based on documented findings that conditions warrant a grant of the request (similar to those findings included in the 2017 Resolution), the Director of Public Works may continue to make available or credit Emergency Drought Relief Water or carryover water to the Zone 3 Contractors as necessary to implement the Extended Delivery Provision described in Section 3.6 of the LRRP for up to three (3) years after termination of the LRRP by its terms(i.e. either termination of the proclamation of local emergency or the volume of water in the LopezReservoir exceeds twenty thousand (20,000) acre feet). Notwithstanding any action by the Director of Public Works, once the LRRP terminates, the District will calculate and declare the amount of Surplus water available in accordance with the Water Supply Contracts.

6. Nothing contained herein modifies the District's duty or power to meet downstream release requirements.

7. In the event of a conflict between the terms of this Resolution and the policies and procedures set forth in the LRRP, the terms of this Resolution shall control.

8. The action of adopting policies and procedures set forth in the LRRP for San Luis Obispo County Flood Control and Water Conservation District Zone 3 is exempt from the California Environmental Quality Act ("CEQA") pursuant to CEQA Section 21080(b)(4) and CEQA Guidelines Section 15269(c) in that adopting policies and procedures set forth in the LRRP is a specific action necessary to prevent or mitigate an emergency and CEQA Guidelines Section 15061(b)(3) in that it can be seen with certainty that there is no possibility that permitting the Director of Public Works to continue to make water available for a limited time after termination of the LRRP may have a significant effect on the environment.

Upon motion of Supervisor Ortiz-Legg, seconded by Supervisor Gibson, and on the following roll call vote, to wit:

AYES: Supervisors Ortiz-Legg, Gibson, Peschong, Arnold and Chairperson Compton

NOES: None

ABSENT: None

ABSTAINING: None

the foregoing resolution is hereby adopted on the 24th day of August, 2021.

Lynn Compton
Chairperson of the Board of Supervisors

ATTEST:

WADE HORTON
Ex-Officio Clerk of the Board of Supervisors

By: T'Ana Christiansen
Deputy Clerk

(SEAL)

APPROVED AS TO FORM AND LEGAL EFFECT:

RITA L. NEAL
County Counsel

By: /s/ Erica Stuckey
Deputy County Counsel

Dated: July 27, 2021

STATE OF CALIFORNIA) ss.
COUNTY OF SAN LUIS OBISPO)

I, **WADE HORTON**, Ex-Officio Clerk of the Board of Supervisors thereof, do hereby certify the foregoing to be a full, true and correct copy of an order entered in the minutes of said Board of Supervisors, and now remaining of record in my office.

Witness, my hand and seal of said Board of Supervisors on August 26, 2021.

WADE HORTON,
Ex-Officio Clerk of the Board of Supervisors

By: T'Ana N. Christiansen
Deputy Clerk

L:\Utilities\2021_Resolutions\Adopting Policies and Procedures for LRRP rsl.doc

ATTACHMENT 1

Low Reservoir Response Plan

for the

San Luis Obispo County Flood Control and Water Conservation District Zone 3

December 16, 2014

Table of Contents

1 INTRODUCTION, PURPOSE AND PLAN ADOPTION

The Low Reservoir Response Plan (LRRP) describes a set of actions that the San Luis Obispo County Flood Control and Water Conservation District (District) Zone 3 will implement when the amount of water in storage within the Lopez Reservoir drops below 20,000 Acre-Feet (AF) provided that the District's Board of Supervisors has declared an emergency related to Zone 3. The purpose of the LRRP is to limit downstream releases and municipal diversions from Lopez Reservoir during periods of low reservoir storage (i.e. less than 20,000 AF) to preserve water within the reservoir, above the minimum pool level, for a minimum of 3 to 4 years under continuing drought conditions. The criteria for reducing municipal diversions and downstream releases are summarized in Section 3.

Droughts have unpredictable impacts on water supplies. The duration of droughts and the actual amount of rainfall and run-off during droughts can differ significantly. As a result, the LRRP has been developed to provide an initial set of prescribed actions combined with an adaptive management approach. The purpose of the LRRP is to act as the guiding document during drought emergencies, as outlined in the Interim Downstream Release Schedule (IDRS). The initial prescribed actions establish baseline actions, and several adaptive management scenarios are included so that actual hydrological conditions can be evaluated during a drought. In summary, ongoing evaluation of actual hydrological conditions is needed during a drought, and through the adaptive management approach, prescribed actions can be modified, if needed, so that the 3-4 year target can be achieved.

The District's Board of Supervisors (BOS) is responsible for final adoption of the LRRP. Prior to adoption by the Board of Supervisors, the following steps are necessary:

1. Development of the draft LRRP guided by the Zone 3 Technical Advisory Committee (TAC).
2. Review of the draft LRRP with Zone 3 agricultural stakeholders.
3. Consideration of policy direction that may be provided by any of the governing boards of the Zone 3 agencies as the draft LRRP is being developed.
4. Review and approval by the Zone 3 Advisory Committee (AC).
5. Formal approval by the governing boards of the Zone 3 member agencies, by resolution, with appropriate findings to address the following:
    a. The California Environmental Quality Act (CEQA).
    b. Emergency provisions that are unique and necessary to the LRRP, but which may differ from contract provisions that control Zone 3 operations and deliveries during normal operating conditions.
6. Final approval by the BOS.
7. Enacting the LRRP as described in this document and outlined in Appendix A.

2 BACKGROUND

Since completion of its construction in 1969, the Lopez reservoir has experienced extended periods of low reservoir inflow that have led to decreased storage levels within the lake. Analysis of historical storage data from Lopez Reservoir identified that the lowest storage water level (16,455 AF) within the reservoir

occurred in November of 1992. Figure 1 shows monthly storage levels within Lopez Reservoir since April 1969. Since 1992, there have been significant changes in dam operations, (e.g. Interim Downstream Release Schedule (IDRS) implementation) that affect the amount of water that is released and diverted from the reservoir on an annual basis. Modified operations and historic drought conditions have highlighted the need for evaluation of LRRP reduction scenarios.

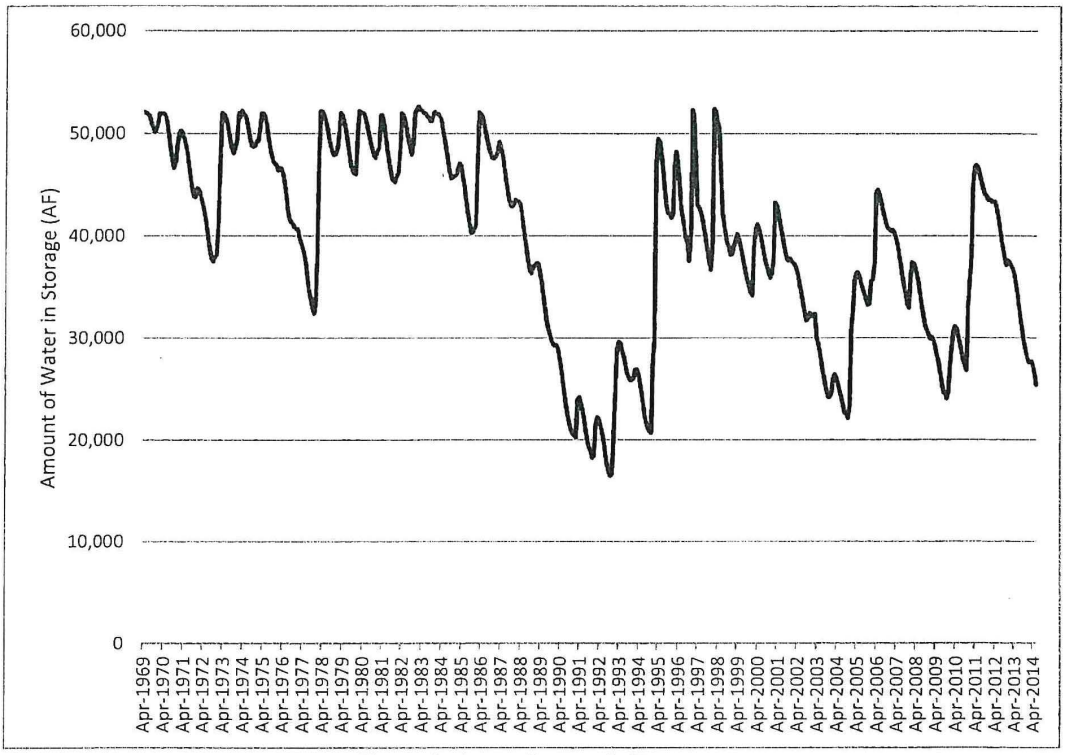


Figure 1. Lopez Reservoir Storage

3 LRRP ELEMENTS

3.1 ENACTING THE LRRP AND INITIAL PRESCRIBED ACTIONS

The LRRP is automatically enacted if the total volume of water in the Lopez Reservoir falls below 20,000 AF and the BOS has declared an emergency related to Zone 3. The initial prescribed actions, once the LRRP is enacted, are as follows:

- Reductions in entitlement water deliveries as set forth in Table 1; and
- Reductions in downstream releases as set forth in Table 2, with actual releases timed to best meet the needs of agricultural stakeholders and to address environmental requirements; and
- No new allocations of Surplus Water from unreleased downstream releases; and

- Extension of time that agencies can take delivery of existing unused water; throughout the duration that the Drought Emergency is in effect, subject to evaporation losses if the water is not used in the year originally allocated.

3.2 ADAPTIVE MANAGEMENT

To provide the District, the Zone 3 agencies and agricultural stakeholders with sufficient flexibility to adapt to changing drought conditions and to address the environmental requirements, the LRRP includes an adaptive management component that allows the initial prescribed actions to be modified and adapted to the specific drought conditions. The steps for modifying the initial prescribed actions are outlined below and are show in Appendix A.

1. The TAC will review several factors including the time of year that the LRRP is enacted, when the reservoir level drops to lower triggers, and Hydrologic Conditions including but not limited to: predicted climatic conditions; anticipated reservoir inflow; and the availability of the Zone 3 agencies' other water supplies.
2. If determined to be necessary, the TAC will make a recommendation to the AC on a strategy for modifying the initial prescribed actions, hereafter referred to as an Adaptive Management Strategy.
3. Upon review of the TAC's recommendation, the AC will vote to approve, deny, modify or continue consideration of the Adaptive Management Strategy for a period not to exceed 30 days, at which time the AC will act to approve, deny or modify. If approved by the AC, the Adaptive Management Strategy will be implemented 14 days following its approval. If the Adaptive Management Strategy is approved, denied, or modified by the AC, AC members, Zone 3 member agencies, and other 3rd parties in interest may appeal to the BOS, within 14 days. If no appeal is made to the BOS, the AC action will be final.
4. If appealed to the BOS, the BOS action shall be final.

3.3 REDUCTION & RECOVERY TRIGGERS

To provide the District, Zone 3 agencies and the agricultural stakeholders with an initial framework for water supply planning, Reduction & Recovery Triggers, tied to the amount of water within the reservoir, were developed for the LRRP. Under the initial prescribed actions the Reduction & Recovery Triggers were set for the following storage levels: 20,000; 15,000; 10,000; 5,000; and 4,000 AF. As the amount of water in the reservoir drops below or rises above these triggers, the TAC will review the hydrologic condition and if necessary, utilize adaptive management to modify municipal diversions and downstream releases to meet the objectives of the LRRP.

Example scenarios provided in Appendix B show how the reservoir would respond to the implementation of the initial prescribed actions and an alternate reduction strategy under various historical hydrological patterns.

3.4 MUNICIPAL DIVERSION REDUCTIONS

Upon enactment of the LRRP, the initial prescribed actions dictate that municipal diversions are to be reduced according to the reduction strategy described in Table 1, which includes Reduction Triggers, reduction percentages and resulting municipal diversions. This municipal diversion reduction strategy may be modified through adaptive management, following the protocol outlined in Section 3.2.

Table 1. Initial Prescribed Municipal Diversion Reduction Strategy

Amount of Water In Storage (AF)	Municipal Diversion Reduction	Municipal Diversion (AFY)[1]
20,000	0%	4,530
15,000	10%	4,077
10,000	20%	3,624
5,000	35%[2]	2,941
4,000	100%	0

3.5 DOWNSTREAM RELEASE REDUCTIONS

Upon enactment of the LRRP, the initial prescribed actions dictate that downstream releases are to be reduced according to the reduction strategy described in

[1] The actual amount of water diverted may vary as agencies extend the delivery of their Lopez Entitlement, as described in Section 3.6.

[2] The 35% reduction provides sufficient water to supply 55 gallons per capita per day (GPCD) for the estimated population of the Zone 3 agencies (47,696 in 2010 per the 2010 Zone 3 UWMP). 55 GPCD is the target residential indoor water usage standard used in California Department of Water Resource's 2010 UWMP Method 4 Guidelines.

Table 2, which includes Reduction Triggers, reduction percentages and resulting downstream releases. The Initial Prescribed Downstream Release Reduction Strategy was developed through a collaborative process that included input from the District and agriculture and municipal stakeholders. The resulting downstream releases represent the maximum amount of water that can be released. The District will control the timing of the reduced releases to meet the needs of the agricultural stakeholders and to address environmental requirements. This downstream release reduction strategy may be modified through adaptive management, following the protocol outlined in Section 3.2.

Table 2. Initial Prescribed Downstream Release Reduction Strategy

Amount of Water In Storage (AF)	Downstream Release Reduction	Downstream Releases (AFY)[3]
20,000	9.5%	3,800
15,000	9.5%	3,800
10,000	75.6%	1,026
5,000	92.9%	300
4,000	100.0%	0

3.5.1 HCP Reduction Strategy

An alternate downstream reduction strategy that could be implemented through adaptive management includes the Habitat Conservation Plan (HCP) Reduction Strategy. Under the HCP Reduction Strategy, downstream releases would be reduced according criteria outlined in the proposed HCP Water Release Program for consecutive low inflow years. Under this strategy, downstream releases would be either 3 cfs or equal to the average inflow over the previous 14-day period, whichever is less.

3.6 EXTENDED DELIVERY PROVISIONS

Once the LRRP is enacted, and in order to promote conservation and a reduction in the demand on Zone 3 water, Zone 3 member agencies will be provided the ability to extend the time that they may have water delivered, while the BOS drought emergency is in effect. The following is how water allocations to Zone 3 member agencies will be determined at the beginning of each water year while the LRRP is in effect. It is important to note that during a water year, increases and decreases in allocations are possible as a result of adaptive management strategies.

1. At the end of each Water Year (WY) (March 31st), the amount of unused Lopez water from the previous WY will be calculated and documented for each member agency for later use.
2. On April 1st, the quantity of Entitlement Water for the new WY will be documented for each agency in accordance with the LRRP determinations. Unused water from the prior WY is subject to evaporation losses, which are further described in Section 3.6.1.

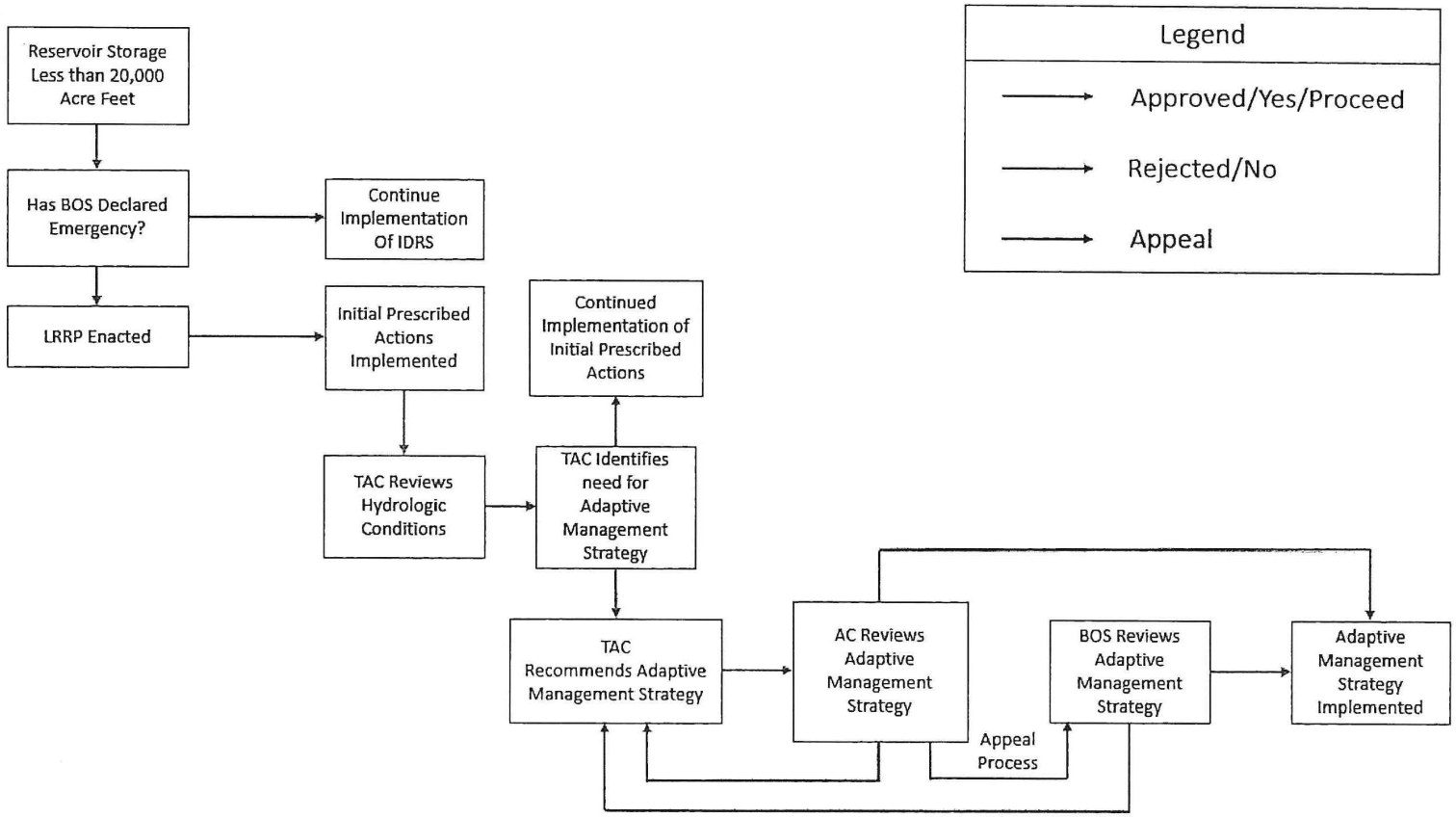
[3] These downstream releases represent the maximum amount of water that can be released. Actual releases may be less if releases can be reduced while still meeting the needs of the agricultural stakeholders and addressing the environmental requirements.

3.6.1 Evaporation Losses

While unused water from the prior WY is retained within the Lopez Reservoir, it is subject to evaporation losses. Evaporation losses are to be calculated quarterly and applied to the total amount of unused prior WY water retained by each agency at the end of the quarter. Evaporation losses will be calculated by comparing the surface area of the reservoir with the unused water against what the surface area would be if there were no unused water retained in the reservoir. Evaporation estimates from the District's weather station would then be applied to the difference in surface area to calculate the increased evaporation losses due to the storage of the unused water. The unused water evaporation losses will be subtracted from each agency's unused water at a rate proportional to the amount of unused water retained by each individual agency.

APPENDIX A. LRRP ENACTMENT & ADAPTIVE MANAGEMENT FLOW CHART

LRRP Enactment & Adaptive Management Flow Chart



APPENDIX B. REDUCTION STRATEGY EVALUATION

Scenario A-1-Water Year 1989/90 Inflow & Rainfall — **Initial Prescribed Reduction Strategy**

Year	Inflow[1]	Rainfall[1]	Evap.[2]	Municipal Reduction[3]	Municipal Diversions[3]	Downstream Releases[4]	Change in Storage	Total Storage
0								20,000
1	7,440	465	2,240	0%	4,530	3,800	-6,666	13,334
2	7,440	465	1,691	10%	4,077	3,800	-5,664	7,671
3	7,440	465	1,260	20%	3,624	1,026	-2,006	5,665
4	7,440	465	1,077	20%	3,624	1,026	-1,823	3,842

[1] Value assumed to be same as Water Year 1989/90 measurement.

[2] Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year's total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

[3] Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the storage at the end of the water year and municipal reduction assumptions.

[4] Release volumes are controlled by the Initial Prescribed Downstream Release Reduction Strategy, which was developed through a collaborative effort by the District and agriculture and municipal stakeholders.

Scenario A-2-Water Year 1989/90 Inflow & Rainfall — **Potential Adaptive Management Scenario-HCP Reduction Strategy**

Year	Inflow[1]	Rainfall[1]	Evap.[2]	Municipal Reduction[3]	Municipal Diversions[3]	Downstream Releases[4]	Change In Storage	Total Storage
0								20,000
1	7,440	465	2,240	0%	4,530	2,060	-4,926	15,074
2	7,440	465	1,808	0%	4,530	2,060	-4,493	10,582
3	7,440	465	1,494	10%	4,077	2,060	-3,726	6,856
4	7,440	465	1,188	20%	3,624	2,060	-2,968	3,888

[1] Value assumed to be same as Water Year 1989/90 measurement.

[2] Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year's total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the amount of water in storage at the end of the water year and municipal reduction assumptions.

[4] Release volumes are assumed to be equivalent to a release rate of 3 cfs or 181 AF/Month or equal to the amount of inflow to the reservoir for that month, whichever is less. This scenario is based on the HCP Hydrologic Analyses report recommended release program provision that sets the maximum release at 3 cfs or the average inflow to the reservoir over the previous 14-day period, when the 3-year running average inflow to Lopez Reservoir is less than 26,190 AFY.

Scenario B-1- Water Year 2013/14
Inflow & Rainfall **Initial Prescribed Reduction Strategy**

Year	Inflow[1]	Rainfall [1]	Evap. [2]	Municipal Reduction [3]	Municipal Diversions [3]	Downstream Releases [4]	Change in Storage	Total Storage
0								20,000
1	1,519	337	2,240	0%	4,530	3,800	-8,714	11,286
2	1,519	337	1,546	10%	4,077	3,800	-7,567	3,719
3	1,519	337	870	100%	0	0	986	4,705
4	1,519	337	980	35%	2,941	300	-2,364	2,340

Value assumed to be same as Water Year 2013/2014 measurement.

[2] Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year's total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

[3] Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the storage at the end of the water year and municipal reduction assumptions.

[4] Release volumes are controlled by the Initial Prescribed Downstream Release Reduction Strategy, which was developed through a collaborative effort by the District and agriculture and municipal stakeholders.

Scenario B-2- Water Year 2013/14
Inflow & Rainfall **Potential Adaptive Management Scenario-HCP Reduction Strategy**

Year	Inflow[1]	Rainfall [1]	Evap. [2]	Municipal Reduction [3]	Municipal Diversions [3]	Downstream Releases [4]	Change in Storage	Total Storage
0								20,000
1	1,519	337	2,240	0%	4,530	1,253	-6,167	13,833
2	1,519	337	1,725	10%	4,077	1,253	-5,199	8,633
3	1,519	337	1,341	20%	3,624	1,253	-4,362	4,272
4	1,519	337	933	35%	2,941	1,253	-3,271	1,001

[1] Value assumed to be same as Water Year 2013/2014 measurement.

[2] Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year's total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the amount of water in storage at the end of the water year and municipal reduction assumptions.

[4] Release volumes are assumed to be equivalent to a release rate of 3 cfs or 181 AF/Month or equal to the amount of Inflow to the reservoir for that month, whichever is less. This scenario is based on the HCP Hydrologic Analyses report recommended release program provision that sets the maximum release at 3 cfs or the average inflow to the reservoir over the previous 14-day period, when the 3-year running average inflow to Lopez Reservoir is less than 26,190 AFY.

Scenario C-1- Average of Water Years 2012/13-2013/14 Inflow & Rainfall **Initial Prescribed Reduction Strategy**

Year	Inflow[1]	Rainfall [1]	Evap. [2]	Municipal Reduction [3]	Municipal Diversions [3]	Downstream Releases [4]	Change in Storage	Total Storage
0								20,000
1	2,176	806	2,240	0%	4,530	3,800	-7,588	12,412
2	2,176	806	1,627	10%	4,077	3,800	-6,522	5,890
3	2,176	806	1,099	20%	3,624	1,026	-2,767	3,123
4	2,176	806	798	100%	0	0	2,184	5,307

[1] Value assumed to be same as 2 year average from Water Year 2012/13 through 2013/2014 measurement.

[2] Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year's total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

[3] Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the storage at the end of the water year and municipal reduction assumptions.

[4] Release volumes are controlled by the Initial Prescribed Downstream Release Reduction Strategy, which was developed through a collaborative effort by the District and agriculture and municipal stakeholders.

Scenario C-2- Average of Water Years 2012/13-2013/14 Inflow & Rainfall **Potential Adaptive Management Scenario-HCP Reduction Strategy**

Year	Inflow[1]	Rainfall [1]	Evap. [2]	Municipal Reduction [3]	Municipal Diversions [3]	Downstream Releases [4]	Change in Storage	Total Storage
0								20,000
1	2,176	806	2,240	0%	4,530	1,435	-5,223	14,777
2	2,176	806	1,788	10%	4,077	1,435	-4,318	10,458
3	2,176	806	1,484	10%	4,077	1,435	-4,014	6,444
4	2,176	806	1,151	20%	3,624	1,435	-3,228	3,216

[1] Value assumed to be same as 2 year average from Water Year 2012/13 through 2013/2014 measurement.

Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year's total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

[3] Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the amount of water in storage at the end of the water year and municipal reduction assumptions.

[4] Release volumes are assumed to be equivalent to a release rate of 3 cfs or 181 AF/Month or equal to the amount of inflow to the reservoir for that month, whichever is less. This scenario is based on the HCP Hydrologic Analyses report recommended release program provision that sets the maximum release at 3 cfs or the average inflow to the reservoir over the previous 14-day period, when the 3-year running average inflow to Lopez Reservoir is less than 26,190 AFY.

Scenario D-1- Average of Water Years 2011/12-2013/14 Inflow & Rainfall

Initial Prescribed Reduction Strategy

Year	Inflow[1]	Rainfall [1]	Evap. [2]	Municipal Reduction [3]	Municipal Diversions [3]	Downstream Releases [4]	Change in Storage	Total Storage
0								20,000
1	4,305	827	2,240	0%	4,530	3,800	-5,438	14,562
2	4,305	827	1,774	10%	4,077	3,800	-4,519	10,044
3	4,305	827	1,453	10%	4,077	3,800	-4,197	5,847
4	4,305	827	1,095	20%	3,624	1,026	-612	5,235

[1] Value assumed to be same as 3 year average from Water Year 2011/12 through 2013/2014 measurement.

[2] Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year's total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

[3] Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the storage at the end of the water year and municipal reduction assumptions.

[4] Release volumes are controlled by the Initial Prescribed Downstream Release Reduction Strategy, which was developed through a collaborative effort by the District and agriculture and municipal stakeholders.

Scenario D-2- Average of Water Years 2011/12-2013/14 Inflow & Rainfall

Potential Adaptive Management Scenario-HCP Reduction Strategy

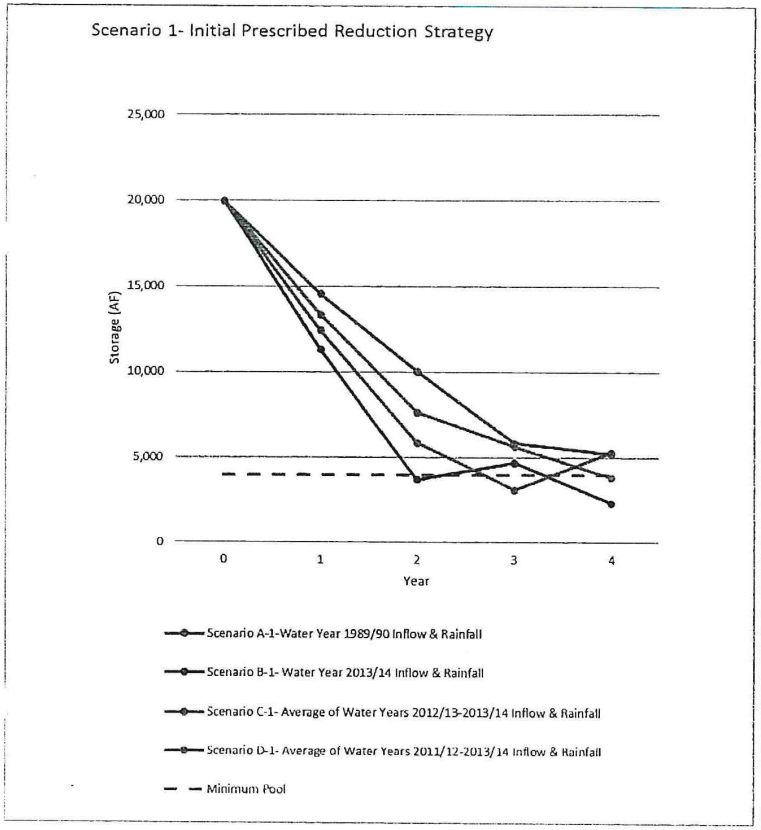
Year	Inflow[1]	Rainfall [1]	Evap. [2]	Municipal Reduction [3]	Municipal Diversions [3]	Downstream Releases [4]	Change in Storage	Total Storage
0								20,000
1	4,305	827	2,240	0%	4,530	1,681	-3,318	16,682
2	4,305	827	1,878	0%	4,530	1,681	-2,956	13,726
3	4,305	827	1,718	10%	4,077	1,681	-2,343	11,383
4	4,305	827	1,553	10%	4,077	1,681	-2,178	9,205

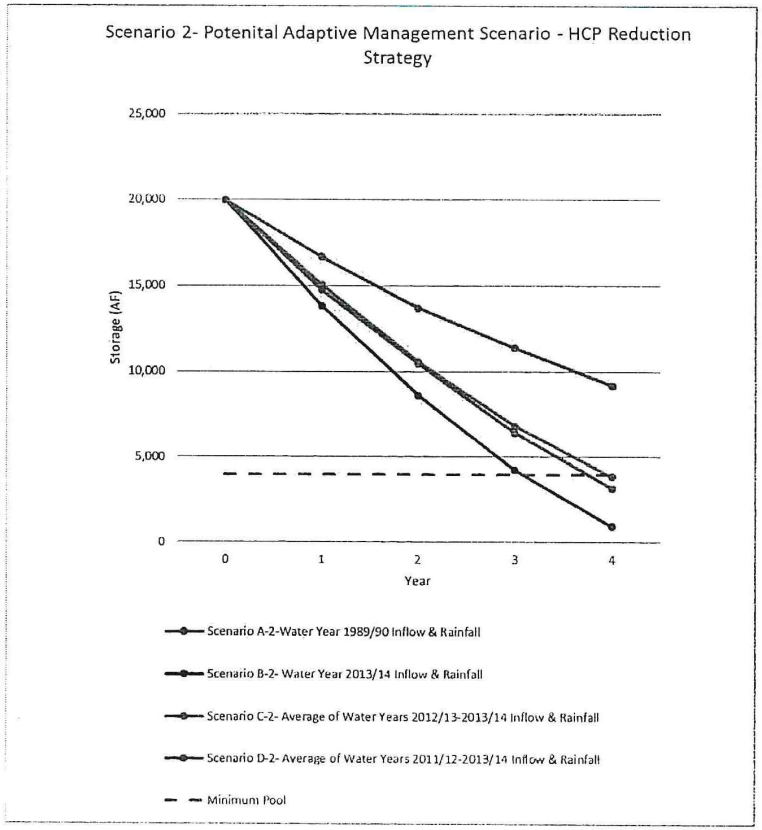
[1] Value assumed to be same as 3 year average from Water Year 2011/12 through 2013/2014 measurement.

[2] Evaporation assumed to equal the maximum historical value between April 1970 and March 2014 (76.25 in/yr in WY 1971-72) applied to the previous year's total lake surface area. Lake surface area estimated based on a lookup table provided by the County, which uses a 2002 survey to correlate reservoir elevation, storage, and surface area.

[3] Municipal diversions are assumed to be the same as the contract amount for the duration of the first year. Years following are dependent upon the amount of water in storage at the end of the water year and municipal reduction assumptions.

[4] Release volumes are assumed to be equivalent to a release rate of 3 cfs or 181 AF/Month or equal to the amount of inflow to the reservoir for that month, whichever is less. This scenario is based on the HCP Hydrologic Analyses report recommended release program provision that sets the maximum release at 3 cfs or the average inflow to the reservoir over the previous 14-day period, when the 3-year running average inflow to Lopez Reservoir is less than 26,190 AFY.


Scenario 1- Initial Prescribed Reduction Strategy
25,000
20,000
15,000
10,000
5,000
0
Storage (AF)
0
1
2
3
4
Year
Scenario A-1-Water Year 1989/90 Inflow & Rainfall
Scenario B-1- Water Year 2013/14 Inflow & Rainfall
Scenario C-1- Average of Water Years 2012/13-2013/14 Inflow & Rainfall
Scenario D-1- Average of Water Years 2011/12-2013/14 Inflow & Rainfall
Minimum Pool


Scenario 2- Potenital Adaptive Management Scenario - HCP Reduction Strategy
25,000
20,000
15,000
10,000
5,000
0
Storage (AF)
0
1
2
3
4
Year
Scenario A-2-Water Year 1989/90 Inflow & Rainfall
Scenario B-2- Water Year 2013/14 Inflow & Rainfall
Scenario C-2- Average of Water Years 2012/13-2013/14 Inflow & Rainfall
Scenario D-2- Average of Water Years 2011/12-2013/14 Inflow & Rainfall
Minimum Pool

Appendix E: Multijurisdictional Hazard Mitigation Plan

https://www.slocounty.ca.gov/departments/administrative-office/office-of-emergency-services/forms-documents/2025-draft-multi-jurisdictional-hazard-mitigation-plan/2025-san-luis-obispo-county-multi-jurisdictional-hazard-mitigation-plan

Appendix F: Lopez Dam Flooding and Evacuation Brochure

DON'T BE SCARED! BE PREPARED!
LEARN THE 7 KEYS TO SURVIVAL

1. Be familiar with evacuation routes, and know how to find higher ground.

2. Have a family plan that includes;
   - Name and telephone number of someone outside the area
   - Know your children's schools emergency plans.
   - Special arrangements for the disabled, elderly, or very young.

   Visit prepareslo.org for more tips.

3. If you are disabled or do not have transportation, make evacuation plans with neighbors now. Public transportation may not be available.

4. Prepare your own "Grab & Go" kit now. Include essential items such as a portable radio with extra batteries, drinkingwater, flashlight, pen and paper, medications and a whistle.

5. Listen for the sirens or other alert and notification systems and be prepared to self-evacuate after a strong earthquake. A strong earthquake is one that can overturn heavy furniture or cause brick chimneys to fall. Don't wait for officials to notify of evacuation, get to high ground immediately!

6. Listen to emergency instructions on the radio during and after a disaster (920 AM, 90.1 FM or 98.1 FM).

7. Use common sense and try to stay calm. *Stay safe and you can help others!*

NEED MORE INFORMATION? HAVE QUESTIONS?

- Call SLO County Office of Emergency Services at
  805 - 787 - 5011
  or visit
  ReadySLO.org
- During an emergency: **805 - 543- 2444**
- For Lopez Dam information, FAQ's, and an interactive flood map visit:
  www.slocounty.ca.gov/pw/zone3
- Or call Public Works at: **805 - 781 - 5252**

PARA MÁS INFORMACIÓN:

- Llame a la oficina de Servicios de Emergencia del Condado de San Luis Obispo al
  805 - 787 - 5011
  or visité
  ReadySLO.org
- Durante una emergencia: **805 - 543- 2444**
- Para información de la Represa Lopez, presuntes frecuences, y un mapa interctivo de la zona de inundacioú visite:
  www.slocounty.ca.gov/pw/zone3
- O lleme a la oficina de Trabajos Públicos al:
  805 - 781 - 5252

SAFETY INFORMATION

ON LOPEZ DAM FLOODING AND EVACUATION

INFORMACIÓN DE SEGURIDAD: EVACUACION EN CASO DE INUNDACION CAUSADA POR LA REPRESA LOPEZ

COUNTY of SAN LUIS OBISPO

AN INFORMATION BOOKLET FROM:
THE COUNTY OF SAN LUIS OBISPO

WHY DO I NEED TO BE PREPARED FOR FLOODING FROM LOPEZ DAM?

- While Lopez Dam was seismically retrofitted in 2002, a very strong earthquake could lead to catastrophic flooding in areas downstream of the dam.
- If you live or work in the Lopez Dam flood zone, you need to be prepared in the unlikely event of a failure of Lopez Dam. This includes portions of the Arroyo Grande Valley, the cities of Arroyo Grande, Grover Beach, Pismo Beach and Oceano.
- The distance from Lopez Dam to the city of Arroyo Grande is about seven miles. In the event that a strong earthquake causes the dam to fail, water could flood parts of Arroyo Grande in less than 45 minutes.
- Parts of Oceano, Grover Beach and Pismo Beach would also be flooded about an hour after the earthquake.

This is why you and your family need to be prepared to evacuate immediately in the case of a strong earthquake if you are in the flood zone.

To learn more about alert & warning systems that can be sent to your phone or other device go to:

www.prepareslo.org/alerts

Do not wait for official warning!

¡NO SE ASUSTE! ¡ESTÉ PREPARADO!

APRENDA LAS 7 CLAVES PARA SOBREVIVIR

1. Esté familiarizado con las rutas de evacuación y sepa como llegar a un lugar más elevado.
2. Tenga un plan familiar que incluya:
   - El nombre y número de telefono de una persona que viva fuera del área de peligro.
   - Planes de evacuación de la escuela de sus hijos.
   - Arreglos especiales para los minusválidos, ancianos, o bebes.

   visite prepareslo.org para mas sugerencias
3. Si usted esta incapacitado o no tiene medio de transportación, prepare un plan de evacuación con su vecino ahora. Trans-porte público puede no estar disponible.
4. Prepare su propio "Equipo de Emergencia" ahora. Incluya lo esencial, como un radio portátil con baterias extras, agua de beber, linterna, papel y lápiz, sus me-dicinas y un silbato.

5. Preste atención a las sirenas de alerta y esté preparado para evacuar después de un fuerte terremoto. Un fuerte terremoto es uno que tumba muebles pesados o quiebra la chimenea. No espere una notif icion of icial, vaya a un lugarel evado inmediatamente!
6. Escuche el radio para instrucciones de emergencia durante y después del desastre (920 AM, 1400 AM o 98.1 FM).
7. Use su sentido común y trate de manten-erse calmado. *¡Permanezca fuera de peligro para poder ayudar a otros!*

¿POR QUÉ DEBO ESTAR PREPARADO SI LA REPRESA LOPEZ CAUSA UNA INUNDACIOŃ?

- Aunque la Represa Lopez fue sísmicamente actualizada en el 2002, un fuerte terremoto puede causar una inundación catastrófica en las zonas descendientes de la represa.
- Si usted vive o trabaja en la zona de inundación, necesita estar preparado en el remoto caso de que la represa falle. Esto incluye partes del valle y ciudad de Arroyo Grande, Grover Beach, Pismo Beach y Oceano.
- La distancia entre la Represa Lopez y la ciudad de Arroyo Grande es aproximadamente siete millas. En caso de que la represa falle, el agua podría inundar partes de Arroyo Grande en menos de 45 minutos.
- Partes Océano, Grover Beach y Pismo Beach tambien se inundarían aproximedamente una hora después del terremoto.

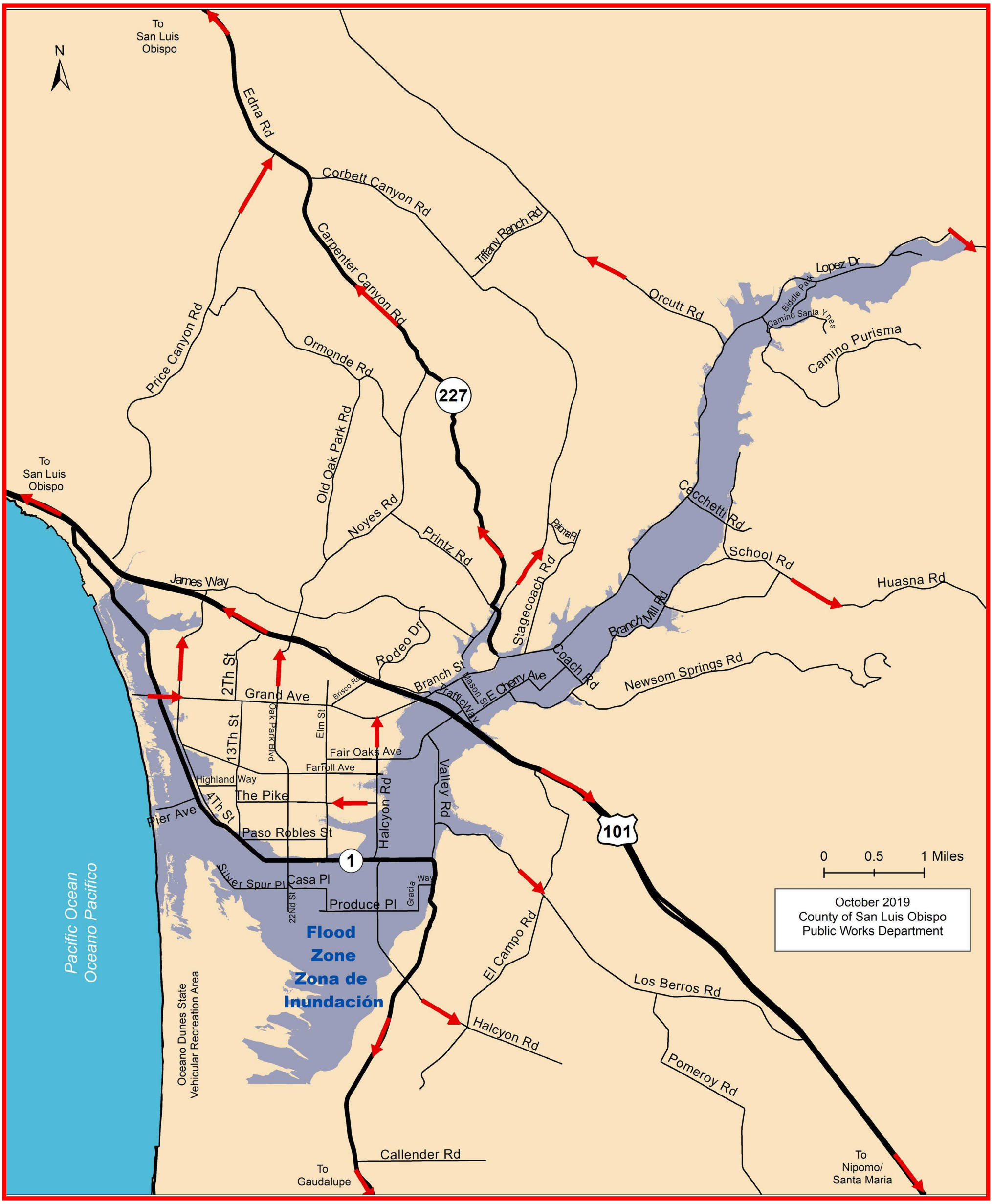
Si gusta aprender más acerca del sistema de alerta que puede ser enviado a su telefono u otro aparato visite:

www.prepareslo.org/alerts

Si usted vive o trabaja en la zona de peligro, es necesario estar preparados para evacuar inmediatamente.

¡No espere una notificacion oficial!

EVACUATION MAP | MAPA DE EVACUACIÓN



STUDY THIS MAP NOW!

1. Identify your home and workplace on this map.
2. **If your home or workplace is located in the flood zone, plan your evacuation route to higher ground now.**
3. Evacuation routes are indicated with red arrows ->
4. Stay off Highway 1 in the flood zone.
5. Do not attempt to cross any flood waters. The water would be fast moving and dangerous.

IN CASE OF EMERGENCY

- **If you feel a strong earthquake, evacuate immediately. Do not go onto a roof to avoid the flood, you must leave the flood zone!**
- If you hear the early warning system sirens, tune your radio to 920 AM, 90.1 FM or 98.1 FM and listen.

FOR A DETAILED, INTERACTIVE MAP:

slocounty.ca.gov/pw/zone3

COUNTY of SAN LUIS OBISPO