ZONE 7 WATER AGENCY

Water Shortage Contingency Plan

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Water Shortage Contingency Plan

Zone 7 Water Agency

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

ABBREVIATIONS AND ACRONYMS

AF	acre-feet
AFY	acre-feel per year
the Agency	Zone 7 Water Agency
ARSWS	Annual Review of the Sustainable Water Supply
Basin	Livermore Valley Groundwater Basin
CWC	California Water Code
DSRSD	Dublin San Ramon Water Services District
DWR	Department of Water Resources
EOC	Emergency Operations Center
ERP	Emergency Response Plan
LDV	Lake Del Valle
LHMP	Local Hazard Mitigation Plan
M&I	Municipal and Industrial
PFAS	per- and polyfluoroalkyl substances
PIO	Public Information Officer
SBA	South Bay Aqueduct
SWP	State Water Project
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
WSCP	Water Shortage Contingency Plan
WSOP	Water Supply Operations Plan
Zone 7	Zone 7 Water Agency

INTRODUCTION

Zone 7 Water Agency (referred as "Zone 7" or "the Agency") has prepared this Water Shortage Contingency Plan (WSCP) in conjunction with the 2025 Urban Water Management Plan (UWMP), following California Water Code (CWC) Section 10632. Zone 7 is a water wholesaler, meaning it sells water to other agencies that then sell it to individual water users. Zone 7 provides water to four agencies, also known as water retailers: California Water Service (Cal Water), the City of Pleasanton (Pleasanton), the City of Livermore (Livermore), and the Dublin San Ramon Water Services District (DSRSD). Additionally, Zone 7 serves treated water to a small number of direct retail customers and untreated water for agriculture. Zone 7 supplies water to approximately 270,000 people throughout the Livermore-Amador Valley, also called the Tri-Valley Area, in Alameda County, California, with a small subset of DSRSD in Contra Costa County.

In 2018, the California State Legislature enacted two policy bills, (Senate Bill 606 [Hertzberg] and Assembly Bill 1668 [Friedman]) (California State Legislature, 2018a; California State Legislature, 2018b), to establish a new foundation for drought planning to adapt to climate change and the resulting longer and more intense droughts in California. The 2018 Water Conservation Legislation set new requirements for water shortage contingency planning.

Water shortages occur when the available water supplies cannot meet the normally expected customer water demands, such as for human consumption, sanitation, fire protection, and other beneficial uses. This can be due to several reasons, such as drought, catastrophic events, regulatory action constraints, and natural and manmade disasters. This WSCP addresses events that are foreseeable and unforeseeable, further discussed in **Section 1.2**.

This WSCP helps Zone 7 meet multiple water supply and reliability goals. This plan supports Strategic Goal F – Effective Operations and advances Strategic Plan Initiative #17 – Update the Emergency Preparedness Program. Zone 7's goal is to maintain a highly reliable Municipal and Industrial (M&I) water supply system to meet existing and future demands under various water supply conditions. Zone 7's Water Supply Reliability Policy (Resolution 13-4230), adopted on October 17, 2012, is included as an attachment in **Appendix 1** to this WSCP. This WSCP describes Zone 7's strategic plan in preparation for and responses to water shortages, including water shortage stages and associated shortage response actions. This WSCP provides a guide for Zone 7 to proactively prevent catastrophic service disruptions and has been updated to be consistent with the 2018 Water Conservation Legislation requirements. As part of this WSCP, Zone 7's communication protocols, legal authorities, financial impacts, and WSCP refinement process are described.

This WSCP is meant to be dynamic so that staff may assess response action effectiveness and adapt to different types of emergencies and shortage events. Refinement procedures to this WSCP are provided to allow Zone 7 to modify this WSCP outside of the UWMP process. The following sections correspond to the requirements in the Department of Water Resources' (DWR) 2025 UWMP Guidebook.

1 WATER SUPPLY RELIABILITY ANALYSIS

1.1 Quantitative Analysis

Chapters 6 and 7 of Zone 7's 2025 UWMP present Zone 7's water supply sources and reliability, respectively. Zone 7 uses an advanced water supply management model implemented in RiverWare (CADWES 2026)[1], a water systems modeling software that simulates water system availability, operations, and infrastructure planning at a monthly timescale. Findings show Zone 7 can reliably meet its projected demands through 2050 in normal-year and single-dry-year hydrologic conditions, with some potential shortages during five consecutive dry years, which can be addressed with this WSCP.

1.2 Types of Water Shortages

Future water supplies and demands are only partially predictable, shaped by both foreseeable and unforeseeable events. Some events, such as droughts, are recurring phenomena that tend to develop over time and can be anticipated to a degree, although their severity, duration, and frequency remain uncertain and not fully predictable. Other events are inherently difficult to predict, such as earthquakes or infrastructure failures. Drought most commonly triggers water shortage events and the use of this plan, although this WSCP can be utilized for unforeseeable events as well.

Drought and expected water shortages are often driven by a combination of interconnected factors. These include State Water Project (SWP) allocations and storage levels; local hydrology affecting Lake Del Valle (LDV) water storage and Arroyo Valle water supply; other agencies' actions; and previous storage and pumping in the Main Basin, which comprises the majority of Zone 7's local groundwater. Water shortages may also be driven, not by water supply availability alone, but by lack of safe drinking water supplies. Contributing factors include Sacramento-San Joaquin Delta (Delta) water quality or contaminants in the Main Basin. Droughts are likely to last on the order of months to years.

Potential unforeseeable events triggering a water shortage for Zone 7 include seismic events affecting Zone 7 or SWP facilities; changing environmental or regulatory requirements; the occurrence of threatened/endangered species near the Banks Pumping Plant in the Delta; or infrastructure malfunctions leading to outages at treated water production, Delta, or South Bay Aqueduct (SBA) facilities. While some unforeseeable events may lead to short periods of water shortages (hours to days), other events could lead to longer shortages (months to years).

While the examples of shortage events described here are not all encompassing, they provide a sample of what this WSCP aims to prepare for. Additionally, not all events may be strictly foreseeable or unforeseeable, but proactive planning through this WSCP and related measures can ensure Zone 7 is prepared to address different types of water shortage events.

2 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

As of July 1, 2022, water suppliers are required to submit an Annual Water Supply and Demand Assessment in accordance with CWC §10632.1, and an Annual Water Shortage Assessment report. Zone 7 annually satisfies both requirements. In addition, Zone 7 has been producing the Annual Review of the Sustainable Water Supply (ARSWS) since the adoption of its Water Supply Reliability Policy in 2012. In addition to the ARSWS, Zone 7 also prepares and updates its Water Supply Operations Plan (WSOP) over

[1] https://riverware.org/.

the course of the year. The WSOP is a more detailed plan focused on the current year, but it also informs the longer-term outlook of the ARSWS.

Zone 7's ARSWS covers near-term planning of water supplies over the upcoming five years and includes the following:

- An estimate of the current annual demand for treated and untreated water, as well as a four-year projection (including water losses and water conservation), as detailed in **Section 2.1.1**.
- A description and quantification of available water supplies to Zone 7 at the beginning of the calendar year and projected water supplies over the next five years, discussed further in **Section 2.1.2**.
- A comparison of current and projected water demand with the available water supplies to determine if a water shortage condition is anticipated, discussed in **Section 2.2**.
- A review of water supply programs (to maintain long-term service reliability) and existing infrastructure and capabilities.
- A discussion of water conservation requirements and other long-term supply programs needed to meet Zone 7 treated and untreated water demands for multi-year dry conditions, as specified in Zone 7's UWMP.

2.1 Key Data Inputs and Assessment Methodology

The State requires that the ARSWS evaluate supplies and demands for, at a minimum, the current year and one subsequent dry year. Zone 7 provides a five-year outlook, assuming the last two years are subject to average hydrologic conditions. Planned water supply sources and quantities, and water demand types and quantities are described in Chapters 6-7 and Chapter 4 of the UWMP, respectively. Quantities and analyses for the ARSWS will be reasonably consistent with the UWMP and any differences will be explained, as needed.

2.1.1 Demand Assessment

Each year, Zone 7 develops annual water demand projections for the next five years as a first step towards assessing annual supply and demand conditions. Zone 7's demand consists of four key components: retailer demand, which makes up the majority of total demand; direct customers (<1%); untreated water for agricultural customers (<15%); and losses (about 1%). To calculate total demand, Zone 7 utilizes historic demand data, future projections, and retailer delivery requests. Every year, Zone 7 receives M&I treated water delivery requests from its retailers for the next five years. These requests are adjusted based on current usage trends, local weather conditions, water year type, anticipated new demands, population changes, pending policy changes, infrastructure capacities and constraints, and retailer groundwater pumping. These demand projections, adjusted for anticipated conservation, are used for the current year in the ARSWS. Subsequent years gradually increase to match the delivery requests submitted. Zone 7 estimates demand for direct customers and agricultural customers based on recent trends and data.

Zone 7 measures and tracks monthly deliveries to its customers, with data for retailers and untreated demands collected since 1990 and 1975, respectively. Zone 7 uses this data to track and update demand projections continually throughout the year.

Additionally, Zone 7 contextualizes five-year demand projections using long-term future demand studies, the most recent of which was conducted for 2025, projecting out to 2050.

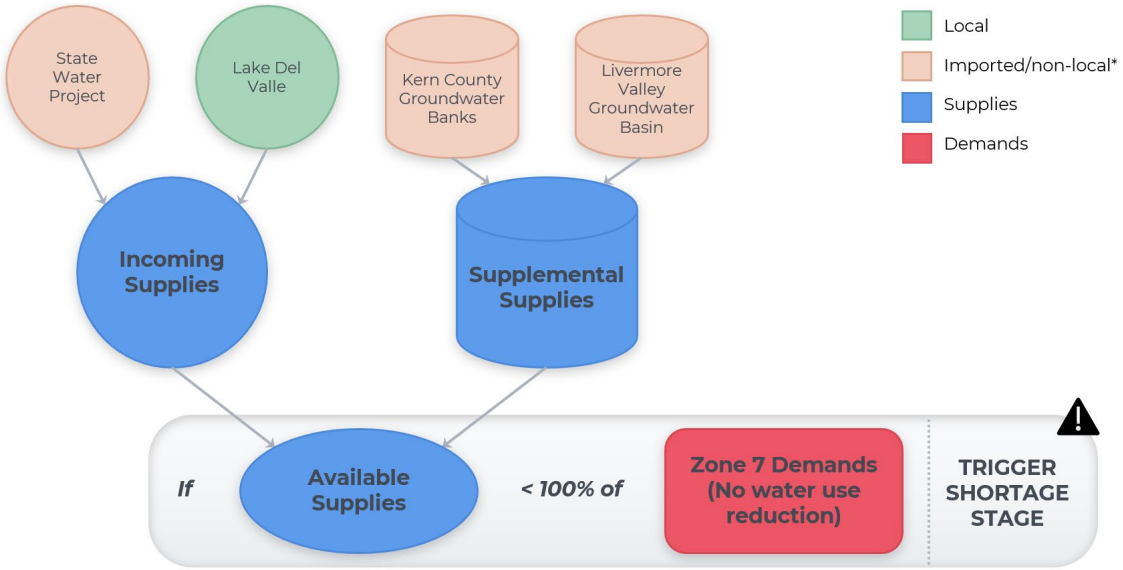
2.1.2 Supply Assessment

As shown in **Figure 1**, Zone 7's available water is comprised of two main sources: incoming supplies (from the SWP and LDV), which are based on weather conditions in a given year, and supplemental supplies, largely based on water storage from previous years. Incoming supplies are delineated into two categories: local and imported water. For supplemental supplies, while the Livermore Valley Groundwater Basin (called the "Basin") is physically located within Zone 7, most of the water in the Basin is imported water that has been recharged into the Basin.

For incoming supplies, monitoring starts on October 1 at the beginning of the new water year. Zone 7 tracks weather locally and across California, focused on the Northern Sierras, where much of the SWP water originates. Zone 7 tracks precipitation, temperature, and snowpack data. DWR conducts multiple snow surveys throughout the wet season, focused on estimating snowpack and available water as a percent of the average on April 1, when snowpack historically peaks. Locally, Zone 7 measures how much streamflow is available via precipitation in multiple streams, including Arroyo Valle and Arroyo Mocho, as well as local storage in LDV. LDV is operated by DWR and water rights are shared between Zone 7 and Alameda County Water District. From 2016 to 2025, the average local supply for Zone 7 was about 4,000 acre-feet per year (AFY).

Zone 7 closely monitors SWP conditions, which, on average, provide about 90% of Zone 7's treated water supplies, with the largest supply coming from Table A. Zone 7 has a maximum Table A allocation of 80,619 AFY, although the actual amount varies annually based on hydrologic conditions and water availability. DWR typically announces an initial SWP allocation for the current water year in December, which then can increase as winter progresses, and is typically finalized in May or June. Other factors impacting SWP availability include:

- Delta water quality;
- Occurrence of threatened and endangered species near the Banks Pumping Plant in the Delta;
- Outages at Delta and SBA facilities; and
- Risk from seismic events, changing regulatory requirements, and climate change.



* NOTE: Imported/non-local water includes SWP Table A water, SWP carryover, SWP Article 21 water, pre-negotiated transfers, etc.

Figure 1. Supply Shortage Determination

Zone 7 tracks water availability for multiple storage sources. Within Zone 7's service area, the Agency mainly uses groundwater aquifers for water storage. The Tri-Valley has about 254,000 acre-feet (AF) of capacity in the Basin divided into operational storage (126,000 AF) and reserve storage that is below historical lows (128,000 AF). The amount of groundwater utilized annually varies significantly between wet and dry years, with larger volumes used during dry years. Groundwater availability can be impacted by contamination events or facility outages, as well as by pumping constraints. In the past five years, Zone 7 has installed two per- and polyfluoroalkyl substances (PFAS) treatment facilities, with a third expected to be built over the next three years, to address contamination in its aquifer.

Zone 7 has multiple non-local storage supplies available. This includes carryover water (Article 12e or 56c water), which is unused Table A water that, Zone 7 can store in SWP's San Luis Reservoir, when there is available storage. Zone 7 aims to carry over about 10,000 AFY. Zone 7 also participates in multiple non-local water banking programs, located in Kern County. These banking programs are currently with the Semitropic Water Storage District and Cawelo Water District, although additional partnerships are being explored. These programs hold water previously stored from Zone 7's surface water supplies during wet years and become a supply source during drought years. Water put into Semitropic and Cawelo have contractual constraints via 10% and 50% losses, respectively. As of January 1, 2026, the banking programs hold about 106,000 AF, combined.

Other factors impacting water supply include regulatory conditions, infrastructure capacity constraints or changes, and capital improvement project implementation.

2.2 Decision-Making Process

Zone 7's decision-making process surrounding water shortages undergoes a cyclical process approximately following the water year from October 1 through September 30, as shown in the timeline in **Table 1**. The first half of the water year (October-April) is focused on monitoring supplies, demands, hydrologic conditions, and storage for the current water year. This is the wet season in California, and the amount of precipitation and water availability determines whether there is a water shortage during the remainder of the year. During this period, Zone 7 partakes in various operational procedures, such as submitting 5-year delivery requests to DWR, preparing a preliminary WSOP, planning for groundwater banking or recovery, and finalizing transfer requests and agreements.

Table 1 Schedule of Annual Sustainability Report and Water Supply Operations Plan Activities

Schedule	Activities
October to November	Start of new water year. Track supply, demand, hydrologic conditions, and storage for current water year. Submit 5-Year Delivery request to DWR. Prepare Preliminary WSOP.
November to mid-April	Monitor water supply, demand, and hydrologic condition trends.
Mid-December to mid-February	Revise Preliminary WSOP & present to Water Resources Committee of Zone 7 Board. Gives preview of water supply conditions and initiates planning for any potential actions.
January to mid-April	Coordinate with DWR and groundwater banks to plan for any banked water recovery, if needed. Get approval from Executive Management.

Schedule	Activities
January to April	Finalize standing water transfer requests and agreements. New agreements require Zone 7 Board approval.
Mid-March to April	Prepare ARSWS, compiling summaries of both water supplies and demands based on current conditions and predicted future conditions.
April/May Zone 7 Board Meeting	Present findings and recommendations from ARSWS, including determinations and recommendations. The Zone 7 Board adopts resolution/s approving determinations and actions, as appropriate.
April - June	Executive Management arranges water transfers, if needed.
April - June	If water shortage emergency exists, prepare recommendations on shortage determination and actions based on ARSWS. Executive Management prepares and presents resolution(s) approving determinations and actions to the Zone 7 Board.
Late April to May	Update the WSOP based on latest information.
May to July	Water shortage regulations or other actions go into effect.
June	Present the WSOP to the Water Resources Committee.
July to December	Update the WSOP, as needed.

Between mid-March and mid-April, Zone 7 prepares its ARSWS, which involves compiling summaries of current and projected demands (**Section 2.1.1**) and supplies (**Section 2.1.2**) to ensure that supplies can meet demands. If supplies are projected to fall short, the ARSWS evaluates what supply-augmentation actions may be taken. If, despite supply augmentation efforts, a water supply deficit is expected, Zone 7 staff will quantify the anticipated deficit. The ARSWS results and related recommendations are typically presented at the April Zone 7 Board Meeting. The 2026 ARSWS report is included as **Appendix 1** of this WSCP.

In the event the ARSWS forecasts a water supply deficit, Zone 7 staff implement various management measures based on the size of the forecasted deficit. As shown in **Figure 2**, when the deficit is greater than 10%, Zone 7 implements Stage 2 or greater measures, which require a public hearing and a Zone 7 Board resolution. If the deficit is 10% or less, Zone 7 may adopt a resolution declaring the associated water shortage stage and relevant actions. A sample resolution is provided in **Appendix 2**. When no deficit is forecasted, monitoring continues. When a state drought emergency is declared, Zone 7 may also adopt a resolution and declare a drought emergency. These follow-on steps to the ARSWS occur from April to June.

From July to the start of the new water year, conditions are monitored and the WSOP is updated, as needed. This is an iterative process where supply and demand conditions are monitored, typically monthly but more frequently if needed, and additional actions and adjustments are made.

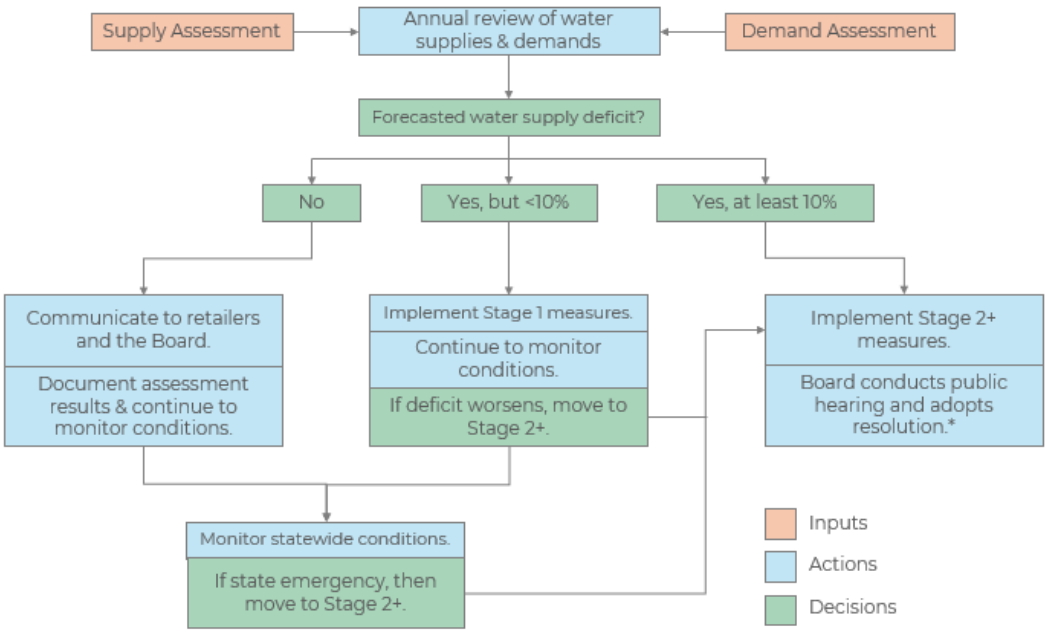


Figure 2. Flowchart for Declaring a Water Shortage

3 SIX STANDARD WATER SHORTAGE STAGES

DWR's 2025 UWMP Guidebook provides six standard water shortage levels that correspond to progressive reductions of up to 10, 20, 30, 40, 50, and greater than 50 percent from normal conditions. Zone 7 utilizes these standard water shortage levels (also called "stages") for stages 1-4. Then, Zone 7 combines stages 5 and 6, since a shortage greater than 40% would require extreme measures. **Table 2** lists Zone 7's five drought shortage stages, as well as how they map to DWR's standard drought stages.

Table 2 Water Shortage Contingency Plan Levels (DWR Table 8-1)

	Supplier Uses the Standard Six Levels of Water Shortage. The supplier will not complete this table.		
Standard Shortage Levels	**Percent Shortage Range**	**Supplier's Shortage Levels**	**Percent Shortage Range**
1	**Up to 10%**	1	Up to 10%
2	**Up to 20%**	2	Up to 20%
3	**Up to 30%**	3	Up to 30%
4	**Up to 40%**	4	Up to 40%
5	**Up to 50%**	5	> 40%
6	**>50%**	5	> 40%
NOTES:			

4 SHORTAGE RESPONSE ACTIONS AND EFFECTIVENESS

Each shortage stage corresponds to additional actions water suppliers should implement to meet the severity of the impending shortages, as defined by CWC §10632 (a)(4). **Appendix 3** summarizes the various response actions that Zone 7 will utilize at each stage, including a mix of supply augmentation, demand reduction, communication and outreach, operational changes, and other measures. **Table 3** and **Table 4** detail the supply augmentation and demand reduction actions, respectively, including estimates of how much each action will reduce the shortage gap. Certain response actions, such as public outreach and enforcement, support the effectiveness of other response actions and do not have a quantifiable effect on their own. As needed, Zone 7 may implement certain actions at earlier water shortage stages. While these actions tend to build on one another logically during a drought, the order of actions and procedures may be modified as needed during droughts, unexpected water shortage emergencies, or other supply disruptions. This is an adaptive plan that can be modified as necessary.

Zone 7's water system is fully metered, from production to retailer turnouts. Records of water deliveries to each retailer are prepared daily and can be used to track the effectiveness of Zone 7's response actions. Water production and water use can be compared to the previous year, previous month, or previous week. Water use can also be compared by retailer. This continuous monitoring allows Zone 7 to evaluate its demand reduction efforts in real-time and adjust its shortage response actions accordingly.

Additionally, Zone 7's suite of response actions depends on the time of the year the event occurs, the water supply sources available, and the condition of its water system infrastructure. In general, Zone 7 plans to use a balanced and dynamic approach, adapting response actions to close the gap between water supply and demand to meet water use goals associated with the declared water shortage condition.

Table 3 Water Shortage Stages and Supply Augmentations (DWR Table 8-2)

No	Is the Supplier completing this table using the standard six levels? (yes/no)		
Shortage Level	**Supply Augmentation Methods and Other Actions by Water Supplier**	**How much is this going to reduce the shortage gap? Include units used (volume type or percentage)**	**Additional Explanation or Reference (OPTIONAL)**
1	Transfers	3,000 AF	Utilize pre-negotiated transfers, like the Sutter Extension
2	Transfers	1,000-4,000 AF (up to full shortage gap)	Seek additional transfers beyond pre-negotiated transfer/exchange program.
5	Stored Emergency Supply	1-3% (or as needed)	Bring in bottled water or emergency supplies as needed
NOTES: Actions introduced in a lower stage will also be used in higher stages, unless otherwise noted. No additional supply augmentation actions planned to be introduced in shortage level 3 or 4.			

Table 4 Water Shortage Stages and Demand Reduction Actions (DWR Table 8-3)

No	Is the Supplier completing this table using the standard six levels? (yes/no)		
Shortage Level	**Demand Reduction Actions**	**How much is this going to reduce the shortage gap? Include units used (volume type or percentage)**	**Additional Explanation or Reference (OPTIONAL)**
1	Other	0 - 10%	Declare 10% voluntary conservation target for total water demands.
	Expand Public Information Campaign	1 - 5%	Expand public information on Zone 7 conservation rebate programs and voluntary restrictions.
	Provide Rebates for Landscape Irrigation Efficiency	1 - 5%	Promote Zone 7 rebate program for efficient irrigation controllers in DSRSD, Livermore, and Pleasanton.
	Provide Rebates on Plumbing Fixtures and Devices	1 - 5%	Promote Zone 7 rebate programs for efficient washing machines and pool covers in DSRSD, Livermore, and Pleasanton.
	Provide Rebates for Turf Replacement	1 - 5%	Promote Zone 7 rebate program for turf replacement in DSRSD, Livermore, and Pleasanton.
	Other	1 - 5%	Consider voluntary restrictions, e.g., limit irrigation to specific times of day, require shut-off nozzles for hoses, etc.

No	Is the Supplier completing this table using the standard six levels? (yes/no)		
Shortage Level	**Demand Reduction Actions**	**How much is this going to reduce the shortage gap? Include units used (volume type or percentage)**	**Additional Explanation or Reference (OPTIONAL)**
2	Other	0 - 10%	Declare a call for mandatory conservation (up to 10%) for total water demands
	Expand Public Information Campaign	1 - 5%	Continue public information campaign and outreach/education efforts.
	Provide Rebates for Landscape Irrigation Efficiency	1 - 5%	Consider increasing rebate spending for efficient irrigation controllers.
	Provide Rebates on Plumbing Fixtures and Devices	1 - 5%	Consider increasing rebate spending for efficient washing machines and pool covers.
	Provide Rebates for Turf Replacement	1 - 5%	Consider increasing rebate spending for turf replacement.
	Implement or Modify Drought Rate Structure or Surcharge	5 - 10%	Consider implementing drought surcharge.
	Other	1 - 10%	Some mandatory restrictions may start (e.g., limited the number of outdoor watering days).

No	Is the Supplier completing this table using the standard six levels? (yes/no)		
Shortage Level	**Demand Reduction Actions**	**How much is this going to reduce the shortage gap? Include units used (volume type or percentage)**	**Additional Explanation or Reference (OPTIONAL)**
3	Other	10 - 20%	Declare a call for mandatory conservation (up to 20%) for total water demands
	Implement or Modify Drought Rate Structure or Surcharge	5 - 10%	Implement a drought surcharge matching mandatory conservation levels.
	Other	2 - 5%	Encourage retailers to enforce excess use penalties.
	Other	<1 - 3%	Decrease line flushing and maintenance.
4	Other	20 - 30%	Declare a call for mandatory conservation (up to 30%) for total water demands
	Increase Water Waste Patrols	2 - 5%	Request retailers and cities to increase enforcement of their water shortage contingency plans, which could include fines for repeated violations.
	Moratorium or Net Zero Demand Increase on New Connections	0 (no net increase)	Consider ban on new connections.

No	Is the Supplier completing this table using the standard six levels? (yes/no)		
Shortage Level	**Demand Reduction Actions**	**How much is this going to reduce the shortage gap? Include units used (volume type or percentage)**	**Additional Explanation or Reference (OPTIONAL)**
5	Other	30% or more	Declare a call for mandatory conservation (>30%) for total water demands
	Increase Water Waste Patrols	2-10%	Water may only be available to meet health and safety needs. Urge retailers to enhance enforcement, or Zone 7 may support enforcement.
	Landscape - Prohibit all landscape irrigation	10-20%	
NOTES: Actions introduced in a lower stage will also be used in higher stages, unless otherwise noted. All demand management actions feed into conservation quantity at each stage.			

4.1 Supply Augmentation

Chapter 6 of Zone 7's 2025 UWMP describes Zone 7's normal water supply portfolio, as well as dry-year and emergency supplies. Zone 7's local and non-local groundwater storage is largely intended to provide water supply during drought years or during definable water shortage events. These supply options are already included in the ARSWS as needed to close the gap between supplies and demands, so they are not counted again as a potential shortage response.

As shown in **Table 3**, in Stages 1 and 2, supply augmentation efforts focus on existing and additional transfer and exchange programs, such as the Sutter Extension. Beyond Stage 2, additional transfers and exchanges may be harder to secure. In Stage 5, an additional supply augmentation strategy includes importing bottled water or emergency supplies, as needed.

4.2 Demand Reduction

Zone 7 may pass a resolution calling for reduction of its total water demand during droughts, as noted in **Appendix 3**. Since Zone 7 is a wholesaler, it works closely with its retailers to request demand reductions, recommend demand reduction strategies, and aid enforcement. In Stage 1, demand reduction requests are voluntary and aim to reduce total demand by up to 10%. For Stages 2 and higher, calls for demand reduction may be mandatory and up to 10% less than the maximum shortage level at that stage. Zone 7 plans to meet the remaining 10% gap between supplies and demands through additional supply augmentation efforts, such as water transfers. Zone 7 may also initiate demand reduction calls to retailers and the community ahead of the stage at which reductions are required if a shortage is anticipated, or to align with State water-use reduction calls. Zone 7's demand reduction goals are overall targets for its service area; the ability and approach to achieve certain levels of reduction may vary by retailer.

Table 4 lists some potential recommendations for residential and commercial water use restrictions, which are typically enforced by retailers.

Demand reduction actions also give direction on expanding conservation-focused rebate programs, implementing drought surcharges and/or overuse fines, and encouraging temporary bans on new connections. Since Zone 7 is a wholesaler, it can implement drought surcharges for its retailers, which may then pass along the surcharges to direct customers.

4.3 Additional Mandatory Restriction

As a wholesaler, Zone 7 typically works with its retailers to implement water use prohibitions. Zone 7 will support mandatory restrictions imposed by its retailers on their customers and coordinate with its retailers to provide consistent public outreach messaging.

4.4 Operational and Miscellaneous Actions

Operational and miscellaneous measures include a range of additional actions to minimize supply losses. Operational actions include evaluating the timing of maintenance activities and decreasing line flushing to avoid wasting water. They also include tracking and projecting relevant conditions and data, such as reporting on reservoir levels weekly (Stage 1), daily (Stage 4), or hourly (Stage 5).

Miscellaneous actions include financial actions, such as utilizing reserve funds (Stage 2+), developing a budget code to track water shortage labor hours and expenditures (Stage 2+), and looking for supplemental funding (Stage 3). Miscellaneous actions also include tracking State actions and developing a community water waste hotline and online reporting system.

4.5 Communication and Outreach Actions

Communication and outreach actions focus broadly on three areas: informing and educating the public; coordinating with retailers, Alameda County, the cities, and other relevant agencies; and declaring demand reductions and/or a drought emergency. More information on communication and outreach measures is discussed in **Section 5**.

4.6 Emergency Response Plan

Zone 7's water shortage stages apply to both foreseeable and unforeseeable water supply shortage conditions. The latter includes catastrophic water shortage conditions, which are addressed in Zone 7's Emergency Response Plan (ERP). The ERP outlines preparation, response, and recovery procedures associated with unforeseeable incidents such as water supply contamination, earthquake, infrastructure failure, and other events.

Zone 7 has an Emergency Operations Center (EOC) and EOC Staff made up of personnel representing different skills and disciplines within Zone 7. The EOC Staff would respond in the event of a natural or man-made emergency.

If imported water deliveries from the Delta are interrupted, Zone 7 plans to meet its water demands with existing facilities using groundwater and Zone 7's share of water stored in Lake Del Valle. Retailers with groundwater pumping capacity—Pleasanton and Cal Water—may be asked to increase their groundwater pumping, if possible. Deliveries to Zone 7's retailers would be reduced as necessary if supplies are insufficient. In coordination with the retailers, Zone 7 would declare a water shortage emergency. The retailers' WSCPs and the associated voluntary and mandatory water consumption reductions would go into effect. Under this scenario, most of Zone 7's untreated water customers reliant on the imported water from the Delta would receive no water.

Zone 7 has emergency generators (both portable and dedicated) at strategic locations in preparation for any regional power outage. These generators would allow both the Del Valle Water Treatment Plant and the Patterson Pass Water Treatment Plant to continue operating even under a power outage. Assuming no interruptions in surface water supply, Zone 7 would be able to provide service to all treated water contractors. If warranted by demand, Zone 7 would also operate groundwater wells and pump stations, some of which have either a dedicated generator in place (Valley Pump Station) or have the necessary hook-ups to receive power from a portable generator. If the power failure were to occur during high demand season (i.e., summer months), Zone 7 may be unable to meet hourly peak demands throughout the transmission system. Zone 7 would work closely with the retailers to manage demands to minimize impacts.

Water storage, treatment, and pumping facilities have been constructed to meet earthquake safety standards and are inspected regularly. Zone 7 also participates in the Water/Wastewater Agency Response Network and the California Utilities Emergency Association, two statewide utility assistance organizations focused on emergency response.

4.7 Seismic Risk Assessment and Mitigation Plan

CWC §10632.5(a) requires that UWMPs include a seismic risk assessment and mitigation plan to assess and mitigate a water system's seismic vulnerabilities. Local Hazard Mitigation Plans (LHMPs) may be incorporated into this UWMP to meet this requirement if they address seismic risk. Zone 7's current LHMP is the 2023 Hazard Mitigation Plan (Zone 7, 2024). It was adopted by the Board on October 16, 2024, and addresses seismic risk and is incorporated into this UWMP by reference. The 2023 LHMP was submitted

to the Federal Emergency Management Agency, which found it in conformance with Title 44 Code of Federal Regulations Part 201.6 Local Mitigation Plans. The 2023 LHMP is available on Zone 7's website.[2]

Earthquakes are common and relatively well-tracked and studied in California. While California experiences hundreds of earthquakes each year, most are below 3.0 on the Richter Scale (i.e., magnitude 3.0) and cause minimal damage. The United States Geological Survey (USGS) roughly defines strong earthquakes (which can cause moderate damage to structures) as measuring greater than 5.0 on the Richter Scale, while major earthquakes measure more than 7.0 on the Richter Scale. In California, strong earthquakes occur every two to three years, and major earthquakes occur once a decade.

The San Andreas, Calaveras, Greenville, and Hayward faults are in the vicinity of Zone 7. A 2016 report by the USGS estimated the probabilities for magnitude-6.7 (or larger) earthquakes on major fault lines in the San Francisco Bay Area by the year 2043 (USGS, 2016). The Hayward Fault has a 33 percent chance of one or more earthquakes of magnitude-6.7 or larger by 2043, while the Calaveras Fault has a 26 percent chance of one or more such earthquakes in that timeframe. The Greenville fault has a 16 percent chance of one or more earthquakes of magnitude-6.7 or larger by 2043. According to the 2023 LHMP, a local earthquake has the potential to impact 62 Zone 7 facilities, including pipelines and treatment plants. As such, the Hazard Mitigation Plan high level evaluation conceptualized seismic resilience improvement projects as a potential mitigation action for further consideration. Additionally, several other conceptual mitigation actions that address multi-hazards (including earthquakes) were included, such as mutual aid agreements, procuring redundant supplies, and identification of system processes which have no redundancies. Moreover, Zone 7's 2025 ERP identifies other conceptual hazard mitigation actions for earthquakes including structural upgrades or retrofits for existing facilities, ensuring all new facilities and pipelines are built to current seismic standards, a pipeline inspection program, and earthquake response training.

5 COMMUNICATION PROTOCOLS

In the event of a current or predicted water shortage, Zone 7 must inform its customers; the general public and interested parties; and local, regional, and state entities. Communication protocols for foreseeable and unforeseeable events are provided in this section. In any event, timely and effective communication must occur for an appropriate response to the event. Key Zone 7 staff are provided cell phones, emergency radios, and agency email accounts to communicate internally and externally.

5.1 Communication during Drought

Communication with Zone 7's retailers, Tri-Valley cities, additional public agencies, the public, and the Counties of Alameda and Contra Costa is essential during drought. Communication with the public must be clear and consistent across retailers to effectively inform and educate customers and the public.

In all stages of a water shortage, a resolution is passed to declare the stage of the drought and the related actions. This dictates the messaging and necessary outreach efforts.

At all water shortage stages, Zone 7 leads public information and education efforts to ensure clear, concise messaging. This will include some or all of the following options:

- public meetings,
- press releases,

[2] Zone 7's 2023 LHMP: https://www.zone7waterca.gov/sites/main/files/file-attachments/2024.zone_7.hazardmitigationplan.final_.pdf?1731102830.

- digital newsletters,
- postings on Zone 7's website,
- social media posts and digital advertising (e.g., Google, newspaper ads, boosted Facebook posts, YouTube, NextDoor),
- newspaper ads, and
- public service radio announcements.

Staff also keep interest lists for specific interest groups and community members for targeted messaging.

Zone 7 will also ramp up outreach and education efforts for rebate programs, which Zone 7 coordinates for Livermore, Pleasanton, and DSRSD, as discussed in Chapter 9 of the UWMP. Cal Water coordinates its own rebate programs.

Additionally, in Stage 2 and greater, Zone 7 will begin regular meetings with retailers and other relevant agencies, as well as an internal drought coordination team. The goal of more regular coordination is to ensure messaging across agencies is clear, as well as to provide more frequent status updates.

When supplies are insufficient, Zone 7 can ask its retailers to reduce demands. Specific compliance and enforcement mechanisms are at the discretion of the retailers. Zone 7 is committed to working with and supporting its retailers in implementing water shortage response actions.

In addition to communication during declared drought conditions, Zone 7 also communicates proactively when a water shortage is anticipated based on the ARSWS. When the ARSWS indicates a potential or predicted shortage, Zone 7 coordinates early outreach with retailers and regional partners to share supply outlooks, discuss potential response actions, and align messaging in advance of any formal drought stage declaration (see **Figure 2**).

5.2 Communication for Unforeseeable Events

A water shortage may occur during unforeseeable events such as earthquakes, fires, infrastructure failures, civil unrest, and other catastrophic events. Zone 7's ERP provides specific communication protocols and procedures to disseminate water shortage contingency planning actions during these events. Zone 7 may trigger any of these communication protocols at any water shortage stage, depending on the event.

In general, communications and notifications should proceed along the chain of command. Notification decisions will be made under the direction of the Incident Commander, while internal and external communications will be managed by the Public Information Officer (PIO). All Zone 7 staff are provided their communication responsibilities. The ERP provides a list of relevant contacts to notify at the local, regional, and state level.

The PIO is the official spokesperson for Zone 7 and is responsible for interfacing with the public, media, other agencies, and stakeholders. The PIO maintains a list of contacts to disseminate information to the public, typically via radio, television, newspapers, or social media. Zone 7 may also elect to make telephone calls to certain types of facilities (e.g., day care centers, homeless centers, hospitals) as appropriate.

To maintain the security of Zone 7's water system, the ERP is maintained as a confidential document and may not be incorporated in this UWMP.

6 LEGAL AUTHORITIES

Zone 7 has the legal authority to create, manage, and activate emergency plans and carry out the responsibilities of those plans under the California Emergency Services Act, which authorizes all political subdivisions of the state (i.e., special districts, cities, and counties) to conduct emergency operations. Zone 7 Board Resolution 95-1777 describes the process for declaration of an agency emergency by the General Manager, with subsequent ratification by the Zone 7 Board no later than ten days after such declaration.

In a duly noticed meeting, the Zone 7 Board will determine whether a water shortage emergency condition exists and, if so, how severe the emergency is and what regulations and restrictions should be enforced in response. Zone 7 shall declare a water shortage emergency in accordance with CWC Chapter 3 Division 1.

> *Water Code Section Division 1, Section 350*
>
> *…The governing body of a distributor of a public water supply…shall declare a water shortage emergency condition to prevail within the area served by such distributor whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection.*

When a water shortage is determined, Zone 7 will coordinate interdepartmentally, with the region's water service providers, and with Alameda and Contra Costa counties, for the possible proclamation of a local emergency in accordance with the California Government Code, California Emergency Services Act (Article 2, Section 8558).

A water shortage emergency declaration triggers communication protocols described in **Section 5** and compliance and enforcement actions described in **Section 4**.

7 FINANCIAL CONSEQUENCES OF WSCP

Zone 7 anticipates both revenue losses and increased costs during water shortages. Revenue losses stem from reduced water sales driven by conservation or limited supply. Increased costs may include higher water transfer expenses and infrastructure improvements.

Conservation poses a direct risk to Zone 7's revenue stability, as approximately 55% of the Agency's revenue is derived from volume-based water usage. To mitigate this risk, Zone 7 utilizes long-term financial planning, implements regular moderate adjustments to rates and fees, and maintains financial reserves. In addition, the Board may authorize a water shortage surcharge to offset revenue impacts.

7.1 Use of Financial Reserves

Zone 7 maintains reserves for operational costs, capital needs, debt obligations, and emergencies under its Reserve Policy (amended June 18, 2025).

The Reserve for Economic Uncertainties protects against fluctuations in water use, imported water costs, and unforeseen events. As of June 30, 2025, the Reserve for Economic Uncertainties is funded at its target level of $5.2 million.

In June 2025, the Agency established the Water Reliability Reserve to support emerging water supply and reliability needs, such as transfer purchases, drought response measures, and regional/state project participation. This fund does not carry a minimum requirement as the reserve is intended to maintain

agility and flexibility in addressing water supply challenges and opportunities as they arise. As of June 30, 2025, the Water Reliability Reserve is funded at $9.8 million.

Use of these reserves may be authorized by the Board during a declared water shortage stage, as defined in this plan.

7.2 Drought Rate Structures and Surcharges

If a declared water shortage results in reduced revenues, reserves alone may not be able to maintain fiscal stability. The Board has the authority to implement a water shortage surcharge aligned with the declared water shortage stages, as shown in **Table 5** below.

A Board adopted surcharge becomes effective on the first day of the month following 30 days after adoption and sunsets after six months unless extended or modified.

Table 5 Water Shortage Surcharges

Water Shortage Stage	Demand Reduction Target	Water Shortage Surcharge per Hundred Cubic Feet (ccf)
1	Up to 10%	Not Applicable
2	Up to 20%	$0.15
3	Up to 30%	$0.49
4	Up to 40%	$0.95
5	>40%	$1.57

7.3 Other Measures

Zone 7 annually reviews its capital budget and re-prioritizes projects, as necessary, given current and forecasted resources, needs, and funding availability. Zone 7 also continuously evaluates federal and state grant opportunities, whenever possible.

In some cases, projects may be accelerated or deferred. For example, from 2021-2022, Zone 7 accelerated the construction of the Stoneridge PFAS Treatment Plant, the Valley Pump Station, and replacement of electrical switchgears at multiple wells throughout the Wells & Mocho Groundwater Demineralization Plant Electrical Replacement project in response to the drought. All of these projects improved available water supply and reliability, as Zone 7 is highly dependent on local groundwater supplies during drought.

Zone 7 will continue to evaluate its capital budget and pursue grant opportunities where possible to meet demands and overcome future impacts to revenue and expenditures.

8 WSCP REFINEMENT PROCEDURES

This WSCP is an adaptive management plan. It is subject to refinement as needed to ensure that Zone 7's shortage response actions and mitigation strategies are effective and produce the desired results. Zone 7 may adjust its response actions and modify its WSCP based on feedback from monitoring and enforcement efforts. Zone 7 will also seek input from staff, its retailers, and the public regarding the effectiveness of its WSCP and ideas for improvements.

When a revised WSCP is proposed, the revised WSCP will undergo the process described in **Section 9** for adoption by the Zone 7 Board and distribution to Alameda County, Contra Costa County, Zone 7's retailers, and the general public.

9 PLAN ADOPTION, SUBMITTAL, AND AVAILABILITY

This WSCP is adopted concurrently with Zone 7's 2025 UWMP, by separate resolution. Prior to adoption, a duly noticed public hearing was conducted. A copy of this WSCP will be submitted to DWR within 30 days of adoption.

No later than 30 days after adoption, copies of this WSCP will be available at Zone 7's offices. A copy will also be provided to Alameda County, Contra Costa County, and Zone 7's retailers. An electronic copy of this WSCP will also be available for public review and download on Zone 7's website.

10 REFERENCES

California State Legislature, 2018a. *Senate Bill 606 (Hertzberg), Water Management Planning.* Retrieved from: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB606.

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USGS, 2016. *Earthquake Outlook for the San Francisco Bay Region 2014–2043.* Fact Sheet 2016–3020. Retrieved from: https://pubs.usgs.gov/fs/2016/3020/fs20163020.pdf.

Zone 7, 2024. *2023 Hazard Mitigation Plan*. Prepared by Risk Management Professionals. Retrieved from: https://www.zone7waterca.gov/sites/main/files/file-attachments/2024.zone_7.hazardmitigationplan.final_.pdf?1731102830

Appendix 1.

2026 Annual Review of the Sustainable Water Supply Report

ANNUAL REVIEW OF THE SUSTAINABLE WATER SUPPLY REPORT 2026

BACKGROUND

To support its mission to deliver safe, reliable, efficient, and sustainable water, Zone 7 Water Agency (Zone 7) has been managing water supplies. This Annual Review of the Sustainable Water Supply Report assesses Zone 7's ability to provide a sustainable water supply for the next five years to support Strategic Plan Goal B - Reliable Water Supply and Infrastructure, and also to implement Initiative #5 - develop a diversified water supply plan and implement supported projects and programs.

In addition, on October 17, 2012, Zone 7 adopted the Water Supply Reliability Policy (Resolution 13-4230, see Attachment A), which requires an annual review of sustainable water supplies (Annual Review). This Annual Review of the Sustainable Water Supply Report covers the following topics:

- Key hydrologic and water supply conditions
- Projected water demands for the next five years
- Projected water supplies for the next five years
- Comparison of supplies and demands for the next five years
- Programs necessary to continue meeting water demands going forward

SUMMARY OF FINDINGS

Water Year 2025 (October 1, 2024–September 30, 2025) began with an initial State Water Project allocation of 10% in December 2024. Following a number of atmospheric rivers, conditions improved to moderate hydrologic conditions. The State Water Project experienced a total of four allocation increases and finally announced a 50% allocation in late April 2025. The Arroyo Valle watershed received a modest amount of rainfall, requiring DWR to pump Delta water into Lake Del Valle for recreation. Combined with a healthy supply of SWP carryover from 2024, Zone 7 has accumulated sufficient surface water to meet all deliveries and store water both locally and in Kern County water banks.

In 2025, Zone 7 deliveries were supplied with 80% surface water and 20% groundwater. Zone 7 artificially recharged over 3,000 AF, produced 7,500 AF of groundwater, stored 5,000 AF in the Kern Storage and Recovery Programs, and carried over 14,000 AF in San Luis Reservoir for use in 2026.

Under current 2026 calendar year conditions, Zone 7's planned incoming supplies for 2026 consist of the following:

- 24,200 AF from a 30% State Water Project (SWP) Table A allocation
- 3,500 AF of Lake Del Valle local water captured in 2026 as of April 1

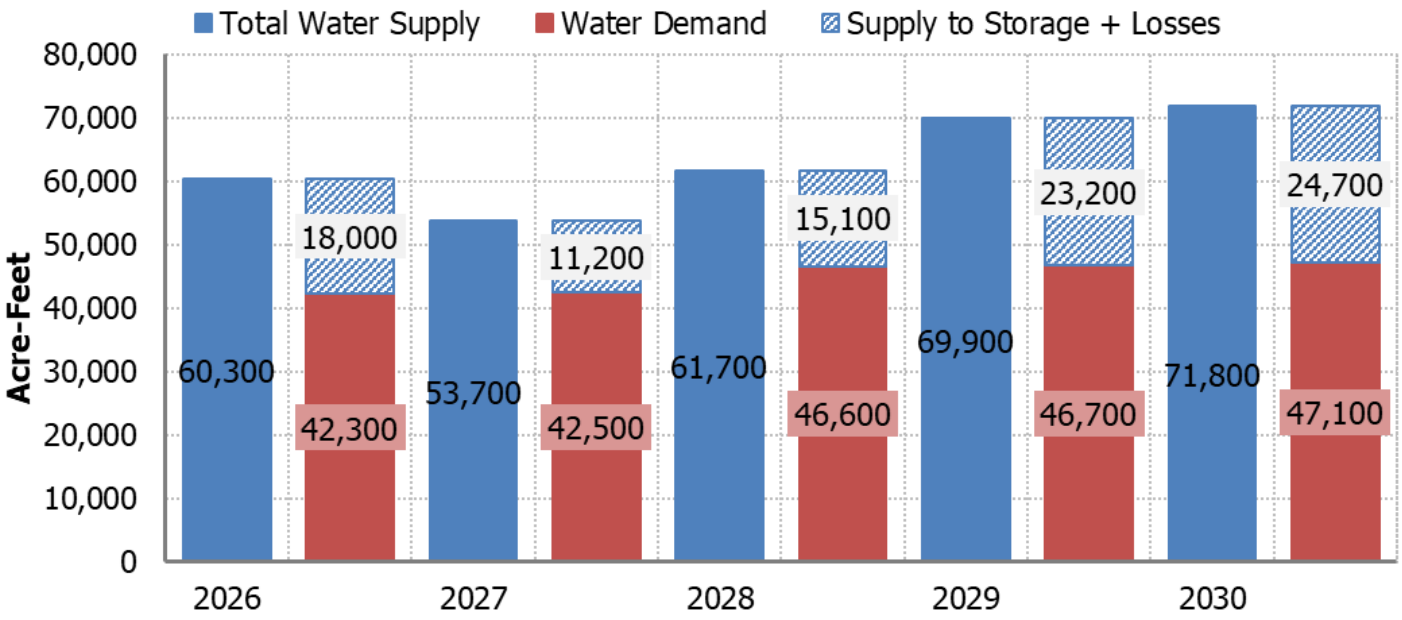
Given existing conditions and above normal incoming supplies, Zone 7 plans to draw from storage as follows:

- 14,000 AF of SWP carryover from 2025 stored in San Luis Reservoir
- 4,900 AF of Lake Del Valle local water captured in 2025
- 4,200 AF from Semitropic Bank, and
- 7,000 AF from the Livermore Valley Groundwater Basin.

Planned 2026 incoming water supplies, combined with withdrawal from various stored supplies, result in a total of 60,300 AF that could be used to satisfy customer projected demands of 42,300 AF. This is based on treated customer demand projections and untreated water demands. It is estimated that 2,000 AF of water will be used to incidentally recharge the local groundwater basin through the local water rights' live-stream requirement. As part of Zone 7's water management strategy, the remaining supplies (approximately 15,000 AF) will be carried over between San Luis Reservoir and Lake Del Valle for use in 2027. An estimated 5,000 AF of this will be carried over in Lake Del Valle for use in 2027. A portion of the remaining water will be unavailable as operational system losses (DWR and Zone 7 losses; 1,000 AF).

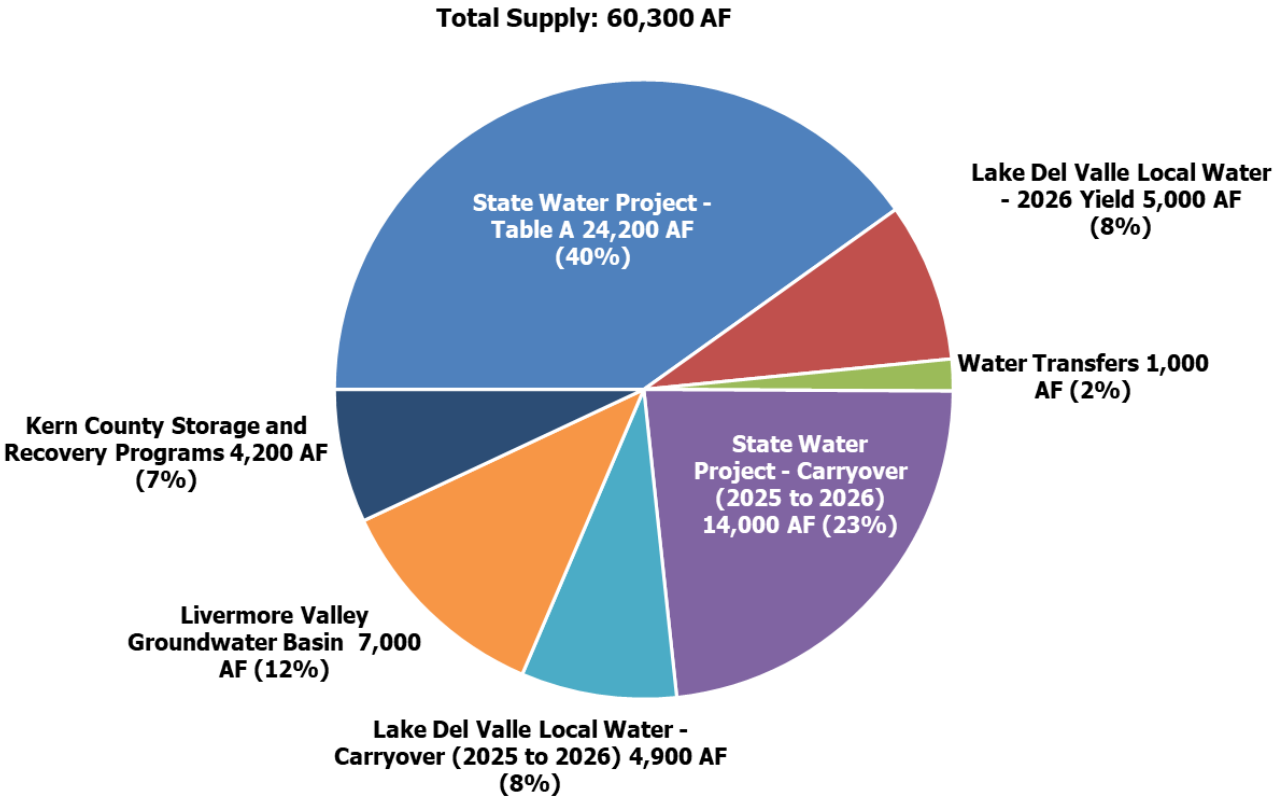
As shown in Figure 1, a comparison of projected water supply and demand indicates that Zone 7 can deliver projected demands, even if hydrologic conditions turn critically dry in 2027 and dry in 2028. Zone 7 also expects to meet demands over 2029 and 2030, assuming average hydrologic conditions in those years.

Figure 1: Water Supplies Versus Demands Based on Delivery Requests



Based on projected operations, the available surface water supply will be sufficient to meet water demands and allow replenishment of Zone 7's water storage reserves in the local groundwater basin. Figure 2 below shows how Zone 7 anticipates meeting demands with its water supply portfolio during 2026.

Figure 2: Expected 2026 Water Supply Portfolio to Meet Demands



Zone 7 has been evaluating several potential future supplemental water supply and storage options to bolster long-term water supply reliability (e.g., Delta Conveyance Project, Chain of Lakes Conveyance System, Sites Reservoir, and Potable Reuse). If developed, these supplemental supplies will increase water supply reliability, and the completed Chain of Lakes will help bolster the reliability of Zone 7's water supply system in the future. Furthermore, these projects will help optimize the long-term yield of Lake Del Valle local water, a key source of incoming supplies, and the use of the local groundwater basin for storage and recovery.

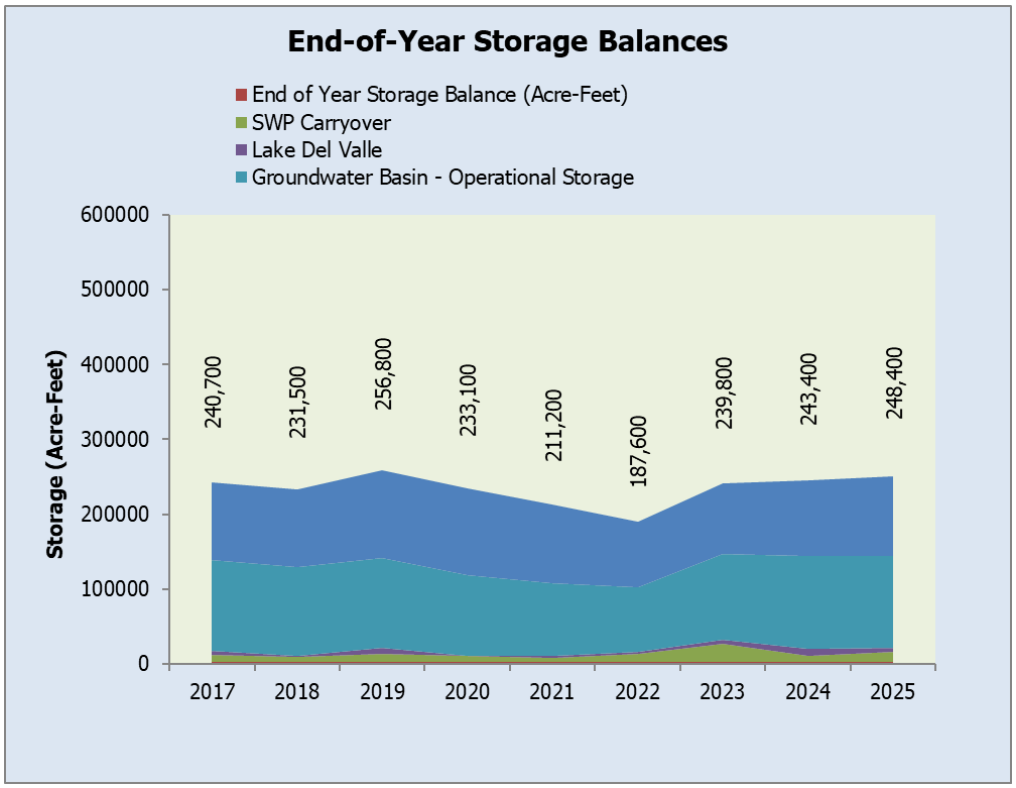
Zone 7 will continue to monitor local and statewide hydrologic conditions, adjust operations as necessary to optimize use of available resources, remain prepared for another single or multi-year drought, and continue to coordinate with the local water supply retailers, untreated water customers, and the Department of Water Resources (DWR).

KEY HYDROLOGIC AND WATER SUPPLY CONDITIONS

INITIAL STORAGE CONDITIONS (JANUARY 1, 2026)

Zone 7 started 2026 with a SWP carryover of 14,000 AF, 4,900 in Lake Del Valle local water carryover, Livermore Valley Groundwater Basin storage of 123,100 AF above the Minimum Thresholds set in the Livermore Valley Alternative Groundwater Sustainability Plan, and 106,400 AF of water stored in the Kern County Storage and Recovery Programs -- Semitropic Water Storage District (Semitropic) and Cawelo Water District (Cawelo). Zone 7's storage portfolio at the beginning of 2026 had about 248,400 AF, as shown in Figure 3 below.

Figure 3: Historical Water Supply Storage Conditions, End-of-Year Storage Balances



RESERVOIR CONDITIONS

As of April 1, 2026, storage in Oroville Reservoir was at 3.1 million acre-feet (MAF), or 91% of capacity. Oroville Reservoir collects runoff from the Feather River watershed in Northern California, a main source of supply for the SWP. San Luis Reservoir, the main reservoir for the SWP south of the Delta, was at 1.8 MAF, or 89% of capacity as of April 1.

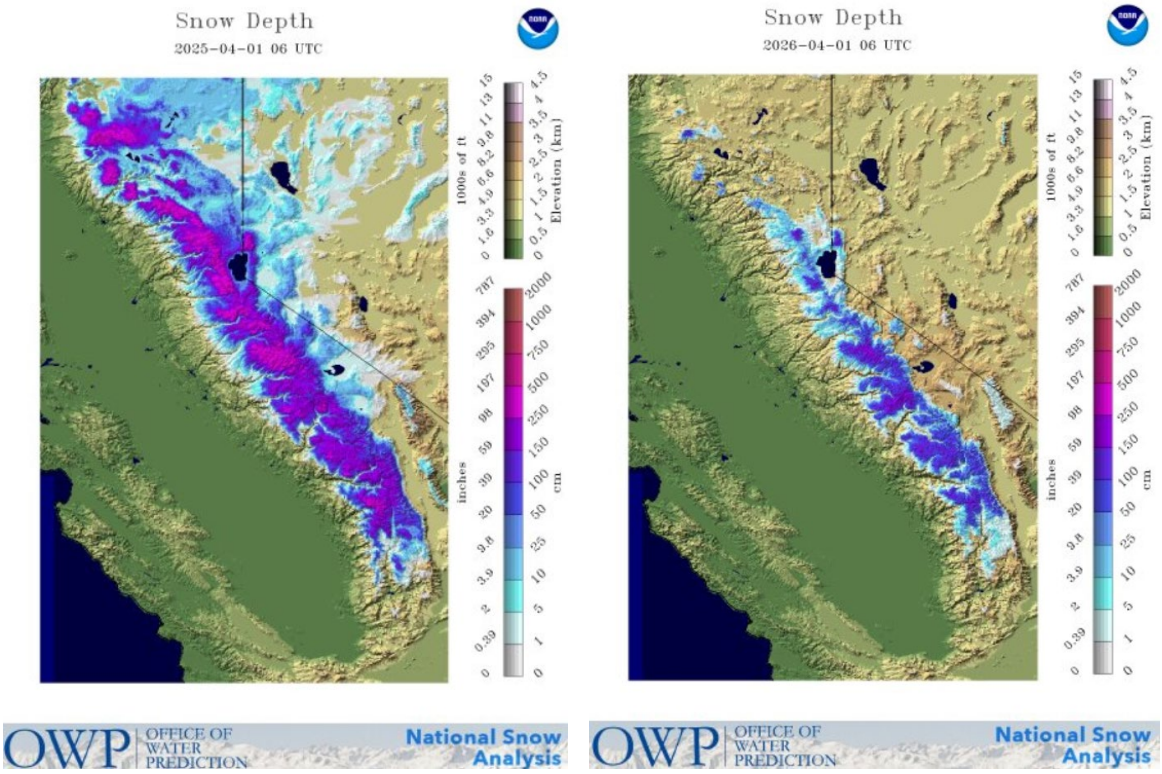
More than half of Zone 7's this year's SWP carryover (14,000 AF) stored in San Luis Reservoir has been used, and the remaining balance in storage will be delivered to Zone 7 this year.

SIERRA SNOWPACK AND PRECIPITATION (APRIL 1, 2026)

The statewide Sierra snowpack on April 1, 2026, was estimated at about 18% of average (see Attachment B), compared to 96% at the same time last year. Normally, April 1 is when the snowpack level peaks before the spring melt begins. The snowpack in Northern California is the main source of supply for the SWP during the spring and summer. This year, the snowpack melted in March due to dry, warm weather conditions. Figure 4 presents a comparison of snow depths in the Sierras in April 2025 versus those in April 2026. A stark contrast in snow depth was apparent between 2025 and 2026, with snow conditions shifting from normal to dry, as shown on the maps.

Northern Sierra precipitation, which is a key factor in SWP allocation, was 42.2 inches as of April 1, 2026, or 95% of average (Attachment B). This is about 10 inches (20%) less than it was a year ago.

Figure 4: Statewide Snowpack in the Sierra Nevada: 2025 versus 2026

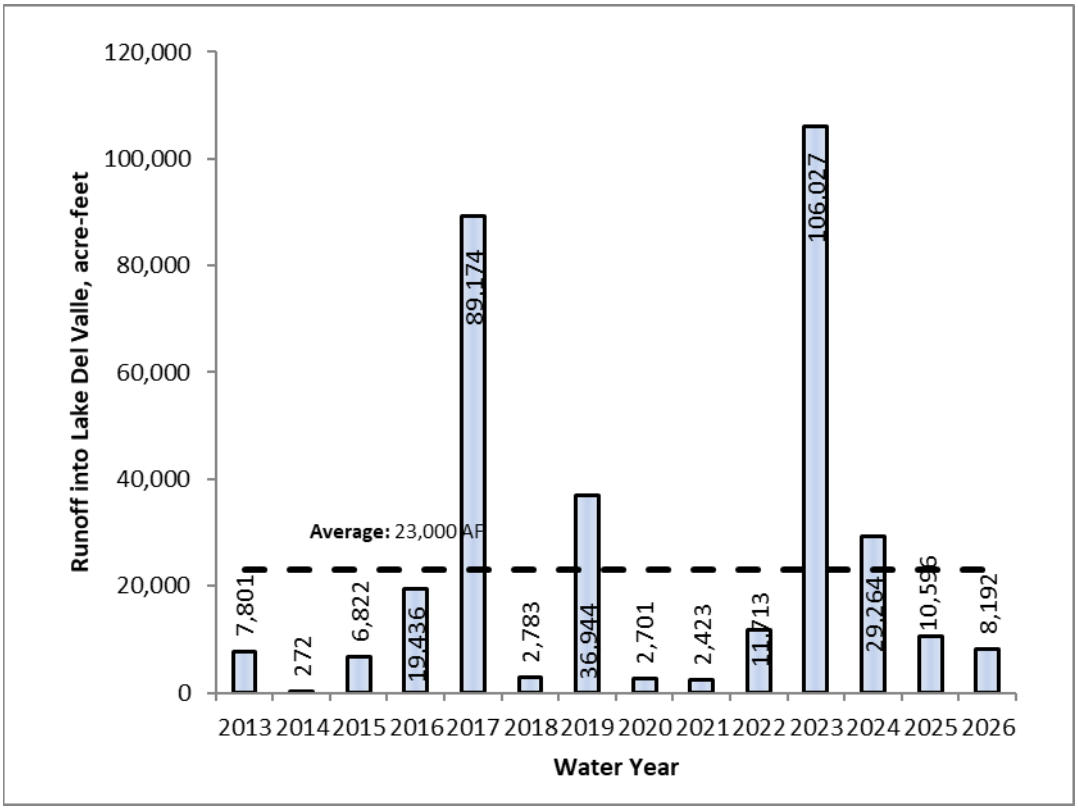


(Source: National Weather Service Remote Sensing Center, www.nohrsc.noaa.gov/nsa)

LOCAL RUNOFF AND PRECIPITATION IN 2026

The Tri-Valley area has experienced significantly less runoff this year compared to the same time last year. Figure 5 shows that as of April 1, 2026, runoff into Lake Del Valle is 36% of the average (8,200 AF compared to 23,000 AF). No flood releases have been made this year. Locally captured water is shared with the Alameda County Water District (ACWD) and stored in the lake for future use in accordance with Zone 7 and ACWD's water rights permit. Based on DWR accounting, Zone 7 has about 8,500 AF of local water stored in Lake Del Valle as of April 1, 2026. The local precipitation total is at 80% of the average year-to-date at Livermore Airport Station for April 1, 2026 (Attachment B).

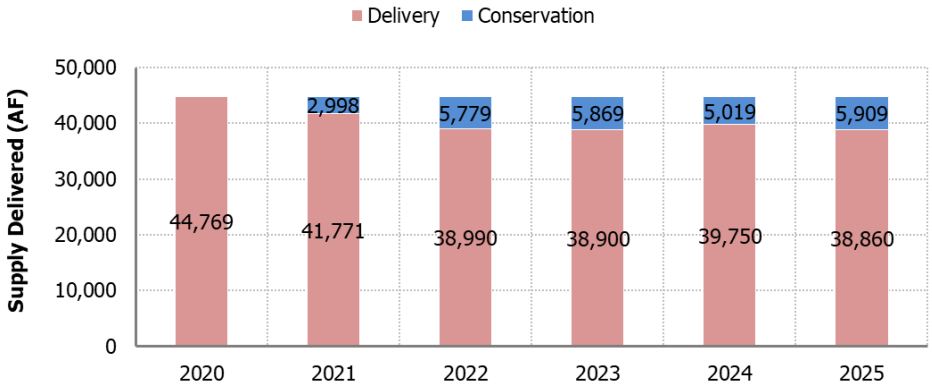
Figure 5: Runoff into Lake Del Valle (USGS Stream Gauge Arroyo Valle Below Lang Canyon)



CONSERVATION IN THE TRI-VALLEY

Zone 7 set a 5% voluntary conservation target in April 2024, which is still in effect. Since then, water demand has been slow to rebound to baseline levels following the last drought. Figure 6 shows water use and conservation between 2021 and 2025 relative to 2020. A cumulative amount of about 25,000 AF was conserved during this period by Tri-Valley treated and untreated water customers (relative to 2020). Water supply conservation preserves supplies and supports Zone 7's ability to meet retailer demands in current and subsequent years.

Figure 6: Conservation in the Tri-Valley (2020 Baseline)



2026 SWP TABLE A ALLOCATION: 30% AS OF APRIL 1, 2026

Per Zone 7's water supply contract with DWR, Zone 7 can receive up to 80,619 AF of SWP Table A water in any given year; the percent of this amount Zone 7 actually receives is referred to as the "Table A" allocation. The 2026 SWP Table A allocation for Zone 7 remains at 30%, equivalent to 24,200 AF.

ANNUAL REVIEW OF THE SUSTAINABLE WATER SUPPLY REPORT ASSUMPTIONS

In a normal year, the Annual Review of the Sustainable Water Supply Report uses the retailers' delivery requests in the analysis. Given average precipitation conditions in 2026, this report reflects retailer demands corresponding to a moderate water consumption decrease in the first two years, as water usage has thus far been slow to rebound from the last drought. It should be noted that the current 30-year water supply contracts for all four retailers are currently undergoing renewal. This report presumes those contracts will be renewed in 2026.

To illustrate Zone 7's ability to meet treated and untreated water demands, the analysis assumes below-normal conditions[1] (equivalent to 2009 conditions) in 2026, followed by critically dry conditions in 2027, continuing dry conditions in 2028 and normal conditions in 2029-2030. The demand trend of this Annual Review of the Sustainable Water Supply Report is reflective of the historic nature of the last drought and its anticipated long-term effects. For this Annual Review of the Sustainable Water Supply Report, projected average conditions are consistent with the 53% average Table A allocation or 42,700 AF for the existing conditions scenario in DWR's 2023 Delivery Capability Report[2]. Lake Del Valle local water supply is expected to yield on average 5,500 AF per year to reflect climate change conditions. Each year, Zone 7 typically strives to carry over 10,000 AF to the following year in SWP facilities ("SWP Carryover"). Any water captured locally in Lake Del Valle is also typically carried over into the following year, whenever possible. Reserving water for future years is used as a prudent water management practice given the uncertainty and variability of hydrologic conditions from year to year.

PROJECTED WATER DEMANDS: NEXT FIVE YEARS

Each year, Zone 7 receives Municipal and Industrial (M&I) treated water delivery requests from the retailers for the next five years (Table 1 and Figure 7), which are normally used in the Annual Review of the Sustainable Water Supply Report. Zone 7 estimates demands for direct customers and untreated water customers based on recent trends. Note that while the Annual Review of the Sustainable Water Supply Report typically uses retailer's treated water delivery requests in the analysis, as noted above, retailer demands have been adjusted in 2026 and 2027 to reflect the current water usage trends. Retailer demands are assumed to increase progressively toward delivery requests by 2028. Zone 7's demand projections include 3,500 AF of treated water supply

[1] Designations of hydrologic conditions are based on the Sacramento Valley Water Year Index: https://cdec.water.ca.gov/reportapp/javareports?name=WSIHIST

[2] The 2023 Delivery Capability Report projections were used for the average SWP Table A estimate and for equivalent hydrologic conditions: https://data.cnra.ca.gov/dataset/finaldcr2023/resource/92356681-957a-48ee-97c4-529d25b9dbb2

for the City of Pleasanton to replace their groundwater pumping quota. In 2025, Zone 7 was able to transfer 4,000 AF to another SWP contractor because it had water supplies exceeding its need and reserve. Figure 8 shows the projections of untreated water demand used in the analysis. As shown in Table 1, in addition to customer deliveries, demands also include system losses and water planned to go into storage for future use.

Table 1: Actual and Projected Five-Year Demands (Customer Deliveries), Water Planned for Storage, and System Losses

DEMANDS/PLANNED FOR STORAGE[a] **Acre-Feet**	**ACTUAL**	**PROJECTIONS**				
	2025	**2026**	**2027**	**2028**	**2029**	**2030**
Hydrologic Year Equivalent	*2010*	*2018*	*1977*	*2018*	*Average*	*Average*
Table A Allocation	*50%*	*30%*	*10%*	*30%*	*53%*	*53%*
Customer Deliveries						
Treated Water Demand[b]	34,500	37,300	36,500	41,100	41,700	42,100
Untreated Water Demand[c]	4,400	5,000	6,000	5,500	5,000	5,000
To Storage						
State Water Project - Carryover (Current to Following Year)	14,000	10,000	10,000	10,000	10,000	10,000
Lake Del Valle Local Water - Carryover	4,900	5,000	0	4,000	8,000	8,000
Livermore Valley Groundwater Basin Groundwater Recharge	3,100	2,000	0	0	4,400	5,900
Semitropic Storage	5,000	0	0	0	0	0
Cawelo Storage	0	0	0	0	0	0
System Losses						
Groundwater Production (Disposal to brine)	100	0	400	400	100	100
Delta Carriage Water or SWP Transfer	4,000	300	300	300	0	0
Treated Water System Losses	100	200	200	200	200	200
Lake Del Valle Evaporation Losses	500	500	300	200	500	500
State Water Project - Carryover Spill	0	0	0	0	0	0
Total	**70,600**	**60,300**	**53,700**	**61,700**	**69,900**	**71,800**

Notes

(a) Demands were rounded to the nearest 100 acre-feet.

(b) Treated Water Demand = Municipal and Industrial (M&I) demands. Demands include retailer demands (including groundwater pumping quota (GPQ) for Dublin San Ramon Services District and City of Pleasanton) and direct retail going forward. Incorporates 10% conservation relative 2026 and 2027 delivery requests.

(c) Zone 7's untreated water demand is used primarily for agricultural and golf course irrigation; projections are based on recent past usage and projected hydrologic conditions.

Figure 7: Historical and Projected Five-Year Treated Water Demands Based on Delivery Requests

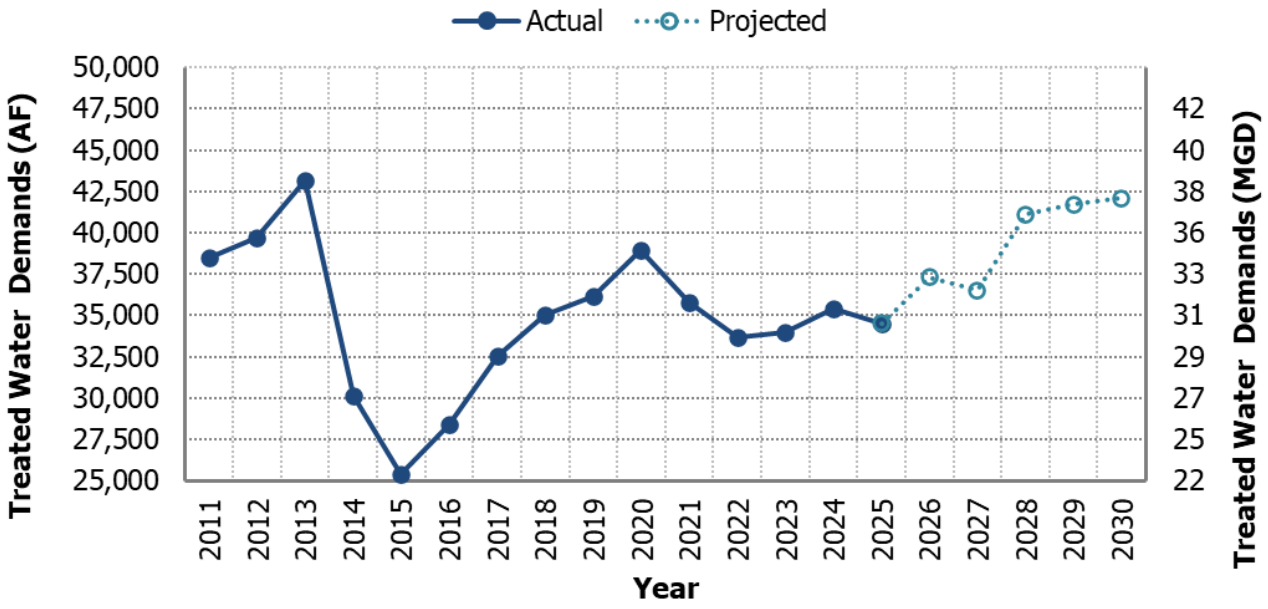
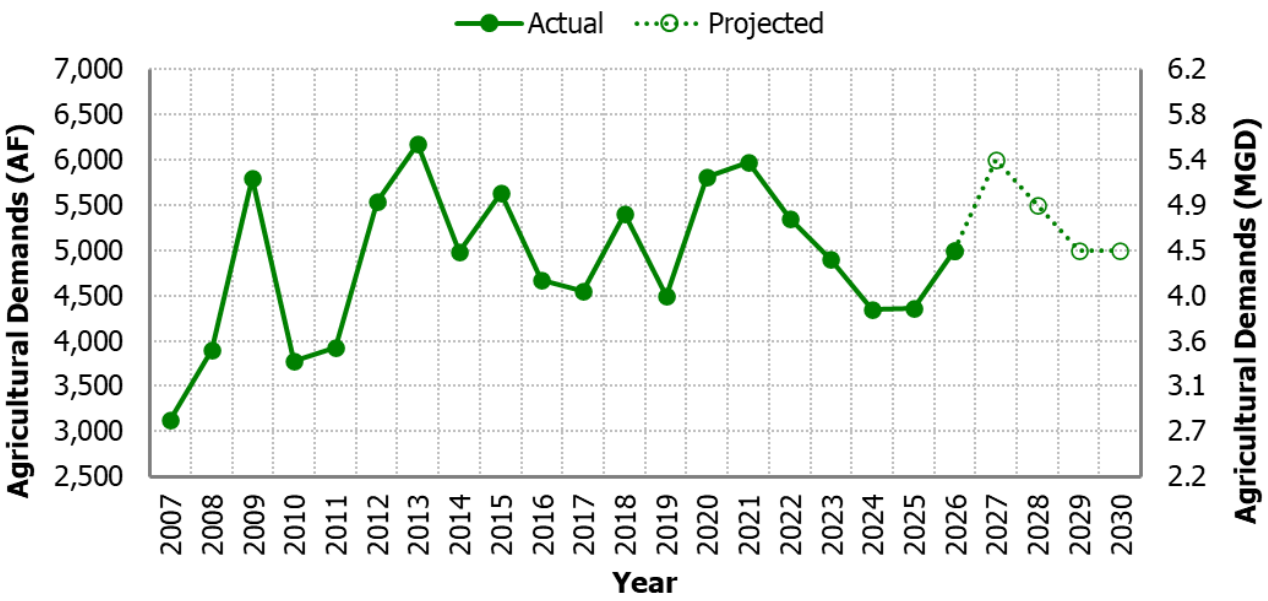


Figure 8: Historical and Projected Untreated Water Demands



The State of California has enacted several recent pieces of legislation focused on water conservation, including SB 1157, which revises indoor residential water use standards, SB 606 and AB 1668, collectively referred to as the "Making Conservation a California Way of Life" legislation, and recently AB 1572, which phases in a ban on the use of potable water to irrigate non-functional turf on certain non-residential properties. Future demands will therefore reflect a combination of water conservation and population growth in the Tri-Valley. Zone 7 will continue to work closely with the retailers to verify demands and track the effects of conservation. The 2021 Tri-Valley Municipal and Industrial Water Demand Study was

completed to improve long-term demand estimates.[3] Zone 7 is currently conducting another assessment of demands to update this study.

PROJECTED WATER SUPPLIES: NEXT FIVE YEARS

INCOMING SUPPLIES

Each year, Zone 7 receives water from its contract with DWR for imported SWP Table A water[4] and its local water right permit on Arroyo Valle (Lake Del Valle Local Water). This year, Zone 7 expects less than 1,000 AF from the Yuba Accord program. Zone 7 also has the option to purchase water from the Sutter Extension Water District up to 3,500 AF as necessary to shore up supplies. There are currently no plans to purchase water from this source in 2026.

Table 2 presents the expected yields in 2026 and estimates for 2027-2030.

WATER FROM STORAGE

Zone 7 currently stores surplus water in various storage facilities, including the Livermore Valley Groundwater Basin, San Luis Reservoir, Lake Del Valle, and the Kern County Storage and Recovery Programs (Semitropic and Cawelo), to help meet water demands during dry years. Water is recovered from storage as needed to supplement a given year's incoming supply and meet demand. Water may also be shifted from one type of storage to another as part of water management; during the 2022 drought, for example, water was withdrawn from storage, and a portion was redeposited in other locations to meet operational needs. As of this report, Zone 7 is not planning to store water outside its service area in the current water year.

Table 2: Projected Supply Sources: Incoming Supplies and Water from Storage

SUPPLY SOURCES	ACTUAL	PROJECTIONS				
Acre-Feet	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Hydrologic Year Equivalent	*2010*	*2018*	*1977*	*2018*	*Average*	*Average*
Table A Allocation	*50%*	*30%*	*10%*	*30%*	*53%*	*53%*
Incoming Supplies						
State Water Project (SWP) - Table A	40,300	24,200	8,100	24,200	42,700	42,700
Lake Del Valle Local Water - Current Year Capture	5,000	5,000	2,000	4,000	8,000	8,000
Yuba Accord/Dry Year Transfer Program	0	1,000	1,000	1,000	0	0
SWP/Other Water Transfer	0	0	2,000	4,500	0	0
From Storage						
State Water Project - Carryover (Previous to Current Year)	9,200	14,000	10,000	10,000	10,000	10,000
Lake Del Valle Local Water - Carryover	8,500	4,900	5,000	0	4,000	8,000
Livermore Valley Groundwater Basin	7,500	7,000	10,000	9,600	5,000	3,000
Groundwater Brine Disposal	100	0	0	400	200	100
Semitropic Banked Water (Pumpback/Exchange)	0	4,200	9,000	6,000	0	0
Cawelo Banked Water	0	0	6,600	2,000	0	0
Total	**70,600**	**60,300**	**53,700**	**61,700**	**69,900**	**71,800**

Notes:

(a) See Zone 7's 2022 Water Supply Evaluation Update for more details about Zone 7 supplies: https://www.zone7water.com/sites/main/files/file-attachments/draft_zone_7_2023_wse_update_2026.03.pdf?1680823418

(b) Zone 7 plans to obtain water transfers as needed, subject to availability.

[3] 2020 Tri-Valley Municipal and Industrial Water Demand Study: https://www.zone7water.com/sites/main/files/file-attachments/2020_tri-valley_demand_study.pdf?1627595774

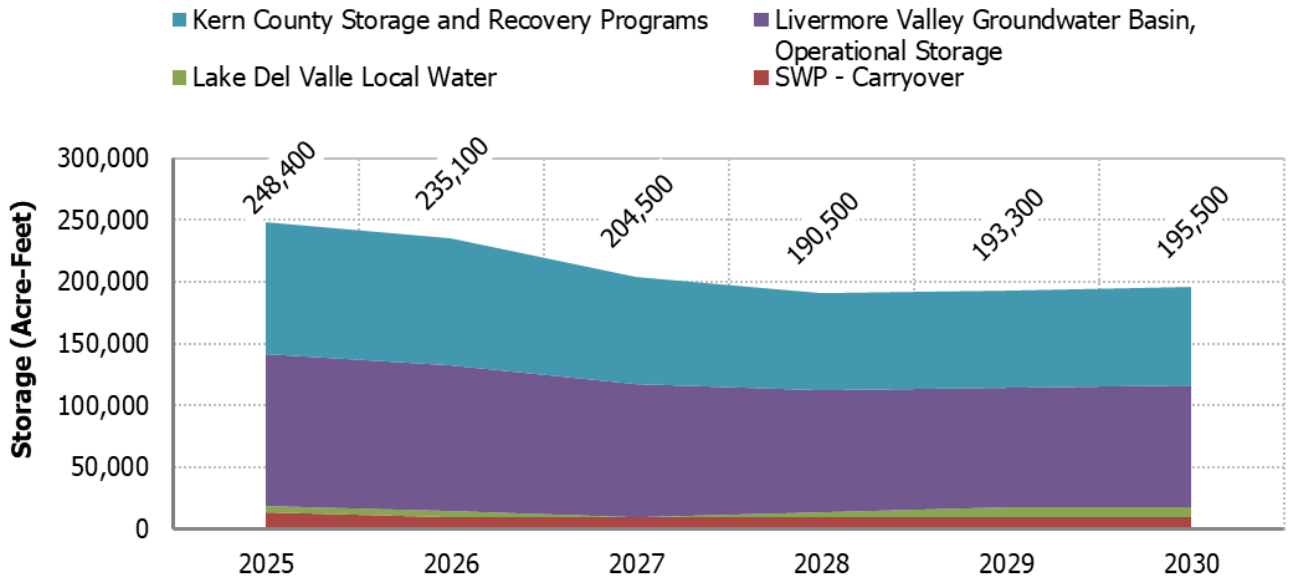
[4] This includes Table A or SWP carryover from the previous year; the latter is discussed in the next section.

Table 3 and Figure 9 summarize the total water in storage available as of the end of 2025, and projected storage levels between 2026 and 2030. Storage projections show a decrease of about 53,000 AF over the next five years from the end of 2025 through the end of 2030 based on assumed hydrologic conditions and demands. This trend is a preliminary estimate based on projected deposits and withdrawals from the various storage categories. For example, while it accounts for 10% of groundwater loss from local storage activities, it does not account for the natural influx into storage in the local groundwater basin from rainfall runoff. The declining storage trend could be mitigated through additional water transfers. Staff will monitor conditions to determine the appropriate amounts of water transfers in future years.

Table 3: End-of-Year Storage Balances (Actual and Projected)

	ACTUAL	PROJECTIONS				
End of Year Storage Balance (Acre-Feet)	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
SWP - Carryover	14,000	10,000	10,000	10,000	10,000	10,000
Lake Del Valle Local Water	4,900	5,000	0	4,000	8,000	8,000
Livermore Valley Groundwater Basin - Operational Storage	123,100	117,900	107,900	97,900	96,700	98,900
Kern County Storage and Recovery Programs	106,400	102,200	86,600	78,600	78,600	78,600
TOTAL STORAGE	**248,400**	**235,100**	**204,500**	**190,500**	**193,300**	**195,500**

Figure 9: End-of-Year Storage Balances (Actual and Projected)



COMPARISON OF SUPPLY AND DEMAND: NEXT FIVE YEARS

As shown in Table 4, Zone 7 can supply 100% of customer demand based on adjusted retailer demand levels for 2026 and 2027, with demand expected to ramp up to delivery request levels by 2028 under the assumed hydrology.

Table 4: Comparison of Supplies and Demands: Next Five Years

SUPPLIES VS DEMANDS	ACTUAL	PROJECTIONS				
Acre-Feet	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Hydrologic Year Equivalent	*2010*	*2018*	*1977*	*2018*	*Average*	*Average*
Table A Allocation	*50%*	*30%*	*10%*	*30%*	*53%*	*53%*
Incoming Supplies[(a)]	45,300	30,200	13,100	33,700	50,700	50,700
Water Supply from Storage[(b)]	25,300	30,100	40,600	28,000	19,200	21,100
Total Water Supply	70,600	60,300	53,700	61,700	69,900	71,800
Customer Deliveries[(c)]	38,900	42,300	42,500	46,600	46,700	47,100
Supply to Storage[(d)]	27,000	17,000	10,000	14,000	22,400	23,900
System Losses[(e)]	4,700	1,000	1,200	1,100	800	800
% of Demand Delivered (Customer Deliveries)	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
TOTAL STORAGE	**248,400**	**235,100**	**204,500**	**190,500**	**193,300**	**195,500**

Notes:

(a) From Table 2: SWP - Table A, Lake Del Valle Local Water, and water transfers.

(b) From Table 2: SWP - Carryover, Lake Del Valle Local Water - Carryover, Livermore Valley Groundwater Basin, and Semitropic/Cawelo.

(c) From Table 1: Treated and Untreated Water Demands.

(d) From Table 1: Water stored in Lake Del Valle and SWP as carryover, Livermore Valley Groundwater Basin recharge, and water stored in Semitropic/Cawelo.

(e) Operational losses: storage losses, evaporation, other system losses.

PROGRAMS NECESSARY TO MEET WATER DEMANDS GOING FORWARD

The Annual Review of the Sustainable Water Supply Report indicates that Zone 7 has enough water supplies to meet projected water demands over the next five years based on current projected demands (reflecting 10% decreased usage for retailers for 2026 and 2027) and assumed hydrology. To achieve long-term water supply reliability through buildout while accounting for hydrologic uncertainties, Zone 7 has been evaluating several potential future water supply and storage options.

The 2022 Water Supply Evaluation Update (WSE) Update analyzed several portfolios containing a combination of the following water supply and storage alternatives:

- Annual Water Transfers
- Chain of Lakes Conveyance System
- Sites Reservoir
- Delta Conveyance Project
- Bay Area Regional Desalination Project
- Potable Reuse
- Los Vaqueros Expansion

The 2022 WSE Update found that simulated portfolios containing more new water supply and storage projects performed better than portfolios with fewer new water supply and storage projects at reducing Zone 7's shortage probability. No single project would effectively reduce the shortage probability enough to meet Zone 7's reliability goals. Zone 7 continues to track and evaluate potential water supply and storage alternatives and will utilize its advanced water supply management model to evaluate the alternatives further as more information becomes available. Additionally, Zone 7 continues to refine its advanced water supply management model to better represent and optimize Zone 7's water supply system for future analyses and an upcoming water supply status report as required by the water supply reliability policy.

Zone 7 also continues to evaluate and optimize the long-term local water yield from the Arroyo Valle. Several planned capital projects (e.g., new wells, the Chain of Lakes Conveyance System) will help bolster the reliability of Zone 7's water supply system. The reconveyance of the lakes in the Chain of Lakes for Zone 7's operation continues to be a component of Zone 7's long-term reliability.

Zone 7 staff will also continue to monitor local and statewide conditions, adaptively modify operations as necessary to optimize use of available resources, remain prepared for continuing drought conditions, and continue to coordinate regularly with its local water supply retailers, untreated water customers, and with DWR. In June 2026, staff will provide an updated Operations Plan to the Water Resources Committee; this plan will reflect the latest actual supply and demand conditions and Zone 7's most feasible operational scenario for the remainder of 2026.

This Annual Review of the Sustainable Water Supply Report indicates that Zone 7 is able to meet demands without mandatory conservation. To promote conservation, Zone 7 will continue to implement rebates and public outreach programs in partnership with the retailers.

ATTACHMENTS:

1. Water Supply Reliability Policy
2. Hydrologic Conditions

Attachment A
Water Supply Reliability Policy

ZONE 7
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

BOARD OF DIRECTORS

RESOLUTION NO 13-4230

INTRODUCED BY DIRECTOR QUIGLEY
SECONDED BY DIRECTOR STEVENS

Water Supply Reliability Policy

WHEREAS, the Zone 7 Board of Directors desires to maintain a highly reliable Municipal and Industrial (M&I) water supply system so that existing and future M&I water demands can be met during varying hydrologic conditions; and

WHEREAS, the Board has an obligation to communicate to its M&I customers and municipalities within its service area the ability of Zone 7's water supply system to meet projected water demands; and

WHEREAS, the Board on August 18, 2004 adopted Resolution No. 04-2662 setting forth its Reliability Policy for Municipal & Industrial Water Supplies; and

WHEREAS, the Board desires to revise the Reliability Policy to reflect recent data, analysis, and studies.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby rescinds Resolution No. 04-2662 adopting the August 18, 2004 Reliability Policy for Municipal & Industrial Water Supplies; and

BE IT FURTHER RESOLVED that the Board hereby adopts the following level of service goals to guide the management of Zone 7's M&I water supplies as well as its Capital Improvement Program (CIP):

Goal 1.Zone 7 will meet its treated water customers' water supply needs, in accordance with Zone 7's most current Contracts for M&I Water Supply, including existing and projected demands as specified in Zone 7's most recent Urban Water Management Plan (UWMP), during normal, average, and drought conditions, as follows:

- At least 85% of M&I water demands 99% of the time
- 100% of M&I water demands 90% of the time

Goal 2:Provide sufficient treated water production capacity and infrastructure to meet at least 80% of the maximum month M&I contractual demands should any one of Zone 7's major supply, production, or transmission facilities experience an extended unplanned outage of at least one week.

BE IT FURTHER RESOLVED that to ensure that this Board policy is carried out effectively, the Zone 7 General Manager will provide a water supply status report to the Board every five years with the Zone 7 Urban Water Management Plan that specifies how these goals will be, or are being, achieved.

If the General Manager finds that the goals cannot be met during the first five years of the Urban Water Management Plan, then the Board will hold a public hearing within two months of the General Manager's finding to consider remedial actions that will bring Zone 7 into substantial compliance with the stated level of service goals. Remedial actions may include, but are not limited to, voluntary conservation or mandatory rationing to reduce water demands, acquisition of additional water supplies, and/or a moratorium on new water connections. After reviewing staff analyses and information gathered at the public hearing, the Board shall, as expeditiously as is feasible, take any additional actions that are necessary to meet the level of service goals during the following five-year period; and

BE IT FURTHER RESOLVED that the Zone 7 General Manager shall prepare an Annual Review of the Sustainable Water Supply Report which includes the following information:

(1) An estimate of the current annual average water demand for M&I water as well as a five-year projection based on the same information used to prepare the UWMP and CIP;
(2) A Summary of available water supplies to Zone 7 at the beginning of the calendar year;
(3) A comparison of current water demand with the available water supplies; and
(4) A discussion of water conservation requirements and other long-term supply programs needed to meet Zone 7 M&I water demands for single-dry and multiple-dry year conditions, as specified in the Zone 7's UWMP.

A summary of this review will be provided to M&I customers.

Definitions

Level of Service for Annual Water Supply Needs—the level of service is the percent of existing or projected water demand that Zone 7's water supply system can meet during two key conditions: (1) during various hydrologic conditions and (2) during unplanned outages of major facilities.
Capital Improvement Program (CIP)—the CIP is Zone7's formal program for developing surface and ground water supplies, along with associated infrastructure, including import water conveyance facilities, surface water treatment plants, groundwater wells, and M&I water transmission system to meet projected water demands.

Normal conditions—conditions that most closely represent median runoff or allocation from all normally contracted or available water supplies from the historic record.

Average conditions—conditions that most closely represent the average runoff or allocation from all normally contracted or legally available water supplies from the historic record.

Drought conditions—conditions that most closely represent reduced runoff or allocation level from the historic record from all normally contracted or legally available water supplies, including both single-dry and multiple-dry year conditions.

Single-dry year condition—a condition that most closely represents the lowest yield over a one-year period from the historic record from all normally contracted or legally available supplies.

Multiple-dry year condition—a condition that most closely represents three or more consecutive dry years from the historic record that represent the lowest yields from all normally contracted or legally available supplies.

Available water supplies—consist solely of (1) water supplies that Zone 7 has contracted for (e.g., listed under Schedule A of the State Water Contract, dry-year water options, special contracts with other water districts, etc.) and (2) water actually stored in surface and subsurface reservoirs.

Maximum Month—the largest monthly average water use.

ADOPTED BY THE FOLLOWING VOTE:

AYES: DIRECTORS FIGUERS, GRECI, MACHAEVICH, PALMER, QUIGLEY, RAMIREZ HOLMES STEVENS

NOES: NONE

ABSENT: NONE

ABSTAIN: NONE

I certify that the foregoing is a correct copy of a Resolution adopted by the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District on October 17, 2012.

By _____
President, Board of Directors

Attachment B
Hydrologic Conditions

Figure 10: California Snow Water Content as of April 1, 2026

CURRENT REGIONAL SNOWPACK FROM AUTOMATED SNOW SENSORS

% of April 1 Average / % of Normal for This Date

NORTH	
Data as of April 1, 2026	
Number of Stations Reporting	33
Average snow water equivalent (Inches)	1.5
Percent of April 1 Average (%)	6
Percent of normal for this date (%)	6

CENTRAL	
Data as of April 1, 2026	
Number of Stations Reporting	53
Average snow water equivalent (Inches)	5.8
Percent of April 1 Average (%)	21
Percent of normal for this date (%)	21

SOUTH	
Data as of April 1, 2026	
Number of Stations Reporting	24
Average snow water equivalent (Inches)	7.6
Percent of April 1 Average (%)	32
Percent of normal for this date (%)	32

STATE	
Data as of April 1, 2026	
Number of Stations Reporting	110
Average snow water equivalent (Inches)	4.9
Percent of April 1 Average (%)	18
Percent of normal for this date (%)	18

Statewide Average: 18% / 18%

Data as of April 1, 2026

Figure 11: Northern Sierra Precipitation as of April 1, 2026

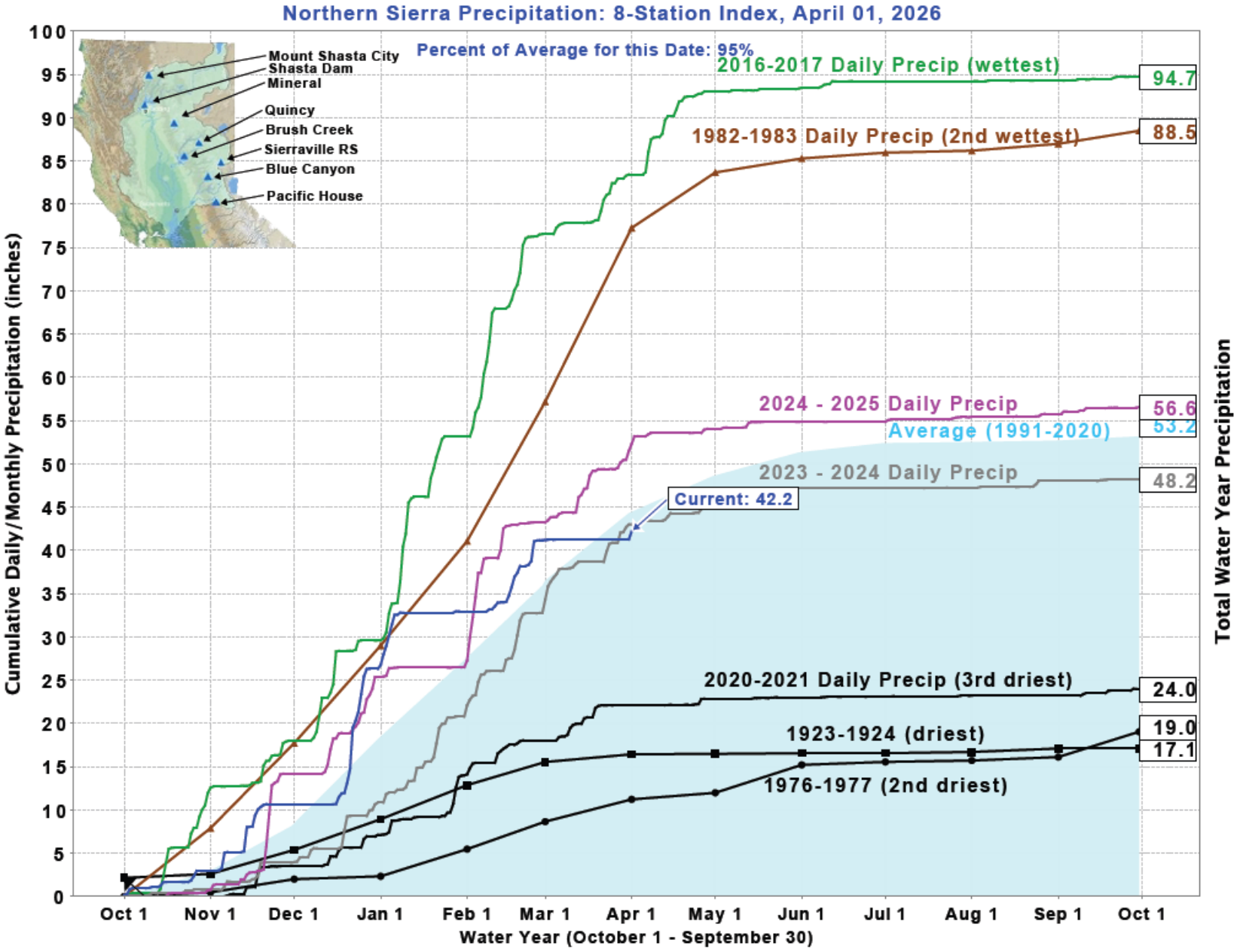


Figure 12: California Reservoir Conditions as of April 1, 2026

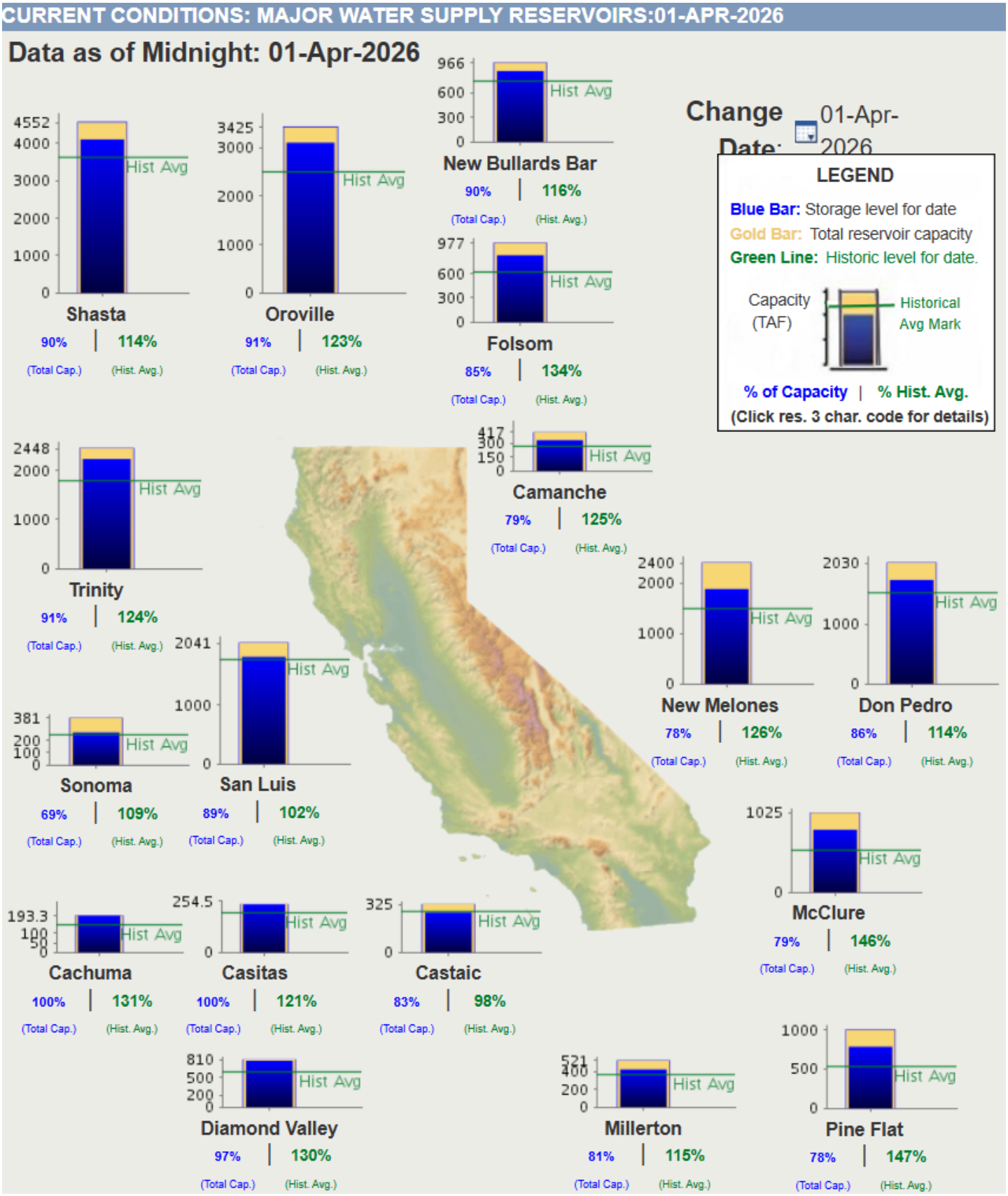
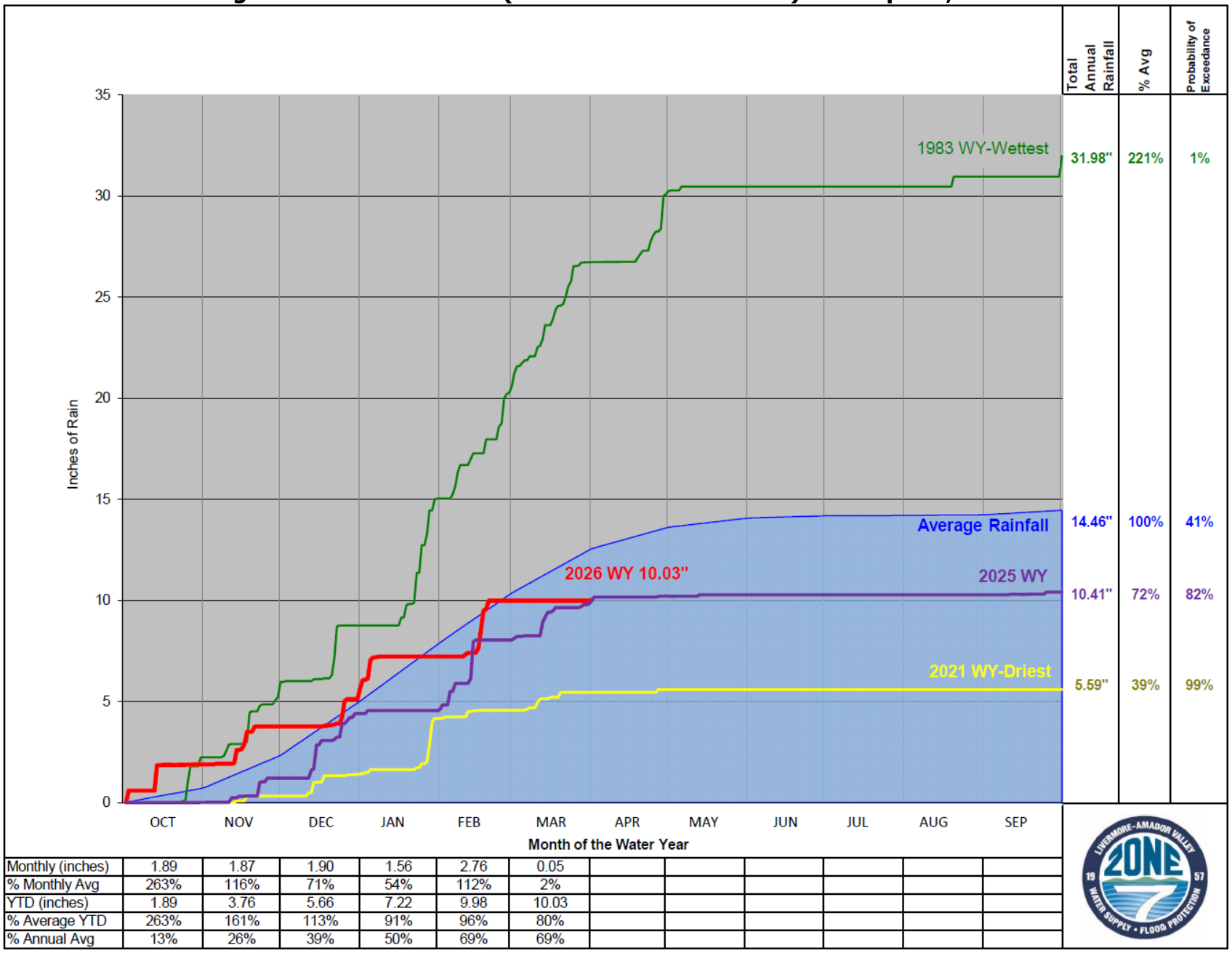


Figure 13: Local Rainfall (Livermore Station KLVK) as of April 1, 2026



Monthly (inches)	1.89	1.87	1.90	1.56	2.76	0.05						
% Monthly Avg	263%	116%	71%	54%	112%	2%						
YTD (inches)	1.89	3.76	5.66	7.22	9.98	10.03						
% Average YTD	263%	161%	113%	91%	96%	80%						
% Annual Avg	13%	26%	39%	50%	69%	69%						

Appendix 2.

Sample Resolution to Adopt Water Shortage Stage

ZONE 7
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
BOARD OF DIRECTORS

RESOLUTION NO

INTRODUCED BY
SECONDED BY

DECLARATION OF A STAGE X WATER SHORTAGE EMERGENCY

WHEREAS, the California Urban Water Management Planning Act ("Act") requires urban water suppliers to adopt an Urban Water Management Plan every five years; and

WHEREAS, Zone 7 adopted its 2025 Urban Water Management Plan in accordance with the provisions of the Act on June 17, 2026; and

WHEREAS, a required component of the Urban Water Management Plan is a Water Shortage Contingency Plan, which establishes criteria and guidelines for operations and water conservation during a water shortage condition; and

WHEREAS, on [Date] the Zone 7 Board was presented with the Annual Review of Sustainable Water Supply ("Annual Sustainability Report"); and

WHEREAS, the Annual Sustainability Report determined that Zone 7 can only deliver XX% of expected water demands in 20XX due to [cite conditions: e.g., critically dry conditions]. ***And/Or***

WHEREAS, on X/XX/20XX, the Governor of the State of California declared a drought state of emergency [asking/requiring] residents to reduce water use by XX%. ***And/Or***

WHEREAS, on X/XX/20XX, the Department of Water Resources announced a X% allocation from the State Water Project. ***And/Or***

WHEREAS, the Board has determined that water shortage emergency conditions exist within the Zone 7 service area due to [cite event: e.g., drought or supply disruption from the Delta due to an earthquake]; and

WHEREAS, the Water Shortage Contingency Plan in the 2025 Urban Water Management Plan adopted by the Board on June 17, 2026 identifies stages of water shortages and demand reduction targets, water supply conditions and required actions associated with each stage.

WHEREAS, current conditions warrant declaration of a Stage X water shortage which requires a XX% [voluntary/mandatory] reduction in water use.

NOW, THEREFORE BE IT RESOLVED, the Board hereby declares a Stage X water shortage and actions applicable to Stage X are, put into effect immediately.

ADOPTED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSENT:

ABSTAIN:

I certify that the foregoing is a correct copy of a resolution adopted by the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District on [DATE]

By_____
President, Board of Directors

Appendix 3.

Water Shortage Response Action Summary

Water Shortage Response Action Summary

Stage	Supply shortfall	Action types			
		Supply Augmentation	**Demand Reduction**	**Communication & outreach**	**Operational & Miscellaneous**
Stage 1	**Up to 10%**	* Seek transfers from pre-negotiated transfer/exchange program, e.g. Sutter Extension.	* Call for 10% voluntary water use reduction.	* Public information campaign.	* Track weather conditions, snowpack, SWP allocations, and water storage.
			* Promote water conservation programs.	* Outreach and education efforts.	* Coordinate with retailers and update them as needed. Track State actions and align with these actions as much as possible.
			* Begin tracking total Zone 7 water usage, including direct retail water usage.	* Conduct press release to announce the conservation level/actions requested.	* Develop weekly reports of reservoir levels.
			* Consider voluntary restrictions, e.g., limit irrigation to specific times of day, require shut-off nozzles for hoses, etc.	* *Pass resolution to declare stage.*	* Begin monitoring revenue impacts.
Stage 2	**Up to 20%**		**Maintain other Stage 1 actions as needed.**		
		* Seek additional transfers beyond pre-negotiated transfer/exchange program.	* Call for mandatory water use reduction (up to 10%).	* Continue public information campaign and outreach/education efforts.	* Consider creating a community water waste hotline to provide education and resources.
			* Consider increasing water conservation program goals and funding. Consider promoting programs to high-consumption customers.	* Begin regular meetings with retailers, other agencies, and the internal drought coordination team.	* Utilize funds from reserves.
			* Consider implementing drought surcharge.	* *Pass resolution to declare stage.*	* Develop a budget code to track labor hours and expenditures.
			* Some mandatory restrictions may start (e.g., limiting the number of days that outdoor watering is allowable).		* Evaluate the timing of maintenance activities, such as line flushing, to manage water supplies and shortages.
Stage 3	**Up to 30%**		**Maintain other Stage 2 actions as needed.**		
			* Call for mandatory water use reduction (up to 20%).	* Advance the public information campaign and outreach/education efforts.	* Decrease line flushing and maintenance to reduce water use.
			* Increase water conservation program goals and funding.	*Conduct more regular meetings with retailers, other agencies, etc.	* Seek supplemental funding (grants, loans, etc.)
			* Implement drought surcharge matching the corresponding stage of drought.	* Increase updates and coordination with retailers.	
			* Encourage retailers to enforce excess use penalties.	* *Pass resolution to declare stage.*	
			* Request retailers to set up water use restrictions, e.g., limit outdoor watering to 1-2 days/week, prohibit use of potable water for construction & dust control, etc.		
Stage 4	**Up to 40%**		**Maintain other Stage 3 actions as needed.**		
			* Call for mandatory water use reduction (up to 30%).	* Increase frequency of press releases.	* Prioritize spending for critical infrastructure.
			* Request retailers and cities to increase enforcement of their water shortage contingency plans, which could include fines for repeated violations.	* *Pass resolution to declare stage.*	* Develop daily reports of reservoir levels.
Stage 5	**>40%**		**Maintain other Stage 4 actions as needed.**		
		* Bring in bottled water or emergency supplies as needed	* Call for mandatory water use reduction (>30%).	* Prepare emergency communication messaging, i.e., reverse 911.	* Activate the Emergency Operations Center (EOC).
			* Water may only be available to meet health and safety needs. Urge retailers to enforce and Zone 7 may support enforcement.	* Provide daily updates on conditions.	* Develop hourly reports of reservoir levels.
			* Ask communities to restrict water use for outdoor and recreational purposes, including: irrigation; filling or topping off swimming pools, spas, or decorative water features; washing vehicles at home; and washing hardscapes.	* *Pass resolution to declare stage.*	
			* Prohibit all landscape irrigation.		

NOTES:
The supply shortfall listed is based on the expected annual demand as described in the monthly water inventory. The monthly water inventory already incorporates supplemental supply measures as shown in Figure 1 of the Water Shortage Contingency Plan.
Actions can be implemented in earlier stages as needed.