

Zone 7 Water Agency Water Shortage Contingency Plan

JOINTLY PREPARED BY



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LIST OF ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
AWSDA	Annual Water Supply and Demand Assessment
Cal Water	California Water Service-Livermore District
ccf	Hundred cubic feet
CIP	Capital Improvement Program
CWC	California Water Code
Delta	Sacramento-San Joaquin Delta
DSRSD	Dublin San Ramon Services District
DWR	Department of Water Resources
EOC	Emergency Operations Center
ERP	Emergency Response Plan
Legislature	California State Legislature
Livermore	City of Livermore
M&I	Municipal and Industrial
PIO	Public Information Officer
Pleasanton	City of Pleasanton
SB	Senate Bill
SBA	South Bay Aqueduct
UWMP	Urban Water Management Plan
WARN	Water/Wastewater Agency Response Network
WSCP	Water Shortage Contingency Plan
Zone 7	Zone 7 Water Agency
Zone 7 Board	Zone 7 Board of Directors

Zone 7 Water Agency Water Shortage Contingency Plan

Water shortages occur whenever the available water supply cannot meet the normally expected customer water use. This can be due to several reasons, such as climate change, drought, and catastrophic events. Drought, regulatory action constraints, and natural and manmade disasters may occur at any time. In 2018, the California State Legislature (Legislature) enacted two policy bills, (Senate Bill (SB) 606 (Hertzberg) and Assembly Bill (AB) 1668 (Friedman)) (2018 Water Conservation Legislation), 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.

Zone 7 Water Agency's (Zone 7) 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 and included as Appendix A to this WSCP, guides the management of its water supplies to meet this goal.

This Water Shortage Contingency Plan (WSCP) reflects Zone 7's Water Supply Reliability Policy and describes its 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 legal authorities, communication protocols, compliance and enforcement, and monitoring and reporting are described.

Zone 7 intends for this WSCP to be dynamic so that it may assess response action effectiveness and adapt to emergencies and catastrophic events. Refinement procedures to this WSCP are provided to allow Zone 7 to modify this WSCP outside of the Urban Water Management Plan (UWMP) process.

1.0 WATER SUPPLY RELIABILITY ANALYSIS

Chapters 6 and 7 of Zone 7's 2020 UWMP present Zone 7's water supply sources and reliability, respectively. Findings show Zone 7 can reliably meet its projected demands through 2045 in normal and dry hydrologic conditions, including single dry years and five consecutive dry years.

Statewide water supply conditions, changes in groundwater levels, and actions by other agencies may impact Zone 7's available water supply. For Zone 7, a water shortage condition occurs when the available supply of potable water cannot meet its retailers' normal water demands for human consumption, sanitation, fire protection, and other beneficial uses. Zone 7's retailers include the California Water Service-Livermore District (Cal Water), the City of Livermore (Livermore), the City of Pleasanton (Pleasanton), and the Dublin San Ramon Services District (DSRSD).

The analysis associated with this WSCP was developed in the context of Zone 7's water supply sources and system reliability. In some cases, Zone 7 may be able to foresee its water shortage condition, but the water shortage may also be caused by an unforeseen emergency event. In general, Zone 7's water supply conditions may be affected by the following:

- SWP supply allocations and storage levels
- Sacramento-San Joaquin Delta (Delta) water quality



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- Occurrence of threatened/endangered species near Banks Pumping Plant in the Delta
- Delta vulnerability to seismic events, changing environmental and regulatory requirements, and climate change
- Local hydrology affecting availability of Arroyo Valle water supply
- Contaminants in the Main Basin
- Outages of Delta (e.g., Banks Pumping Plant) and South Bay Aqueduct (SBA) facilities
- Outages of treated water production facilities

2.0 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

Beginning July 1, 2022, California Water Code (CWC) §10632.1 requires water suppliers to submit an Annual Water Supply and Demand Assessment (AWSDA). Water suppliers will also be required to submit an Annual Water Shortage Assessment Report beginning July 1, 2022. Zone 7 plans to satisfy both requirements via its “Annual Review of the Sustainable Water Supply” (Annual Sustainability Report), which Zone 7 has been producing since it adopted an updated Water Supply Reliability Policy on October 17, 2012. The Annual Sustainability Report is submitted to the Zone 7 Board of Directors (Zone 7 Board) annually in April; the 2020 report is included in this WSCP as Appendix B. In addition to the Annual Sustainability Report, Zone 7 also prepares and updates its Water Supply Operations Plan over the course of the year. The Water Supply Operations Plan is a more detailed plan focused on the current year, but it also informs the longer-term outlook of the Annual Sustainability Report.

Zone 7’s Annual Sustainability Report 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 five-year projection (including water losses and water conservation) based on projections from Zone 7’s retailers, observed trends, and other updated information. The Annual Sustainability Report is more focused on “Delivery Requests” submitted by the retailers, while Zone 7’s Water Supply Operations Plan is generally based on forecasted demands based on observed trends updated over the year.
- 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.
- A comparison of current and projected water demand with the available water supplies to determine if a water shortage condition is anticipated.
- 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 single-dry and multiple-dry year conditions, as specified in Zone 7’s UWMP.



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Zone 7 will modify the contents of its Annual Sustainability Report as needed to meet the requirements of the AWSDA and the Annual Water Shortage Assessment Report. For the purposes of this WSCP, the Annual Sustainability Report is assumed to meet these requirements for the AWSDA and the Annual Water Shortage Assessment Report.

This section provides the decision-making process, key data inputs, and methodology necessary for Zone 7 to produce its Annual Sustainability Report. This process includes steps Zone 7 may take to declare a water shortage emergency and associated water shortage stage (see Section 3.0) and implement water shortage response actions (see Section 4.0).

2.1 Decision-Making Process

Zone 7 will use the decision-making process described below to consistently produce its Annual Sustainability Report but may adjust and improve this process as needed.

Zone 7 staff will prepare the Annual Sustainability Report and submit it to the California Department of Water Resources (DWR) by July 1 of each year under the new requirement effective on July 1, 2022. Key data inputs described in Section 2.2 will be gathered and the assessment will be conducted in accordance with Section 2.3.

The findings from the Annual Sustainability Report are presented to the Zone 7 Board in April of each year. If available supply will not meet expected demands, recommendations on determining a water shortage condition and associated actions will be included for Board consideration. Based on the findings of the Annual Sustainability Report, the Zone 7 Board is responsible for determining if a water shortage condition exists and whether to adopt a resolution declaring a water shortage emergency and an associated water shortage stage and authorizing water shortage actions (a sample resolution is provided in this WSCP as Appendix C). Recommended actions may include declaration of a water shortage emergency, declaration of a water shortage stage, and implementation of shortage response actions. Such actions will be coordinated interdepartmentally, with the Tri-Valley's water service providers, and with Alameda and Contra Costa counties for the possible proclamation of a local emergency.

To produce the Annual Sustainability Report, Zone 7 will follow the approximate schedule of activities and decision-making shown on Table 1 and Table 2, respectively. Due to variations in climate and hydrologic conditions and other factors from year-to-year, the dates shown in the tables are approximate and may be adjusted as needed. The intent of the schedule is to allow Zone 7 to implement shortage response actions to effectively address anticipated water shortage conditions in a timely manner while complying with the State's reporting requirements. Preparation of the Water Supply Operations Plan and Annual Sustainability Report is currently assigned to the Integrated Planning Section as the lead, with close coordination with other Zone 7 sections (i.e., Operations, Engineering, Groundwater, Water Quality, Finance). Executive Management approves the Annual Sustainability Report and Water Supply Operations Plans before presentation to the Water Resources Committee and Zone 7 Board.



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

Schedule	Activities
Mid-December (prior year) to mid-January	Prepare Preliminary Water Supply Operations Plan and present to the Water Resources Committee of the Zone 7 Board. This gives a preview of water supply conditions and initiates planning for any potential actions.
January to mid-March (may continue over the year)	Monitor water supply, demand, and hydrologic condition trends and coordinate with DWR. Coordinate with groundwater banks to plan for any banked water recovery, if needed. Arrange for water transfer, if needed.
Mid-March to mid-April	Using the most current information, prepare the summaries of water supply sources for current year, a following dry year, and subsequent average three years for a five-year outlook. Describe sources and quantities considering factors affecting supply as described in Section 2.2.
Mid-March to mid-April	Document water demands for the current year and subsequent four years assuming the hydrologic conditions described above. Demands will generally be based on retailers' delivery requests. Describe demand types and quantities considering factors affecting demand as described in Section 2.2.
Mid-March to mid-April	Using the methodology described in Section 2.3, calculate Zone 7's water supply reliability over the five-year period. Determine if a water shortage condition is expected and recommend associated actions. Prepare the Annual Sustainability Report.
April Zone 7 Board Meeting	Present the findings and recommendations from the Annual Sustainability Report for Zone 7 Board consideration.
Late April-May	Update the Water Supply Operations Plan based on the latest information.
June	Present the Water Supply Operations Plan to the Water Resources Committee.
Before July 1	Submit the Annual Sustainability Report to DWR.
July-December	Update the Water Supply Operations Plan, as needed.

Table 2. Schedule of Decision-Making Activities

Start Date	Activities	Approval
January to mid-March	Initiate any requests for banked water recovery and arrange for water transfers, as needed.	Executive Management
Mid-March to mid-April	If a water shortage emergency condition exists, prepare recommendations on water shortage condition determination and actions based on Annual Sustainability Report findings. Determine financial consequences of a water shortage emergency. Prepare resolution/s ^(a) approving determinations and actions.	Executive Management
April Zone 7 Board Meeting (currently third Wednesday)	Receive presentation of Annual Sustainability Report, including determinations and recommendations. Adopt resolution/s approving determinations and actions, as appropriate.	Zone 7 Board
January-April	Finalize water transfer requests and any new agreements, if needed. New agreements will require Zone 7 Board approval.	Zone 7 Board

(a) Sample resolutions are provided in Appendix C.



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2.2 Key Data Inputs

The State requires that the Annual Sustainability Report 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 three years are of average conditions. The following key data inputs will be used to evaluate Zone 7's water supply reliability.

In reviewing planned water supplies, the Annual Sustainability Report will consider, as appropriate and applicable:

1. Hydrologic conditions
2. SWP supply availability
3. Local water availability
4. Storage conditions
5. Regulatory conditions
6. Contractual constraints
7. Surface water and groundwater quality conditions
8. Groundwater well production limitations
9. Infrastructure capacity constraints or changes
10. Capital improvement project implementation

Planned water supply sources and quantities will be described and shall be reasonably consistent with the supply projections in Chapter 6 of Zone 7's most recent UWMP. If supply sources and projections differ significantly between the Annual Sustainability Report and the UWMP, Zone 7 will explain the differences as needed.

In reviewing planned unconstrained water demands (i.e., without conservation) for the five-year outlook, the Annual Sustainability Report will consider, as appropriate and applicable:

1. Retailers' Delivery Requests
2. Local weather conditions
3. Demand trends
4. Water year type
5. Population changes (e.g., due to development projects)
6. Anticipated new demands (e.g., changes to land use)
7. Pending policy changes that may impact demands
8. Infrastructure capacities and constraints (Zone 7 and retailers)
9. Retailer groundwater pumping



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Planned water demand types and quantities will be described and shall be reasonably consistent with the demand projections in Chapter 4 of Zone 7's most recent UWMP. If demands differ significantly between the Annual Sustainability Report and the UWMP, Zone 7 will explain the differences as needed.

2.3 Assessment Methodology

In preparing the Annual Sustainability Report, Zone 7 will use the following assessment methodology and criteria to evaluate the agency's water supply reliability for the current year and following dry year (followed by three years of average conditions). Zone 7 assesses the data listed in Section 2.2 to develop its supply and demand forecasts, which are then compared to determine Zone 7's water supply reliability. Zone 7's water supply will be deemed reliable if it can meet planned water demands. If water supply cannot meet planned water demands in the current year or the following dry year, the extent of the water shortage condition will be determined, and Zone 7 will prepare recommended response actions in accordance with this WSCP. Findings from the Annual Sustainability Report will be presented to the Zone 7 Board, along with the recommendations for action.

3.0 SIX STANDARD WATER SHORTAGE STAGES

To provide a consistent regional and statewide approach to conveying the relative severity of water supply shortage conditions, the 2018 Water Conservation Legislation mandates that water suppliers plan for six standard water shortage levels that correspond to progressive reductions of up to 10, 20, 30, 40, 50 percent, and greater than 50 percent from normal conditions. Each shortage condition should correspond to additional actions water suppliers would implement to meet the severity of the impending shortages.

For each of the State's standard shortage levels (also called "stages"), Table 3 summarizes the water shortage range (i.e., percent shortage from normal supplies) and a brief narrative description of the corresponding water shortage condition. These water shortage stages apply to both foreseeable and unforeseeable water supply shortage conditions. Zone 7's 2015 UWMP included four stages that addressed up to 35 percent water demand reduction in the first three stages and more than 35 percent water demand reduction in Stage 4. Table 3 presents Zone 7's reorganized stages, which align with the State's standard stages.

As described in Section 2.0, Zone 7 will prepare the Annual Sustainability Report to determine its water supply condition for at least the current year and the following one dry year. Preparing the Annual Sustainability Report helps Zone 7 ascertain and communicate the need to declare a water shortage emergency and water shortage stage due to anticipated conditions. In other cases, Zone 7 may need to declare a water shortage emergency due to unforeseen water supply interruptions. When Zone 7 anticipates or identifies that water supplies may not be adequate to meet the normal water supply needs of its customers, the Zone 7 Board may determine that a water shortage exists and consider a resolution (sample in Appendix C) to declare a water shortage emergency and associated stage. The shortage stage provides direction on shortage response actions. Note that Zone 7 will also consider any statewide actions or declarations in any local declarations of a shortage stage.



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Table 3. Water Shortage Contingency Plan Levels (DWR Table 8-1)

Shortage Level	Percent Shortage Range	Water Shortage Condition	Shortage Response Actions
1	Up to 10%	<ul style="list-style-type: none"> Agency has adequate supply and seeks to preserve water resources for the future; or Assessment shows that water supply is not able to meet normal demands by up to 10%; or Definable event has reduced water supply by up to 10%. 	Implement actions per Table 4 and Table 5
2	Up to 20%	<ul style="list-style-type: none"> Assessment leads to a reasonable conclusion that water supplies may not adequately meet normal demands in the current or upcoming years; or Assessment shows that water supply is not able to meet normal demands by up to 20%; or Definable event has reduced water supply by up to 20%. 	Implement actions per Table 4 and Table 5
3	Up to 30%	<ul style="list-style-type: none"> Previous water conservation target has not been met; or Assessment shows that water supply is not able to meet normal demands by up to 30%; or Definable event has reduced water supply by up to 30%. 	Implement actions per Table 4 and Table 5
4	Up to 40%	<ul style="list-style-type: none"> Previous water conservation target has not been met; or Assessment shows that water supply is not able to meet normal demands by up to 40%; or Definable event has reduced water supply by up to 40%. 	Implement actions per Table 4 and Table 5
5	Up to 50%	<ul style="list-style-type: none"> Previous water conservation target has not been met; or Assessment shows that water supply is not able to meet normal demands by up to 50%; or Definable event has reduced water supply by up to 50%. 	Implement actions per Table 4 and Table 5
6	>50%	<ul style="list-style-type: none"> Previous water conservation target has not been met; or Assessment shows that water supply is not able to meet normal demands by more than 50%; or Definable event has reduced water supply by more than 50%. 	Implement actions per Table 4 and Table 5

Notes: Assessment is based on findings from the Annual Sustainability Report. Zone 7 will also consider any statewide actions or declarations in any local declarations of a shortage stage.

4.0 SHORTAGE RESPONSE ACTIONS AND EFFECTIVENESS

CWC §10632 (a)(4) requires shortage response actions that align with the defined shortage levels. Zone 7's shortage response actions consist of a combination of demand reduction (in coordination with its retailers), supply augmentation, and operational changes. Zone 7's suite of response actions depends on the event that precipitates a water shortage stage, 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 its response actions to close the gap between water supplies and water demand and meet the water use goals associated with the declared water shortage stage.



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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.

As noted above, Zone 7's overall shortage response will be dynamic to close the gap between water supply and demands to meet the goal of the declared stage. For example, Zone 7 may intensify its public outreach or work with its retailers to enforce water use prohibitions more vigorously if water demand reduction goals are not met.

The shortage response actions discussed below may be considered as tools that allow Zone 7 to respond to water shortage conditions. Because Zone 7 may continuously monitor and adjust its response actions to reasonably equate demands with available supply, the extent to which implementation of each action reduces the gap between water supplies and water demand is difficult to quantify and thus only estimated. 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.

4.1 Demand Reduction

Since Zone 7 operates as a wholesale water agency, it cannot set or enforce consumption limits at the customer (e.g., household) level. As a result, this WSCP does not include per capita allotment, penalties, or customer incentives for conservation for any customer sector. Zone 7's retailers will provide their demand reduction response actions in their respective UWMPs. However, Zone 7 may request that retailers reduce demands when supplies are insufficient. Up to Stage 2, Zone 7's demand reduction requests to its retailers may be voluntary or mandatory, depending on conditions. At Stage 3 and higher, Zone 7 will likely require its retailers to reduce demands up to the applicable shortage percentage.

Zone 7's other demand reduction actions include public outreach and financial actions through Zone 7 Board resolutions. Public outreach to support voluntary conservation begins with Stage 1 and expands and intensifies with increasing shortage stages. At any shortage stage, the Zone 7 Board will pass a resolution to officially declare a water shortage emergency and stage, and potentially a separate resolution for implementation of a water shortage surcharge (see sample resolutions in Appendix C).

Table 4 summarizes Zone 7's demand reduction actions, which are organized by the triggering water shortage level (i.e., stage), and each action includes an estimate of how much its implementation will reduce the shortage gap. For each demand reduction action, Table 4 also indicates if Zone 7 uses compliance actions such as penalties, charges, or other enforcement. Demand reduction actions are only listed in Table 4 in the stage when they are first implemented. Zone 7 will continue to use these actions in higher stages unless otherwise noted.



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Table 4. Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions <i>Drop down list</i> <i>These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <i>For Retail Suppliers Only</i> <i>Drop Down List</i>
1	Expand Public Information Campaign	(see Note)	Public outreach to support voluntary conservation.	No
	Other	Up to the full shortage gap	Ask retailers for voluntary demand reduction, as needed.	No
2	Expand Public Information Campaign	(see Note)	Expand public outreach to support conservation.	No
	Other	Up to the full shortage gap	Ask retailers for voluntary or mandatory demand reduction, as needed. Only the latter will be enforced.	Yes
3*	Expand Public Information Campaign	(see Note)	Intensify public outreach to support conservation.	No
	Other	Up to the full shortage gap	Ask retailers for mandatory demand reduction.	Yes

NOTES: Expanding public information campaign boosts water conservation overall, so no shortage gap reduction estimate provided. Actions introduced in a lower stage will also be used in higher stages, unless otherwise noted. *At Stage 3 and higher, Zone 7 will likely require its retailers to reduce demands up to the applicable shortage percentage.

Zone 7 will monitor water production, demands, and changing conditions to determine the intensity of its public outreach, the extent of its enforcement actions, and the need to adjust its water shortage stage declaration as discussed in Section 9.0.

4.2 Additional Mandatory Restrictions

As a wholesaler, Zone 7 does not have direct authority to institute 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.

4.3 Supply Augmentation and Other Actions

Chapter 6 of Zone 7's 2020 UWMP describes Zone 7's normal water supply portfolio, as well as dry-year and emergency supplies. Zone 7's non-local groundwater storage in the Kern County groundwater banks is largely intended to provide water supply during drought years or during definable water shortage events. Water transfer amounts would also be adjusted to meet supply deficits. These supply augmentation options are already included in the Annual Sustainability Report as needed to close the gap between supplies and demands, so they are not counted again as a potential shortage response.

Table 5 lists the supply augmentation methods and other actions (including operational changes described in Section 4.4) Zone 7 can utilize during each shortage level. These actions are only listed in Table 5 in the stage when they are first implemented. Zone 7 will continue to use these actions in higher stages unless otherwise noted.



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Table 5. Supply Augmentation and Other Actions (DWR Table 8-3)

Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier <i>Drop down list</i> <i>These are the only categories that will be accepted by the WUEdata online submittal tool</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>
1	Other actions (describe)	Up to the full shortage gap.	Optimize use of groundwater and surface water supplies and adjust use of locally vs. remotely stored water.
	Other actions (describe)	N/A	Improve monitoring, analysis, and tracking of customer water usage rates.
	Other actions (describe)	N/A	In anticipation of decreased revenue, reduce discretionary spending
2	Transfers	Up to the full shortage gap.	Pursue opportunities for additional water transfers to lower the shortage gap, beyond what is already in the Annual Sustainability Report.
	Exchanges	Up to the full shortage gap.	Pursue opportunities for (additional) water exchanges to lower the shortage gap.
	Implement or Modify Drought Rate Structure or Surcharge	N/A	Consider implementation of water shortage surcharge correlated with stage (requires Board approval).
	Other actions (describe)	N/A	Evaluate timing of maintenance activities that could negatively impact ability to manage water supplies/shortages, or could result in loss of water supply.
	Other actions (describe)	up to 100 AF	Consider greater incentives under rebate program and focus on high-consumption customers.
3	Other actions (describe)	unknown - depends on project/s identified	Review CIP program and accelerate projects facilitating immediate improvement in water supply management if feasible/necessary.
	Stored emergency supply	To be determined based on operational	Consider/plan for/implement pumpback into South Bay Aqueduct if no supplies are available from Delta pumping.

NOTES: Actions introduced in a lower stage will also be used in higher stages, unless otherwise noted.

4.4 Operational Changes

Beginning with Stage 2, Zone 7 will adjust operations to minimize supply losses. This includes improved monitoring, analysis, and tracking of customer water usage and optimizing use of Zone 7's water supplies to emphasize shortage management. In addition, Zone 7 will evaluate the timing of maintenance activities that could negatively impact the ability to manage water supplies or shortages or could result in a loss of water supply.



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At Stage 3 and beyond, Zone 7 will implement more significant operational changes, including reviewing its Capital Improvement Program (CIP) to accelerate projects that would immediately improve water supply management.

4.5 Emergency Response Plan

As stated in Section 3.0, Zone 7's water shortage stages outlined in Table 3 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 the 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, which have either a dedicated generator in place (Mochó 1) 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 (WARN), a statewide public utility mutual assistance organization.

5.0 COMMUNICATION PROTOCOLS

In the event of a 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 appropriate response to the event. Key Zone 7 staff are provided cell phones, emergency radios, and agency email accounts to communicate internally and externally.



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5.1 Communication for Foreseeable Events

A water shortage may be foreseeable when Zone 7 conducts its Annual Sustainability Report as described in Section 2.0. For foreseeable water shortages, Zone 7 will follow the communication protocols and procedures detailed below. Zone 7 may trigger any of these protocols at any water shortage stage.

1. As Zone 7 prepares its Preliminary Water Supply Operations Plan, starting in mid-December, Zone 7 will communicate with DWR, the Kern County groundwater banks, and potential or existing water transfer partners to discuss Zone 7's water supply conditions, as needed.
2. Public outreach on conservation will begin as soon as late winter/early spring if hydrologic conditions are below normal. Messaging will be developed based on specific conditions and will be coordinated with the retailers.
3. Zone 7 will present the findings from the Annual Sustainability Report at the April Zone 7 Board meeting, including recommendations for a water shortage emergency and shortage response actions, as applicable.
4. If a water shortage emergency is anticipated, Zone 7 will coordinate interdepartmentally, with the region's water service providers and the cities they serve, and with Alameda and Contra Costa counties for the possible proclamation of a local emergency.
5. Zone 7 will communicate conditions to the general public using some or all of the following options, as needed at the various shortage levels: public meetings, press releases, 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 keeps interest lists for specific interest groups and community members for targeted messaging.

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 convey 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.



Water Shortage Contingency Plan

6.0 COMPLIANCE AND ENFORCEMENT

When supplies are insufficient, Zone 7 can ask its retailers to reduce demands, but the 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.

7.0 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.

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 California Government Code, California Emergency Services Act (Article 2, Section 8558).

In a duly noticed meeting, the Zone 7 Board will determine whether a water shortage emergency condition exists and, if so, the degree of the emergency and what regulations and restrictions should be enforced in response to the shortage. 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.

The water shortage emergency declaration triggers communication protocols described in Section 5.0 and compliance and enforcement actions described in Section 6.0.

8.0 FINANCIAL CONSEQUENCES OF WSCP

Zone 7 anticipates revenue losses and increased expenses during the potential water shortages described in this WSCP. Revenue losses result from decreased water sales due to conservation and/or lower amounts of water supply available to sell. Increased expenses can include supplemental water supply purchases, infrastructure improvements to increase treated water production or bolster system reliability, and higher water transfer costs.

Water conservation directly affects Zone 7’s revenue stability, as Zone 7 currently recovers 60 percent of its revenue through volumetric or consumption-based rates, even though the majority of Zone 7’s costs are fixed. Zone 7 prepares for these events through prudent financial planning, including water rate studies, and the establishment of reserves to offset revenue losses, smooth rates, and fund capital



Water Shortage Contingency Plan

improvement projects. A water shortage surcharge may also be enacted by the Zone 7 Board to address revenue impacts from conservation.

8.1 Use of Financial Reserves

On May 15, 2019, the Zone 7 Board adopted the revised Reserve Policy per Resolution No. 19-37. The revised Reserve Policy condensed four reserves within the Water Enterprise Fund to three. This revision eliminated the Drought Contingency and Rate Stabilization Reserves and established the Reserve for Economic Uncertainties. The Reserve for Economic Uncertainties is designed to protect Zone 7 from the effects of fluctuations in water usage and the cost of imported water (to which Zone 7 is vulnerable) and other unforeseen events, such as a natural disaster, water shortage emergency, or other unanticipated adverse situations.

The Reserve for Economic Uncertainties is currently funded at the target level with a balance of \$4.9 million. To mitigate potential revenue loss from demand reduction, Zone 7 may utilize funds in the Reserve for Economic Uncertainties in an amount up to the minimum reserve requirement to offset revenue loss. This reserve will be replenished over time with direction from the Zone 7 Board.

The 2012 to 2016 statewide drought provides an example of the financial impacts of water shortages on Zone 7 and the associated use of financial reserves. During the drought, Zone 7's retailers were required to meet mandatory conservation as stated in the Governor's Executive Order B-29-15 issued on April 1, 2015. Zone 7's retailers were very successful in implementing conservation and achieved approximately 40 percent conservation in 2015. As a result of voluntary and mandatory conservation efforts, Zone 7 reduced reserves by a total \$25M within the Water Enterprise Fund over a three-year period starting in Fiscal Year 2013-2014 and ending in Fiscal Year 2015-2016.

8.2 Drought Rate Structures and Surcharges

If a declared water shortage emergency and associated stage generates a reduction in water usage and corresponding sales, use of reserves alone may not be sufficient for Zone 7 to maintain its fiscal health. Therefore, upon approval by the Zone 7 Board, Zone 7 may also implement a water shortage surcharge. The Zone 7 Board will determine when such a surcharge is necessary. To align with the State's standard water shortage level, Zone 7 plans to revise its water shortage surcharge as presented in Table 6.

Water Shortage Stage	Demand Reduction Target	Water Shortage Surcharge per Hundred Cubic Feet (ccf)
1	≤ 10%	Not Applicable
2	11-20%	\$0.26
3	21-30%	\$0.59
4	31-40%	\$1.04
5	41-50%	\$1.67
6	> 50%	\$2.60



Water Shortage Contingency Plan

A water shortage surcharge adopted by the Zone 7 Board becomes effective on the first day of the month following thirty days after adoption. The adopted water shortage surcharge will sunset after six months, unless extended or modified by action of the Zone 7 Board.

8.3 Other Measures

Zone 7 reviews its capital budget annually and re-prioritizes projects as needed given current and forecasted resources, needs, and funding availability. In some cases, projects may be accelerated or deferred. For example, in 2014, Zone 7 accelerated the construction of a new well and a pipeline to better meet water demands during the drought, and potential following dry years. Currently, Zone 7 is planning for a new booster pump station to increase Zone 7's water system reliability during times of drought and emergencies, increasing groundwater production and providing more flexibility to move available water in the system to where it is needed. The estimated project cost is \$5.9M, paid by water rates; it will be completed in July 2023.

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.

9.0 MONITORING AND REPORTING

In their UWMPs, Zone 7's retailers will detail their monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed to evaluate customer compliance with conservation goals. As mentioned above, Zone 7's water system is fully metered, including production at its water treatment facilities and groundwater wells. Zone 7 can also track deliveries to its retailers through their respective turnouts.

Zone 7 will work collaboratively with its retailers to monitor water use and support their reporting.

10.0 WSCP REFINEMENT PROCEDURES

This WSCP is an adaptive management plan. It is subject to refinements as needed to ensure that Zone 7's shortage response actions and mitigation strategies are effective and produce the desired results. Based on monitoring described in Section 6.0 and the need for compliance and enforcement actions described in Section 6.0, Zone 7 may adjust its response actions and modify its WSCP. 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 12.0 for adoption by the Zone 7 Board and distribution to Alameda County, Contra Costa County, Zone 7's retailers, and the general public.

11.0 SPECIAL WATER FEATURE DISTINCTION

Zone 7 is a water wholesaler and does not directly supply treated water to customers with water features; that is done by Zone 7's retailers. As described in their respective UWMPs, each retailer distinguishes water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.



Water Shortage Contingency Plan

12.0 PLAN ADOPTION, SUBMITTAL, AND AVAILABILITY

This WSCP is adopted concurrently with Zone 7's 2020 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.



Appendix A

Zone 7 Board Resolution No. 13-4230

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 Zone 7'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



Appendix B

2020 Annual Sustainability Report



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7
 100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551 • PHONE (925) 454-5000 • FAX (925) 454-5727

ORIGINATING SECTION: Integrated Planning
CONTACT: Sal Segura/Amparo Flores

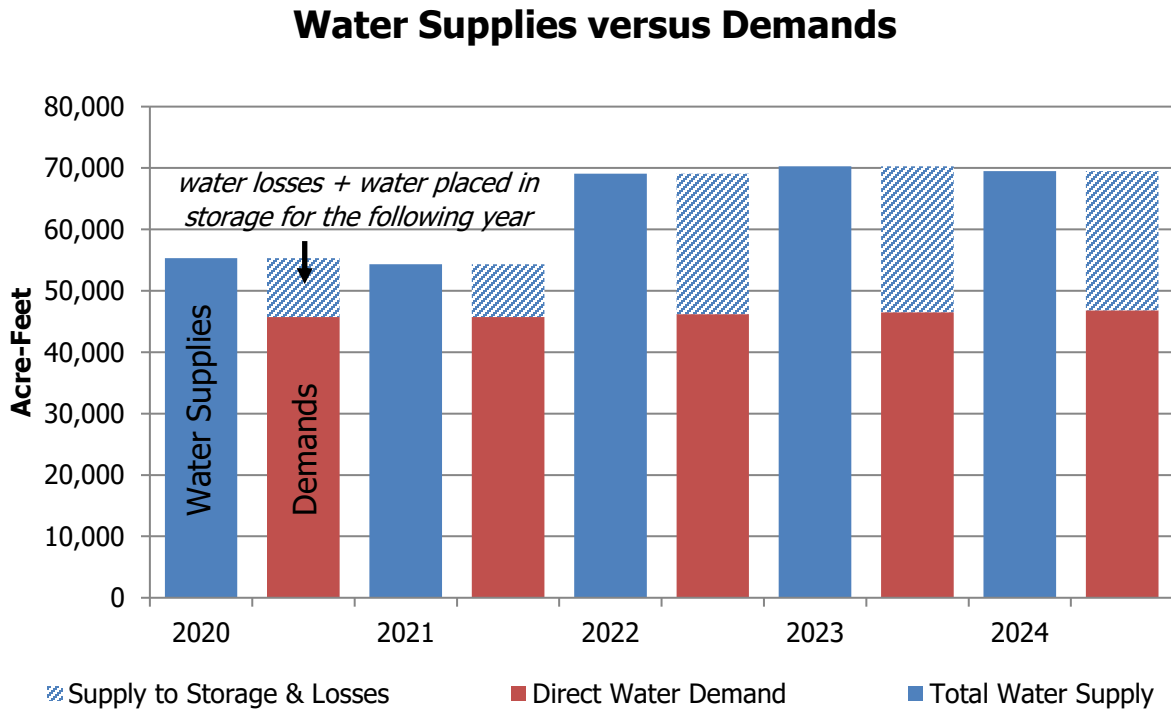
AGENDA DATE: April 15, 2020

SUBJECT: 2020 Annual Sustainability Report

SUMMARY:

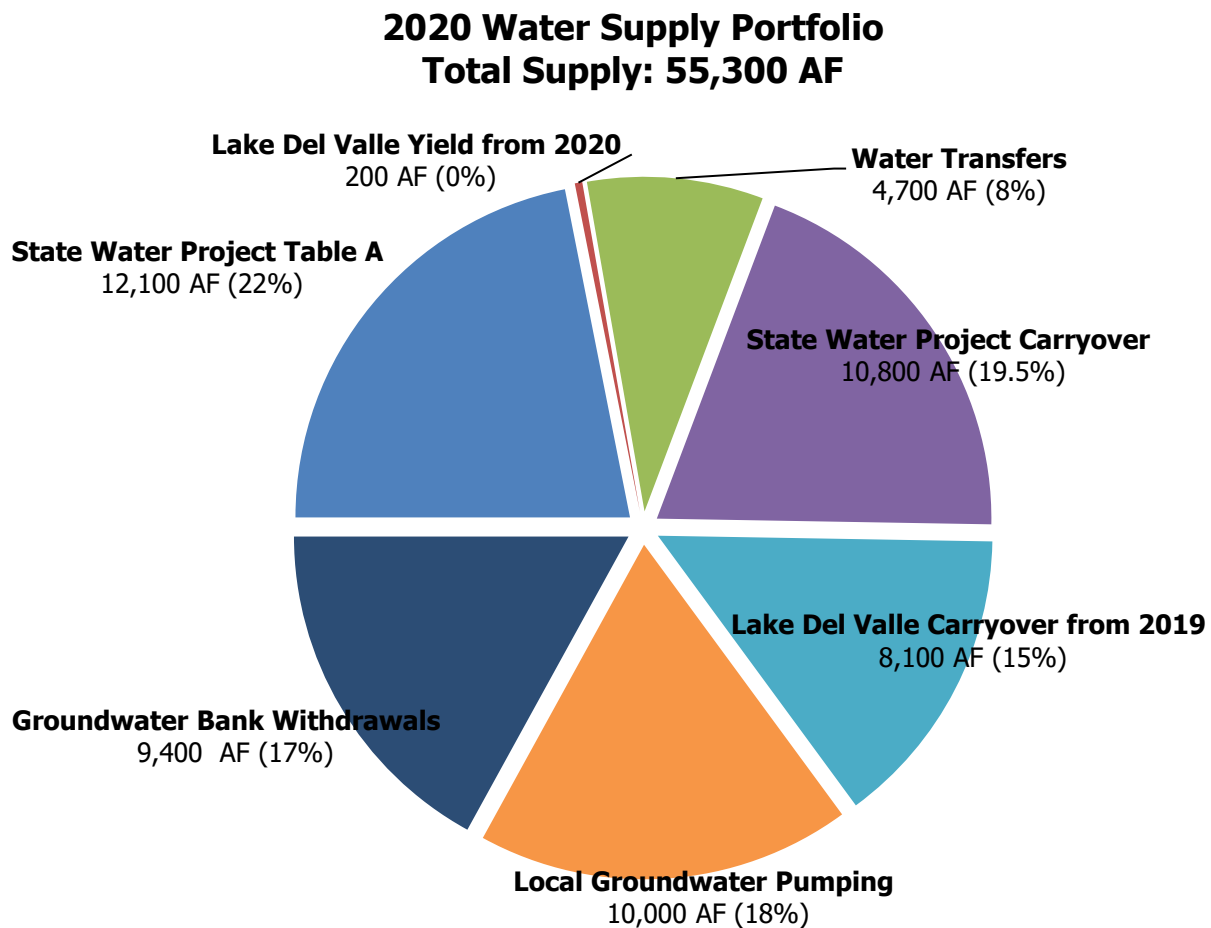
- Central to Zone 7 Water Agency’s mission is the commitment to provide a reliable supply of high-quality water to the Tri-Valley.
- Zone 7’s Water Supply Reliability Policy requires an annual review of sustainable water supplies. A key purpose of this report is to demonstrate Zone 7’s ability to meet delivery requests over the next five years.
- As shown in Figure 1 below, a comparison of projected water supply and demand indicates that, based on supply availability, Zone 7 can deliver 100% of requested water deliveries in 2020 and 2021, even given low incoming supplies from the State Water Project (SWP) and Lake Del Valle (LDV), and even if conditions turn critically dry in 2021. Zone 7 also expects to meet demands over 2022-2024, assuming average conditions return over that time period.

Figure 1: Water Supplies versus Demands



- The SWP and LDV will provide a portion of 2020’s water supply, but local and Northern Sierra dry conditions, and resulting low water allocation from the SWP, will require more use of groundwater and surface water already in storage. Stored water is also used in normal water operations to meet peak demands, accommodate the surface water treatment plant shutdowns, and to shift supply locations for improved system reliability. Zone 7 also expects to supplement water supplies with withdrawals from non-local groundwater banks, and water transfers (e.g., Yuba Accord and other transfers). Figure 2 shows the expected relative contributions of different water supplies in 2020.

Figure 2: Expected 2020 Water Supply Portfolio



- In June 2020, staff plan to 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 2020.
- Zone 7 staff will continue to monitor both state and local conditions and will adjust operations and projections accordingly.
- Staff recommends that the Board maintain the ten percent voluntary conservation target for the Tri-Valley, consistent with the 2016 Board Resolution 16-142, considering the current dry conditions and the State’s long-term conservation goals.

FUNDING:

Funding for water supply expenditures in 2020 are included in the approved budget. Future expenditures will be included in future budgets for Board approval.

RECOMMENDED ACTION:

Information only.

ATTACHMENT:

Annual Sustainability Report 2020

ANNUAL SUSTAINABILITY REPORT 2020

BACKGROUND

On October 17, 2012, Zone 7 Water Agency (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 memorandum presents the Annual Review and 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

For calendar year 2020, Zone 7's planned incoming supplies consist of the following:

- 12,100 acre-feet (AF) based on a 15% State Water Project (SWP) allocation,
- 200 AF captured in Lake Del Valle (LDV) in 2020, and
- approximately 4,700 AF of water transfers through Yuba Accord and other water transfer options.

Given the dry conditions and low incoming supplies, Zone 7 is also planning to draw from storage as follows:

- 10,800 AF of SWP carryover from 2019 at the beginning of January 2020,
- 8,100 AF of net local runoff captured in LDV in 2019,
- 9,400 AF from Semitropic Water Storage District in Kern County, and
- 10,000 AF from the local groundwater basin.

Planned incoming water supplies, combined with withdrawal from various stored supplies, result in a total of 55,300 AF that will be used to meet customer demands of 45,700 AF. A portion of the remaining water will be unavailable as operational losses (evaporation and brine loss). As part of the water management strategy, the rest of the supplies will be redeposited into various storage locations for use in 2021. A comparison of projected water supply and demand indicates that Zone 7 can deliver 100% of requested water deliveries in 2020 and 2021, even if conditions turn critically dry in 2021. Zone 7 also expects to meet demands over 2022-2024, assuming average hydrologic conditions over that time period.

As described in the 2019 Water Supply Evaluation Update, Zone 7 has been participating in several potential future water supply and storage options to bolster long-term water supply reliability. A number of planned capital projects (new wells, the Chain of Lakes Pipeline, Chain of Lakes diversion structures, and reliability intertie) and the completed Chain of Lakes will bolster the reliability of Zone 7's water supply system over the coming

years. These projects will also optimize the long-term yield from the Arroyo Valle, a key source of incoming supplies, and the use of the groundwater basin for storage.

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 regularly with the local water supply retailers, untreated water customers, and the Department of Water Resources (DWR) – the agency responsible for operating the SWP.

To guide Zone 7’s efforts in pursuing short- and long-term water transfers, a ‘Water Transfers 101 Workshop’ is planned be conducted with the Water Resources Committee on April 20, 2020; transfer options and opportunities will be presented for consideration.

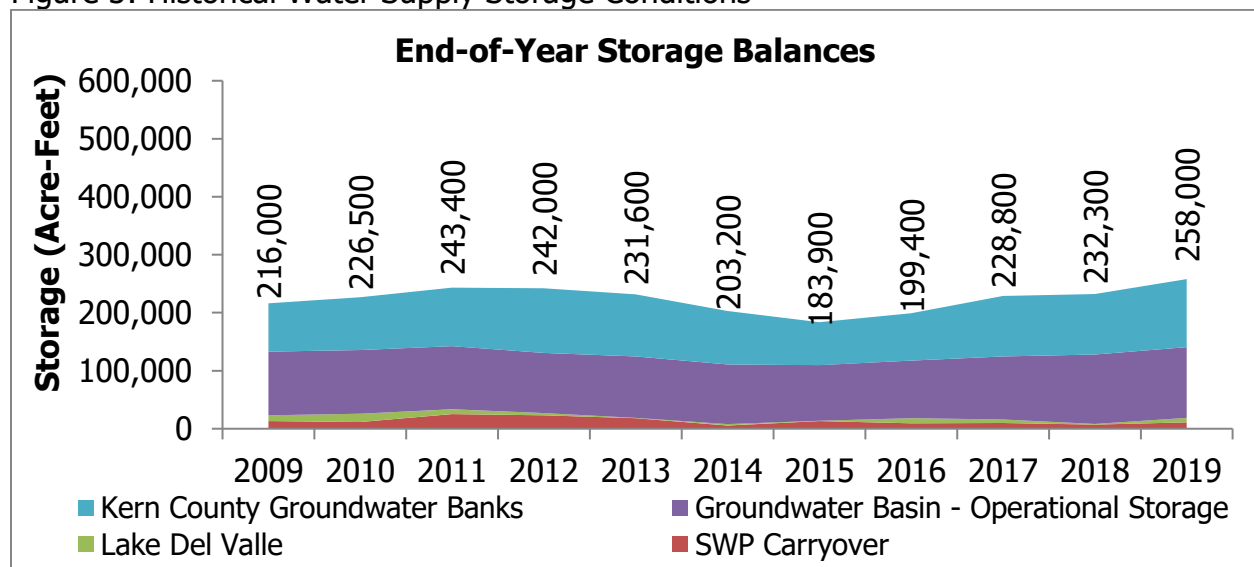
In light of the current dry conditions and the State’s long-term conservation goals, Staff recommends that the Board maintain a ten percent (10%) voluntary conservation target for the Tri-Valley, consistent with the 2016 Board Resolution 16-142.

KEY HYDROLOGIC AND WATER SUPPLY CONDITIONS

Initial Storage Conditions (January 1, 2020)

Zone 7 started 2020 with a SWP carryover of 10,800 AF, LDV carryover of 8,100 AF, local groundwater operational storage of 122,000 AF (98% of capacity), and 117,100 AF of water stored in the Kern County groundwater banks (Semitropic Water Storage District [Semitropic] and Cawelo Water District [Cawelo]). At the beginning of 2020, Zone 7’s storage portfolio had about 258,000 AF, as shown on Figure 3 below, showing continuing recovery from the recent drought. This does not include 128,000 AF of emergency storage in the local groundwater basin.

Figure 3: Historical Water Supply Storage Conditions



Reservoir Conditions

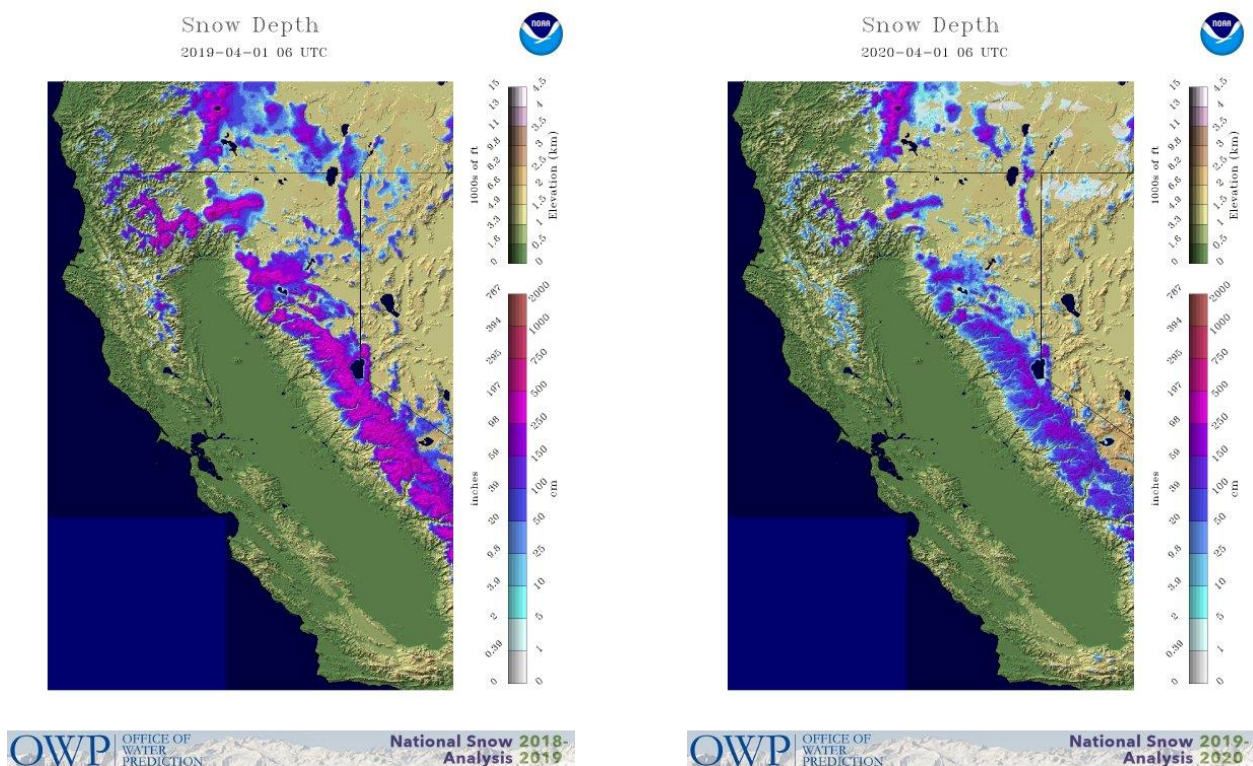
Storage in Oroville Reservoir, as of March 31, was at 2.29 million acre-feet (MAF) or 65% of capacity. Oroville Reservoir collects runoff from the Feather River watershed in northern California, the main source of supply for the SWP. San Luis Reservoir, the main reservoir for the SWP south of the Delta, was at 1.51 MAF or 74% of capacity. Zone 7's Table A carryover is stored in San Luis Reservoir; the reservoir is not expected to spill this year, which means Zone 7's full Table A carryover amount will be available for use.

Sierra Snowpack and Precipitation (April 1, 2020)

The statewide Sierra snowpack on April 1, 2020, was estimated at about 53% of average (see Attachment B), compared to 161% at the same time last year. April 1 is normally when the snowpack level peaks before the spring melt begins. The snowpack level in northern California, the main source of supply for the SWP during the spring and summer, is currently 57% of the April 1 average. Figure 4 presents a comparison of snow depths in the Sierras in April 2019 versus those anticipated for April 2020. The snowpack in 2020 is significantly shallower and more sparse than in 2019. In 2020, the predominant snow depth was 100 cm (~3 ft) versus the depth in 2019 of 500 cm (~17 ft).

Northern Sierra precipitation, which is a strong constituent in SWP allocation, was 24.2 inches as of March 31, 2020, or 56% of average (Attachment B).

Figure 4: Statewide Snowpack in the Sierra Nevada: 2019 versus 2020

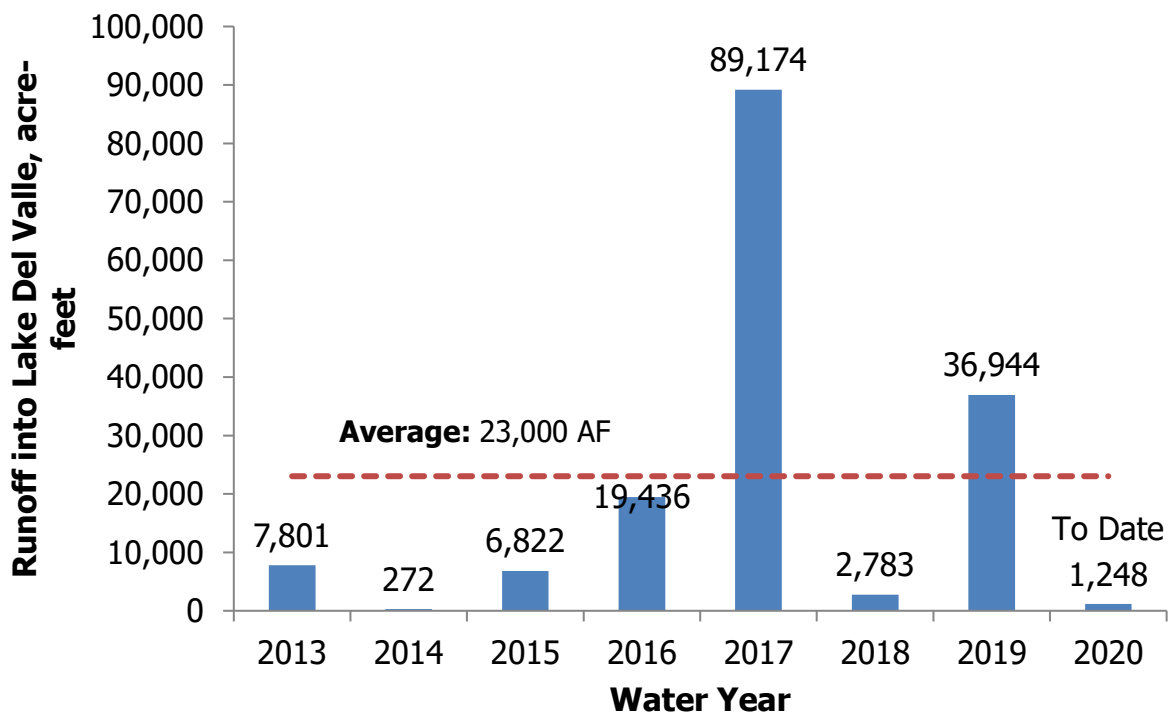


(Source: National Weather Service Remote Sensing Center, www.nohrsc.noaa.gov/nsa)

Local Runoff and Precipitation In 2020

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, 2020, runoff into Lake Del Valle is 5% of average (1,248 AF compared to 23,000 AF). Locally captured water is split with Alameda County Water District and stored in the lake for future use in accordance with Zone 7's water rights permit. Based on DWR's calculations, Zone 7 has approximately 8,300 AF of local water in Lake Del Valle as of April 1, 2020, including the 8,100 AF carried over from 2019. Local precipitation is at 46% of average year-to-date at Livermore Rainfall Station 15E for April 1, 2020 (Attachment B, note that due to station reporting delays, data from the most recent rainfall events in March were not available at the time of writing).

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

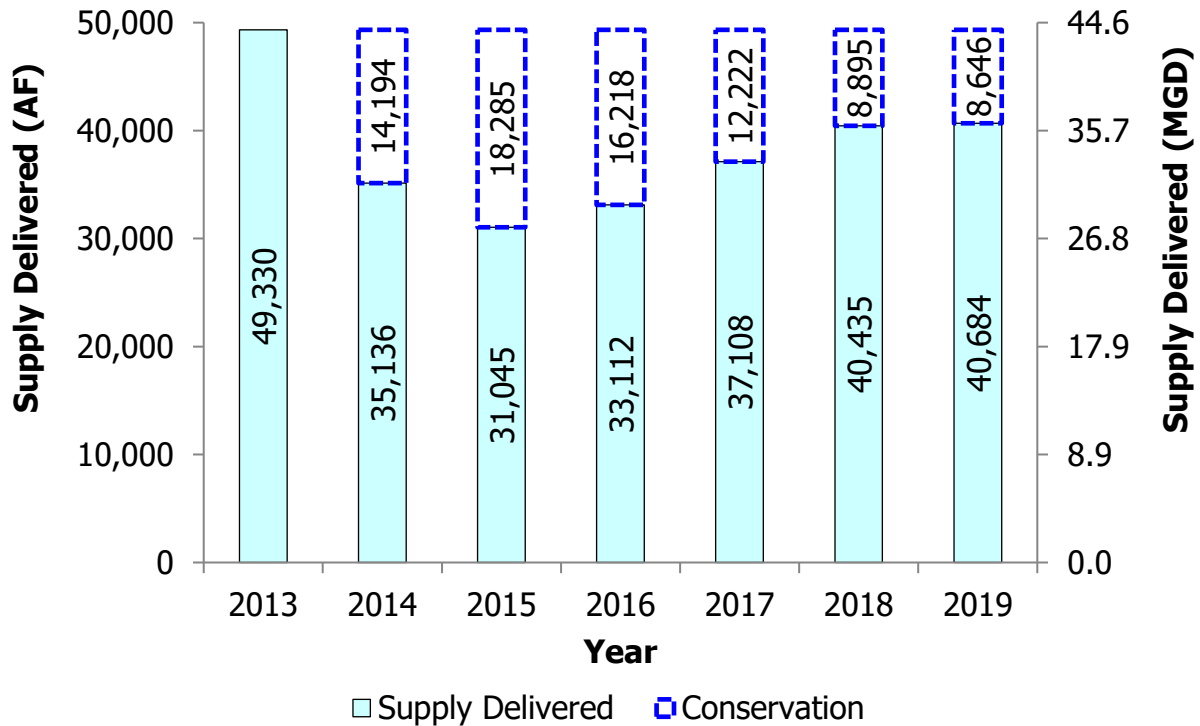


Conservation in the Tri-Valley

The Tri-Valley's response to the recent drought reduced the required water supply delivery from Zone 7 relative to 2013 water demand by 29% in 2014, 37% in 2015, 33% in 2016, 25% in 2017, 18% in 2018 and 18% in 2019; this represents a cumulative water supply savings of 78,500 AF over the past six years. Figure 6 compares each calendar year to 2013. The Zone 7 Board lifted the local drought emergency in June 2017, but set a voluntary 10% conservation target to support ongoing statewide water conservation

efforts, and the Tri-Valley community has continued exceeding the conservation target through 2019. Water supply conservation supports Zone 7's ability to meet retailer delivery requests in current and subsequent years.

Figure 6: Conservation in the Tri-Valley



2020 SWP Table A Allocation: 15% as of April 1, 2020

Zone 7 has a contract with DWR for up to 80,619 AF of SWP water in any given year; the percent of this amount Zone 7 will actually receive is called the "Table A" allocation. The 2020 SWP Table A allocation is 15% as of April 1, 2020, reflecting dry hydrologic conditions in the North Sierra. This is equivalent to 12,100 AF for Zone 7. The Table A allocation is expected to be finalized in May.

ANNUAL SUSTAINABILITY REPORT ASSUMPTIONS

To illustrate Zone 7's ability to meet delivery requests made by the retailers and the untreated water customers, the analysis in this memorandum conservatively assumes critically dry conditions (equivalent to 1977 conditions) in 2021, followed by average conditions in 2022 through 2024. As described in the 2019 Water Supply Evaluation

Update¹, projected average conditions equate to an assumed 49% SWP allocation or 39,500 AF, down from 60% or 48,400 AF used in previous years; this assumption also aligns with the average of actual conditions over the last ten years. Local water supply is expected to yield an average 6,200 AF per year, also based on actual recent conditions; this has been reduced from the 7,300 AF per year assumed in 2018. Each year, Zone 7 strives to carry over to the following year 10,000 AF in SWP facilities except in critically dry years (Table A or SWP Carryover). Any water captured locally in Lake Del Valle is also carried over into the following year. Reserving water for future years is good water management 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 used in the Annual Review. Zone 7 estimates demands for untreated water from agricultural customers' past usage. As shown in Table 1, the projected total water demand for direct use (treated and untreated water) in 2020 is about 12% higher than the actual 2019 water demand (45,700 vs 40,700 AF). Zone 7's retailers are predicting about 96% recovery to 2013 pre-drought treated water demand by 2024 (43,200 AF vs. 41,300, see Figure 7). Figure 8 shows untreated water demand projections used in the analysis.

As shown in Table 1, in addition to direct use, demands also include losses and water planned to be placed in storage for future use.

¹ Zone 7 Water Agency, 2019 Water Supply Evaluation Update. Available at: <https://www.dropbox.com/s/fzhdf60lhcvnmyc/2019%20WSE%20Update.pdf?dl=0>

Table 1: Actual and Projected Five-Year Demands (Direct Use), Water Planned for Storage, and Losses

DEMANDS/PLANNED FOR STORAGE/LOSS Acre-Feet	ACTUAL	PROJECTIONS				
	2019	2020	2021	2022	2023	2024
<i>Hydrologic Year Equivalent</i>	<i>2002</i>	<i>2015</i>	<i>1977</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>
<i>Table A Allocation</i>	<i>75%</i>	<i>15%</i>	<i>10%</i>	<i>49%</i>	<i>49%</i>	<i>49%</i>
Direct Water Demand						
Treated Water Delivery Requests	36,200	40,200	40,200	40,700	41,000	41,300
Agricultural/Untreated Water Projection	4,500	5,500	5,500	5,500	5,500	5,500
Deposits into Storage						
Groundwater Recharge	3,600	200	0	6,700	8,300	8,400
Lake Del Valle Carryover	8,100	200	0	6,200	6,200	6,200
State Water Project Carryover	10,800	8,400	8,000	9,000	8,200	7,000
Semitropic Storage	8,900	0	0	0	0	0
Cawelo Storage	10,000	0	0	0	0	0
Losses						
Demineralization Concentrate-Brine	450	400	100	400	400	400
Lake Del Valle Evaporation Losses	600	400	500	600	700	700
Total	83,150	55,300	54,300	69,100	70,300	69,500

Notes:

- (a) Projected demands were rounded to the nearest 100 acre-feet.
- (b) Treated Water Delivery Request = M&I = Municipal and Industrial. Demands include retailer delivery requests, direct retail, Zone 7's unaccounted-for water (operational losses) and the groundwater pumping quota (GPQ) for Dublin San Ramon Services District.
- (c) Retailer demand projections were provided as delivery requests by California Water Service Company, Dublin San Ramon Services District, City of Livermore, and City of Pleasanton. Zone 7 estimates demands for direct retail customers.
- (d) Zone 7's untreated water demand is used primarily for agricultural and golf course irrigation; projections are based on recent past usage.

Figure 7: Historical and Projected Five-Year Treated Water Demands

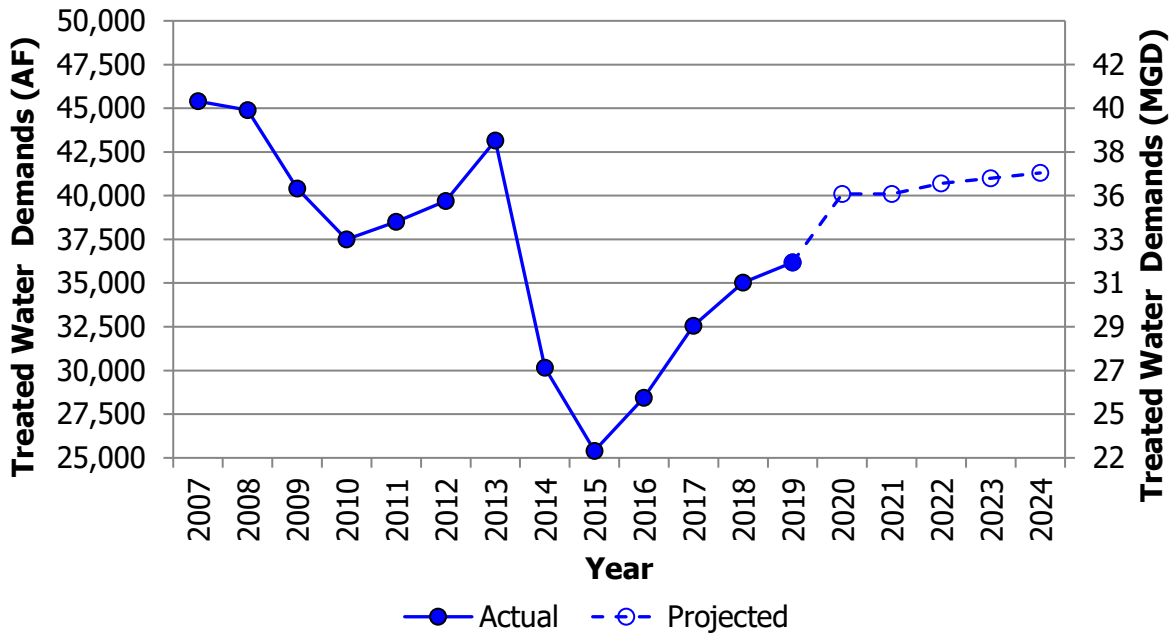
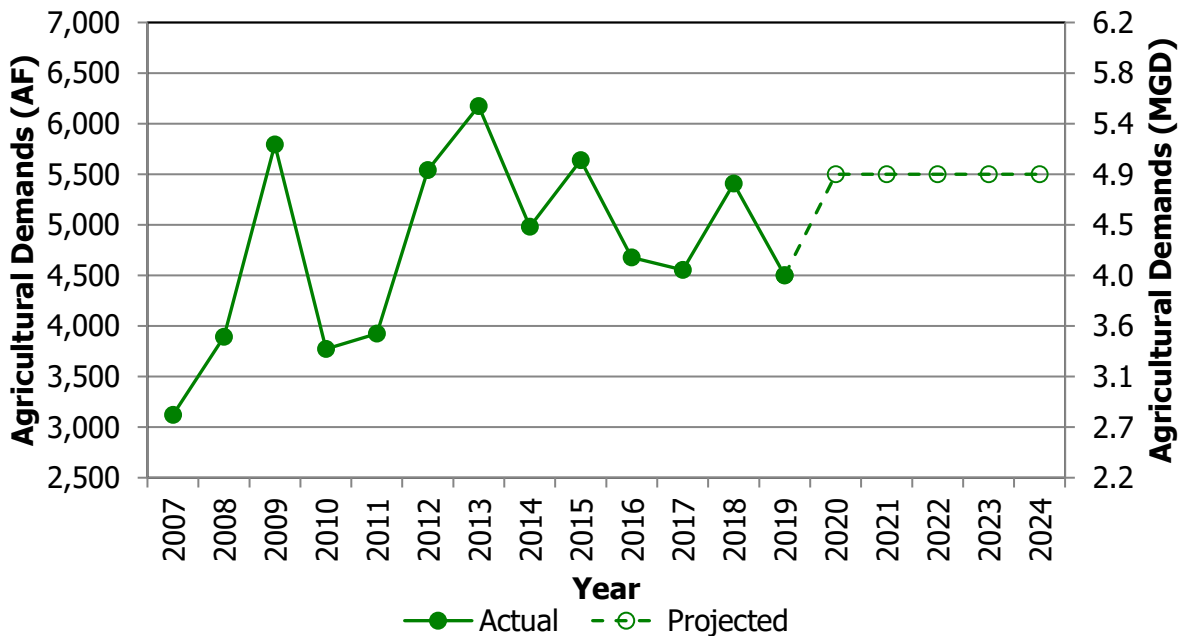


Figure 8: Historical and Projected Agricultural/Untreated Water Demands



Note that the State of California has been rolling out regulations designed to achieve the goals of the Long-Term Conservation Framework, which was developed in response to Governor Jerry Brown’s 2016 Executive Order (B-37-16). For example, indoor residential

water use is required to decrease to an average 55 gallons per capita per day (gpcd) by 2023; by 2030, the requirement will decrease to 50 gpcd. Future demands will therefore reflect a combination of water conservation (i.e., reduced per capita water consumption) and population growth in the Tri-Valley. Zone 7 will continue to coordinate closely with the retailers to verify demands and track the effects of conservation. A regional demand study is also underway to improve long-term demand estimates.

PROJECTED WATER SUPPLIES: NEXT FIVE YEARS

Incoming Supplies

Each year Zone 7 receives water from its contract with DWR for imported SWP water² and its local water right permit on Arroyo Valle. For 2020, Zone 7 is also planning to acquire about 5,000 AF of water transfers to supplement these supplies. Approximately 700 AF is expected to be available from Yuba Accord. For the remaining 4,000 AF, Zone 7 will pursue other water transfers such as a water transfer agreement with another SWP contractor. To preserve water in storage for dry or critically dry years, purchase of transfer water in 2021 and 2022 is also recommended to partially refill water withdrawn from storage.

Table 2 presents the expected yields in 2020 and estimates for 2021 assuming 1977 critically dry hydrologic conditions, followed by average allocation years from 2022 through 2024. Each year in the table below is paired with a comparable historical hydrologic year in anticipation of receiving a similar yield (e.g., Table A allocation). Figure 9 shows the incoming supplies for 2020 totaling 17,000 AF.

Water from Storage

Zone 7 currently stores surplus water in various storage facilities, including the local groundwater basin, LDV and Kern County groundwater banks (Semitropic and Cawelo) to help meet water demands as needed during dry years. Water is withdrawn from storage when needed to supplement that year's incoming supply to meet demands. Water may also be shifted from one type of storage to another as part of water management; in 2020, for example, water is withdrawn from storage then a portion is subsequently redeposited into storage in other locations as required by operational needs. Figure 10 shows that Zone 7 plans to access 38,300 AF of its storage supplies in 2020. Table 2 shows Zone 7 is planning to recover banked water from Kern County in 2021 and 2022 based on assumed hydrologic conditions.

² This includes Table A or SWP carryover from 2019, which is discussed in the next section.

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

SUPPLY SOURCES Acre-Feet	ACTUAL	PROJECTIONS				
	2019	2020	2021	2022	2023	2024
<i>Hydrologic Year Equivalent</i>	<i>2002</i>	<i>2015</i>	<i>1977</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>
<i>Table A Allocation</i>	<i>75%</i>	<i>15%</i>	<i>10%</i>	<i>49%</i>	<i>49%</i>	<i>49%</i>
New Incoming Supplies						
State Water Project Table A	60,500	12,100	8,100	39,500	39,500	39,500
Lake Del Valle Yield	8,100	200	0	6,200	6,200	6,200
Yuba Transfer	0	700	1,000	1,000	1,000	1,000
Other Water Transfer	0	4,000	5,000	2,000	0	0
Withdrawals from Storage						
State Water Project Carryover	2,600	10,800	8,400	8,000	9,000	8,200
Lake Del Valle Carryover	1,000	8,100	200	0	6,200	6,200
Groundwater Production	9,900	10,000	14,500	8,400	8,400	8,400
Kern County Groundwater Bank: Semitropic	0	9,400	9,100	4,000	0	0
Kern County Groundwater Bank: Cawelo	0	0	8,000	0	0	0
Total	82,100	55,300	54,300	69,100	70,300	69,500

Notes:

- (a) See Zone 7's 2015 Urban Water Management Plan for more details about Zone 7 supplies: http://www.zone7water.com/images/pdf_docs/water_supply/uwmp_2015.pdf.
- (b) 2020 yield is based on 15% (current 2020 allocation) of 12,100 AF. Long-term average yield is 49% of Zone 7's Table A amount (80,619 AF) per DWR's Final 2016 Delivery Capability Report and recent conditions. A critically dry year has a 10% SWP Allocation.
- (c) Zone 7 is planning to obtain water transfers in 2020, and if 2021 is critically dry, transfers are recommended in 2021 and 2022. To obtain a net yield of 700 AF of Yuba Transfer in 2020, Zone 7 has to purchase about 1,000 AF to cover conveyance losses in the Delta.
- (d) Zone 7 stored 8,100 AF in LDV in 2019 and has captured an additional 200 AF in 2020. Additional capture is expected by the end of December 2020; however, to be conservative, only 200 AF is assumed for 2020. An average annual yield of 6,200 is assumed in line with recent conditions over the last ten years.

Figure 9: Incoming Water Supplies in 2020

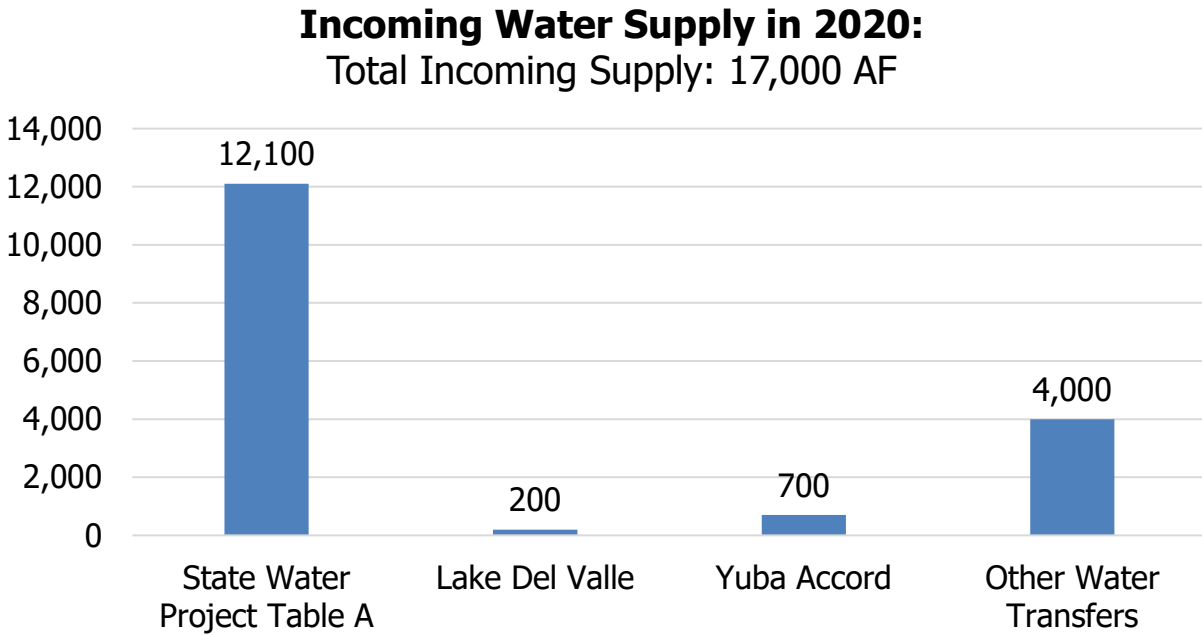


Figure 10: Water Supply Withdrawals from Storage in 2020

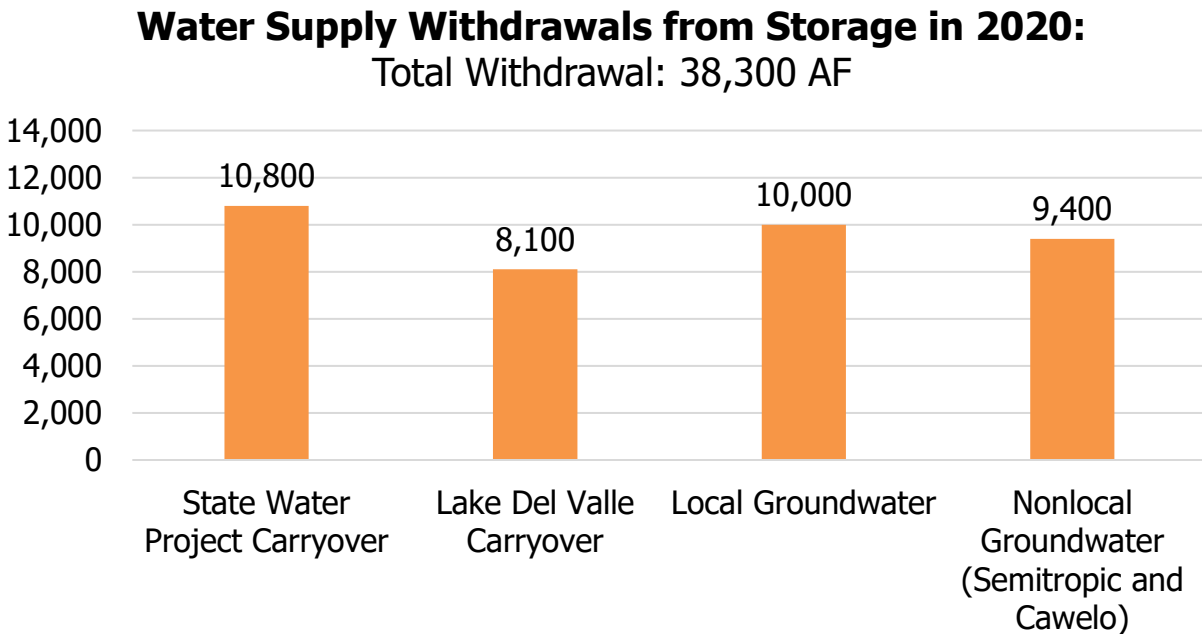
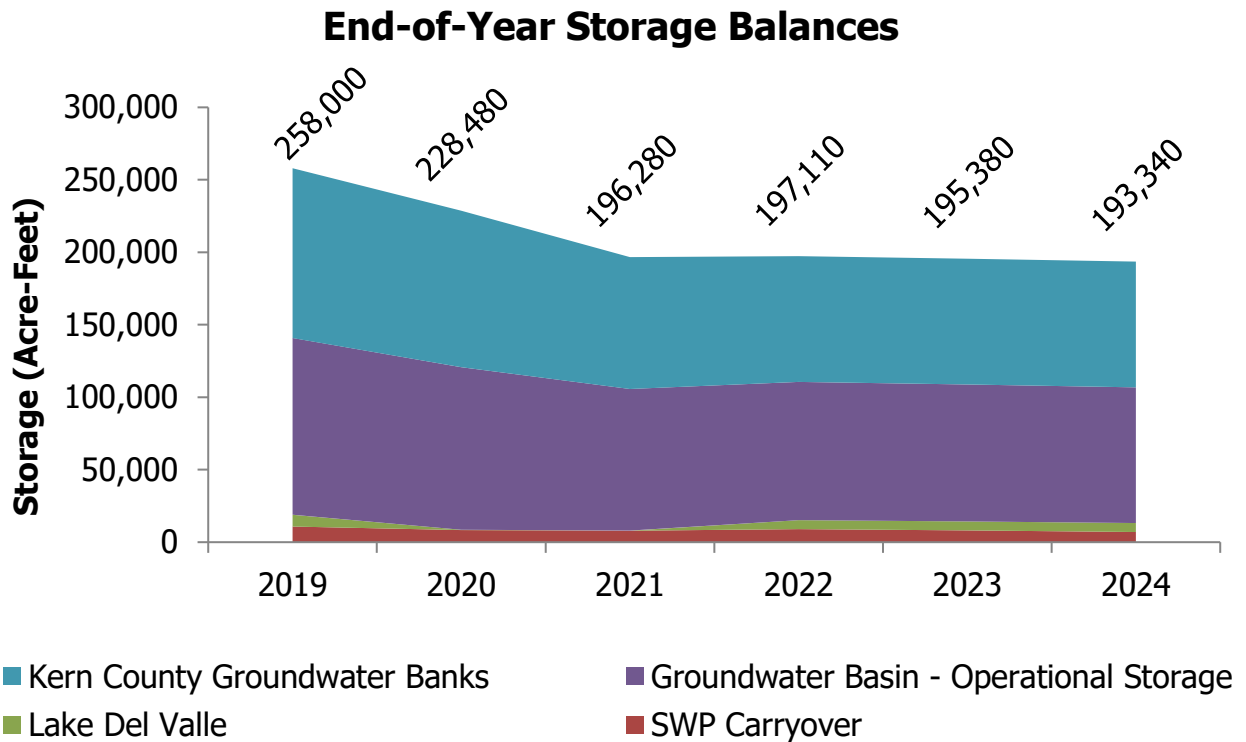


Table 3 and Figure 11 summarize the total water in storage available as of the end of 2019, and projected storage levels over 2020 through 2024. Storage projections show a decrease of about 64,700 AF over the next five years from the end of 2019 through the end of 2024 based on assumed hydrologic conditions 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% groundwater loss from local storage activities, it does not account for the natural influx to storage that occurs in the local groundwater basin due to rainfall runoff. The declining storage trend could be mitigated through the additional purchase of transfer water. Staff will monitor conditions to determine the appropriate amounts of transfer water in future years.

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

End of Year Storage Balance (Acre-Feet)	ACTUAL	PROJECTIONS				
	2019	2020	2021	2022	2023	2024
SWP Carryover	10,800	8,400	8,000	9,000	8,200	7,000
Lake Del Valle	8,100	200	0	6,200	6,200	6,200
Groundwater Basin - Operational Storage	122,000	112,180	97,680	95,310	94,380	93,540
Kern County Groundwater Banks	117,100	107,700	90,600	86,600	86,600	86,600
Semitropic	87,200	77,800	68,700	64,700	64,700	64,700
Cawelo	29,900	29,900	21,900	21,900	21,900	21,900
TOTAL STORAGE	258,000	228,480	196,280	197,110	195,380	193,340

Figure 11: End-of-Year Storage Balances (Actual and Projected)



COMPARISON OF SUPPLY AND DEMAND: NEXT FIVE YEARS

As shown in Table 4, Zone 7 can deliver water to supply 100% of delivery requests for 2020 through 2024 based on current projected demands and assumed hydrology for 2020 through 2024. Additional conservation would allow more water not used to meet direct demands to be placed into storage, while higher demands (than currently projected) could be met by using additional storage supplies.

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

SUPPLIES VS DEMANDS	ACTUAL	PROJECTIONS				
	2019	2020	2021	2022	2023	2024
<i>Hydrologic Year Equivalent</i>	<i>2002</i>	<i>2015</i>	<i>1977</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>
<i>Table A Allocation</i>	<i>75%</i>	<i>15%</i>	<i>10%</i>	<i>49%</i>	<i>49%</i>	<i>49%</i>
Incoming Supply ^(a)	68,600	17,000	14,100	48,700	46,700	46,700
Water Supply from Storage ^(b)	13,500	38,300	40,200	20,400	23,600	22,800
Total Water Supply	82,100	55,300	54,300	69,100	70,300	69,500
Direct Water Demand ^(c)	40,700	45,700	45,700	46,200	46,500	46,800
Deposits into Storage and Losses ^(d)	41,400	9,600	8,600	22,900	23,800	22,700
% of Demand Delivered	100%	100%	100%	100%	100%	100%

Notes:

- (a) From Table 2: SWP (Table A), LDV Yield, and transfers.
- (b) From Table 2: SWP Carryover, LDV Carryover, GW Production, and Semitropic/Cawelo.
- (c) From Table 1: Treated and Agricultural/Untreated Demands (direct use).
- (d) From Table 1: Storage water placed in LDV and SWP as carryover, groundwater recharge, and water stored in Semitropic/Cawelo. A portion of this goes towards operational losses.

PROGRAMS NECESSARY TO MEET WATER DEMANDS GOING FORWARD

The Annual Review indicates that Zone 7 has enough water supplies to meet projected water demands over the next five years based on current delivery requests and assumed hydrology. To achieve long-term water supply reliability through buildout while accounting for hydrologic and other uncertainties (e.g., major system outages), Zone 7 has been evaluating several potential future water supply and storage options. Most recently, the 2019 Water Supply Evaluation Update included the following water supply and storage alternatives:

- Bay Area Regional Desalination Project
- Delta Conveyance (formerly California WaterFix)
- Los Vaqueros Reservoir Expansion
- Potable Reuse
- Short and Long-Term Water Transfers
- Sites Reservoir

Zone 7 also continues to evaluate and optimize the long-term local water yield from the Arroyo Valle currently captured in LDV. A number of planned capital projects (new wells, the Chain of Lakes Pipeline, Chain of Lakes diversion structures, and reliability intertie) will help bolster the reliability of Zone 7's water supply system. The turnover of the lakes in the Chain of Lakes for Zone 7 use also continues to be a key component of Zone 7's long-term reliability.

Zone 7 staff will also continue to monitor local and statewide conditions, adjust operations as necessary to optimize use of available resources, remain prepared for another single or multi-year drought, and continue to coordinate regularly with its local water supply retailers, untreated water customers, and with DWR. To guide Zone 7's efforts in pursuing short- and long-term water transfers, a 'Water Transfers 101 Workshop' will be conducted with the Water Resources Committee in late April/May 2020; transfer options and opportunities will be presented for consideration. In June 2020, 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 2020.

Staff recommends that the Board maintain the ten percent (10%) voluntary conservation target for the Tri-Valley, consistent with the 2016 Board Resolution 16-142, in light of the current dry conditions and the State's long-term conservation goals. This acknowledges and supports the Tri-Valley's continuing conservation efforts—which was nearly 20% in 2019—since the drought ended. Zone 7 will continue to implement rebate and public outreach programs in partnership with the retailers. As previously noted, Zone 7 is undertaking a regional demand study, which will help refine the demand projections as the region looks towards compliance with the State's Long-Term Conservation Framework.

ATTACHMENTS:

- A. Water Supply Reliability Policy
- B. Latest 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 Zone 7'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 12: California Snow Water Content as of April 1, 2020

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



NORTH	
Data as of April 1, 2020	
Number of Stations Reporting	30
Average snow water equivalent (Inches)	16.5
Percent of April 1 Average (%)	57
Percent to normal for this date (%)	57

CENTRAL	
Data as of April 1, 2020	
Number of Stations Reporting	41
Average snow water equivalent (Inches)	16.7
Percent of April 1 Average (%)	56
Percent to normal for this date (%)	56

SOUTH	
Data as of April 1, 2020	
Number of Stations Reporting	28
Average snow water equivalent (Inches)	11.5
Percent of April 1 Average (%)	45
Percent to normal for this date (%)	45

STATE	
Data as of April 1, 2020	
Number of Stations Reporting	99
Average snow water equivalent (Inches)	15.2
Percent of April 1 Average (%)	53
Percent to normal for this date (%)	53

Statewide Average: 53% / 53%

Figure 13: Northern Sierra Precipitation as of March 31, 2020

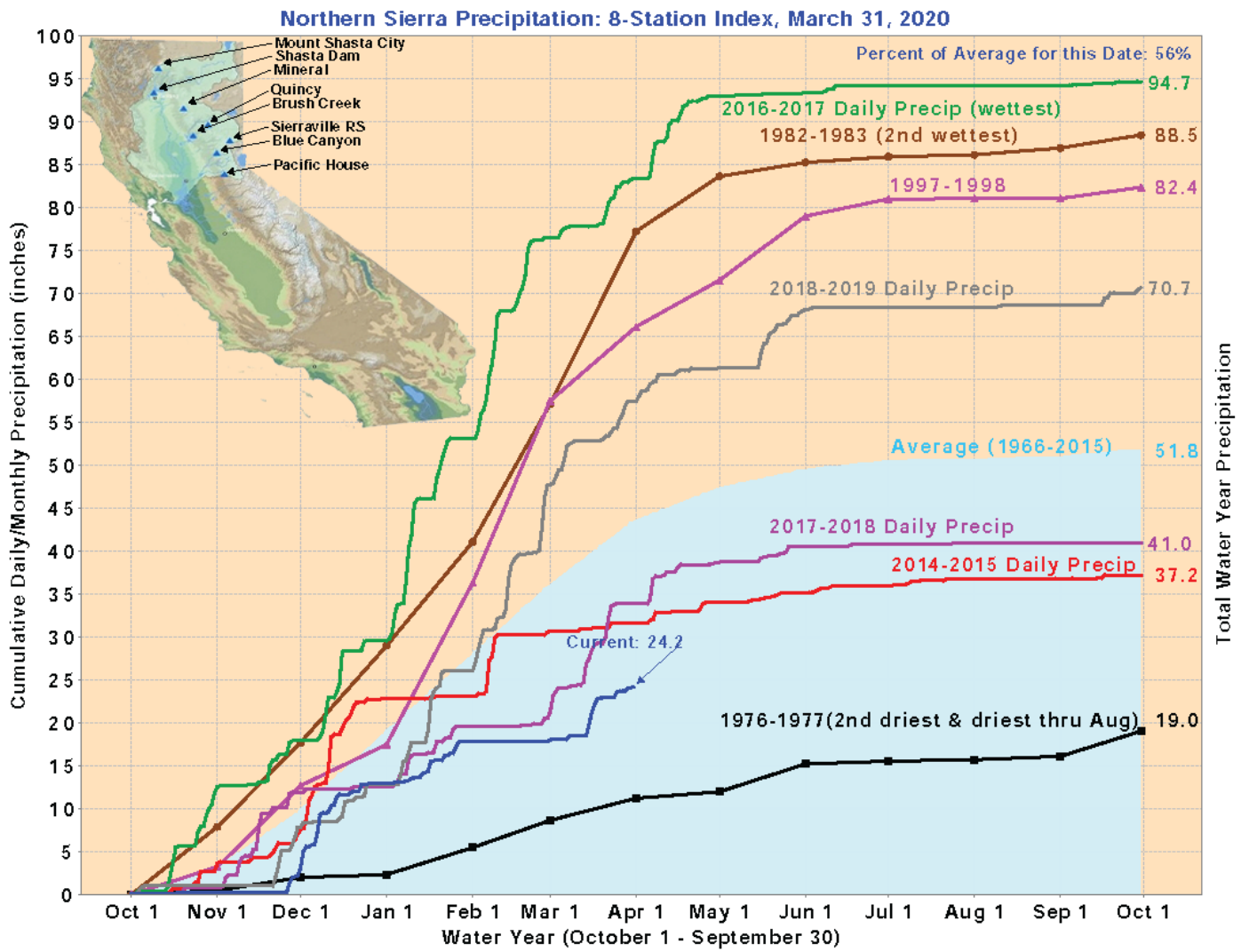


Figure 14: California Reservoir Conditions as of March 31, 2020

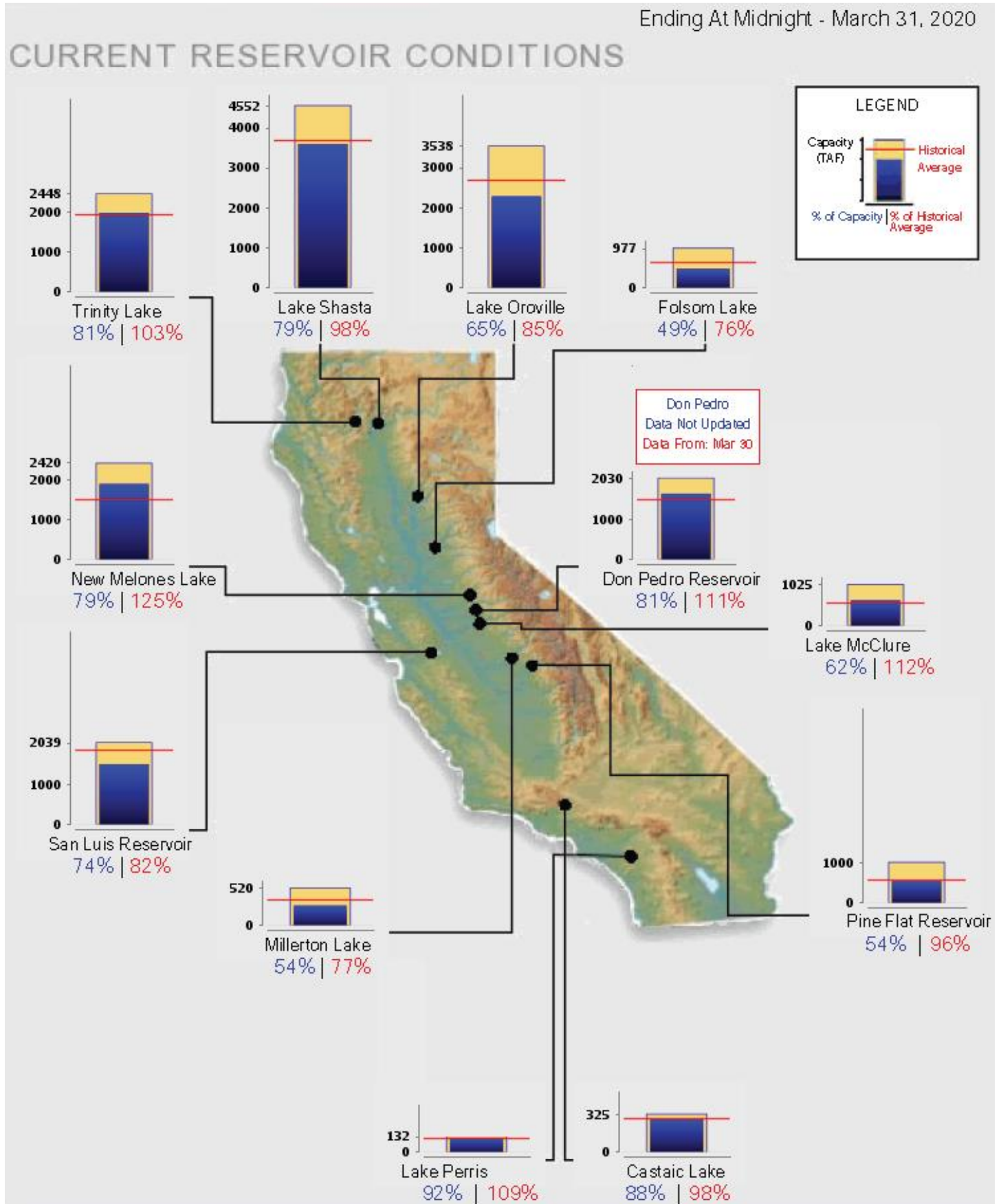
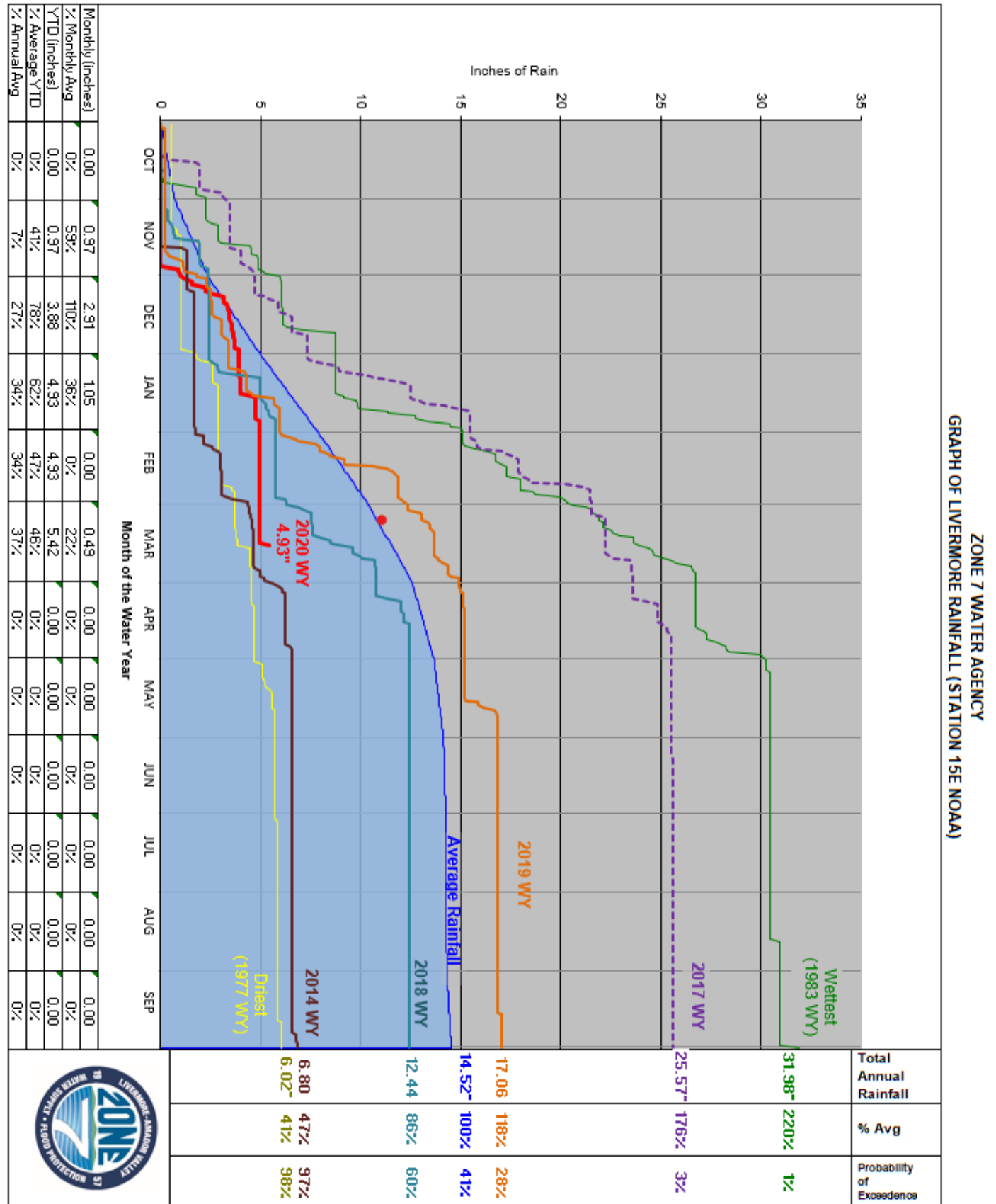


Figure 15 Local Rainfall (Livermore Station 15E NOAA) as of April 1, 2020



Note: due to station reporting delays, data from most recent March rainfall events were unavailable at the time of writing.

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

RESOLUTION NO

INTRODUCED BY
SECONDED BY

Declaration of a 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 2020 Urban Water Management Plan in accordance with the provisions of the Act on **May/June XX, 2021**; and

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

WHEREAS, on April X, 202X 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 202X 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., supply disruption from the Delta due to an earthquake]; and

WHEREAS, the Water Shortage Contingency Plan in the 2020 Urban Water Management Plan adopted by the Board on **May/June XX, 2021** identifies stages of water shortage levels and actions associated with each stage.

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

NOW, THEREFORE BE IT RESOLVED, the Board hereby declares a Stage Y water shortage level;

BE IT FURTHER RESOLVED that the Board directs staff to implement the following actions from the Water Shortage Contingency Plan as soon as feasible:

- [Action 1]
- [Action 2]
- Etc.

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 _____.

By: _____
President, Board of Directors

Zone 7 Board Sample Resolutions

ZONE 7
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

BOARD OF DIRECTORS

RESOLUTION NO.

INTRODUCED BY
SECONDED BY

Implementation of Water Shortage Surcharge

WHEREAS, the Zone 7 Board has declared a Stage Y water shortage which requires a XX% [voluntary/mandatory] reduction in water use;

WHEREAS, the Water Shortage Contingency Plan in the 2020 Urban Water Management Plan adopted by the Board on XX/XX/2021 identifies stages of water shortage levels and planned and potential response actions associated with each stage;

WHEREAS, response actions include use of reserves, deferral/acceleration of capital projects, grants and other cost cutting measures; and

WHEREAS, the Water Shortage Contingency Plan identifies both water shortage surcharges and use of reserves to ensure full revenue recovery for each water shortage stage.

NOW, THEREFORE BE IT RESOLVED, that Stage Y water shortage surcharge in accordance with the table below shall take effect on the first day of the month following thirty days after the adoption of this resolution.

<u>Stage</u>	<u>Demand Reduction Targets</u>	<u>Water Shortage Surcharges [per Hundred cubic feet (ccf)]</u>
<u>1</u>	<u>< 10%</u>	<u>N/A</u>
<u>2</u>	<u>10-20%</u>	<u>\$0.26</u>
<u>3</u>	<u>20-30%</u>	<u>\$0.59</u>
<u>4</u>	<u>30-40%</u>	<u>\$1.04</u>
<u>5</u>	<u>40-50%</u>	<u>\$1.67</u>
<u>6</u>	<u>>50%</u>	<u>\$2.60</u>

BE IT FURTHER RESOLVED, that the Stage Y water shortage surcharge will sunset after six months unless extended or modified by action of the Board.

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 _____.

By: _____
President, Board of Directors

SAMPLE