

Olivehurst Public Utility District



Agenda Item Staff Report

Meeting Date: June 16, 2022

Item description/summary:

Emergency Water Conservation Measures. This item was discussed at committee. In response to the Governor's executive order dated March 28, 2022, OPUD is mandated to implement conservation measures under Level 2 of its Water Shortage and Contingency Plan (excerpt of plan from the 2020 Urban Water Management Plan attached). The implementation was directed by the state to be implemented by June 10, 2022. We implemented Level 2 requirements on June 7, 2022, by the OPUD Website, OPUD Facebook page, Plumas Lake Chatter Facebook page and by a message on our bills to customers (see attached message).

Fiscal Analysis:

At some point and pending Board approval, it may be necessary to reenact the OPUD Drought Surcharge.

Employee Feedback

None

Sample Motion:

None required, information only.

Prepared by:

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WATER SHORTAGE CONTINGENCY PLAN

In response to Governor Newsome's March 28, 2020, executive order requirements, OPUD is implementing Level 2 of our Water Shortage Contingency Plan restricting water use in the District. The plan calls for a 20% reduction in water use by the following methods:

Item	Action	Penalty
Limit landscape irrigation to specific days	Odd numbered addresses can irrigate on Tuesdays, Thursdays and Saturdays while even numbered addresses can irrigate on Wednesdays, Fridays and Sundays. There is NO irrigation allowed on Mondays.	Yes
Limit landscape irrigation to specific times	No irrigation between 9:00 AM and 6:00 PM	Yes
Restaurants can only serve water upon request	Water will be served when requested by customer	Yes
Prohibit use of potable water for washing hard surfaces	Washing down sidewalks, driveways, parking lots or other paved surfaces is prohibited except to alleviate immediate fire or sanitation hazards	Yes
Prohibit free-flowing hoses	Free-flowing hoses are prohibited for all uses, including vehicle and equipment washing, ponds, and evaporative coolers. Automatic shut-off devices shall be installed on any hose or other large-volume filling apparatus in use.	Yes

Penalties will be assessed per the following enforcement schedule:

1. First violation - \$25 fine
2. Second violation - \$50 fine
3. Third violation - \$100 fine
4. Fourth violation - \$250 fine

Olivehurst Public Utility District Water Shortage Contingency Plan

This document presents the Olivehurst Public Utility District (District) Water Shortage Contingency Plan (WSCP), which describes the strategic plan for preparing and responding to water shortages, including the water shortage stages and associated actions.

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. As part of the WSCP, the District's legal authorities, communication protocols, compliance and enforcement, and monitoring and reporting are described.

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 long-term improvements in water conservation and 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.

The purpose of the District's WSCP is to minimize non-essential uses of water and conserve remaining supplies for the greatest public benefit in the event of a water supply shortage. The District's WSCP provides a guide for the District to proactively prevent catastrophic service disruptions and has been updated to be consistent with the 2018 Water Conservation Legislation requirements. The District 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 the District to modify this WSCP outside of the UWMP process.

1.0 WATER SUPPLY RELIABILITY ANALYSIS

Chapters 6 and 7 of the District's 2020 UWMP, present the District's water supply sources and reliability, respectively. Groundwater is currently the only source of potable water supply for the District. In the District's Olivehurst system there are three treatment plants, six active wells, and one standby well. In the District's Plumas Lake system, there are two treatment plants, three active wells, and one standby well.

The District's groundwater supply is pumped from the South Yuba Subbasin. As described in the December 2019 Groundwater Sustainability Plan prepared for the Yuba Subbasins, the Yuba North and South Subbasins have a long history of proactively and collaboratively managing its water resources, with strong participation of local water management agencies, stakeholders, and state and federal agencies. Examples of this proactive management are the long-term stable groundwater level conditions in the North Yuba Subbasin and the efforts that led to reversing a potentially serious overdraft situation that existed in the South Yuba Subbasin. Between 1948 and 1981, groundwater elevations in the South Yuba Subbasin had declined an estimated 130 feet. In 1983, the Yuba Water Agency (YWA) began delivering surface water from its New Bullards Bar Reservoir to this subbasin, which offset the use of groundwater extraction by local water districts, resulting in raising groundwater elevations to near historical levels by the early 2000s.

Water managers in the Yuba Subbasins combined this proactive groundwater management with their surface water operations to create a robust conjunctive use program that allows the Yuba Subbasins greater operational flexibility. This conjunctive use program has been effective in maintaining the groundwater subbasins near historical high levels, while meeting the challenge of delivering reliable water



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supply to the local economy during California's historic drought of 2014-2017, maintaining environmental flow requirements in the lower Yuba River and contributing to state-wide water needs.

A water shortage condition occurs when the available supply of potable water cannot meet ordinary water demands for human consumption, sanitation, fire protection, and other beneficial uses. In some cases, the District may foresee a water shortage, but the water shortage may also be caused by an unforeseen sudden or emergency event. In general, the District's water supply conditions may be affected by the following:

- Climatic variability and drought conditions
- Water quality issues
- Water supply facility failures (loss of wells, treatment facilities, or distribution pipelines)
- State drinking water quality regulatory updates
- Unforeseen Sustainable Groundwater Management Act (SGMA) requirements to available groundwater supply in the future

The District's groundwater supplies are assumed to be drought-resistant. Consequently, supply shortages would not likely occur as a result of a single dry year or even multiple dry years. Supply shortages would be the result of a catastrophic event or water quality issue that would impact large portions of the subbasin.

As described in Chapter 7 of the District's 2020 UWMP, findings show that the District can reliably meet its projected demands through 2045 in normal and dry hydrologic conditions, including single dry years and five consecutive dry years.

Starting in 2022, the District will be required to conduct an annual water supply and demand assessment as described below in Section 2.0. The analysis associated with this WSCP was developed in the context of the District's water supply sources and reliability.

2.0 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

Beginning July 1, 2022, California Water Code (CWC) §10632.1 requires water suppliers to complete an Annual Water Supply and Demand Assessment (Annual Assessment) and submit an Annual Water Shortage Assessment Report to the Department of Water Resources (DWR). This section provides the procedures for the District to conduct its Annual Assessment, which will inform the District's Annual Water Shortage Assessment Report and assist the District with planning for potential water supply shortages. The objective of the Annual Assessment is to determine actual forecasted near-term supply conditions so that the District can prepare logistically and financially for any anticipated water supply constraints, as well as enact appropriate shortage response actions in a timely manner.

The Annual Assessment procedures below describe the steps the District 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).



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2.1 Decision-Making Process

The District will use the decision-making process described below to consistently determine its water supply reliability on an annual basis. The District may adjust and improve this process as needed.

The District is responsible for preparing the District’s Annual Assessment and Annual Water Shortage Assessment Report and for submitting the report to DWR by July 1st of each year (starting in 2022). The District will gather key data inputs described in Section 2.2 and conduct the assessment in accordance with Section 2.3. Each June the District will finalize the assessment based on available supply and demand data and projections. If the Annual Assessment finds that available water supply will be sufficient to meet expected demands for the current year and one subsequent dry year, no further action will be required. The final approved documents will be submitted to DWR by July 1 each year.

The District will follow the schedule of activities shown in Table 1 for conducting the Annual Assessment. Due to variations in climate and hydrologic conditions, the start and end dates shown in the table are approximate and may be adjusted as needed. The intent of the schedule is to allow shortage response actions to effectively address anticipated water shortage conditions in a timely manner while complying with the State’s reporting requirements.

Table 1. Schedule of Annual Assessment Activities

Schedule	Activities	Responsible Party
February	Convene assessment team.	District General Manager
February to March	Determine water supply sources for current year and one subsequent dry year. Describe sources and quantities considering factors affecting supply as described in Section 2.2.	District staff
February to March	Determine water demands for current year and one subsequent dry year. Describe demand types and quantities considering factors affecting demand as described in Section 2.2.	District staff
Early to Mid-April	Calculate the District’s water supply reliability for the current year and one subsequent dry year using the methodology described in Section 2.3.	District staff
Early to Mid-April	Complete assessment based on groundwater monitoring data and SGMA protocols for implementing a sustainable groundwater supply.	District staff
Late April	Based on determinations of Annual Assessment, prepare the Annual Water Shortage Assessment Report with recommendations on water shortage condition determination and response actions. Submit to District General Manager, or designee(s), for review.	District staff
Early May	Review Annual Assessment and Annual Water Shortage Assessment Report and provide comments as needed.	District General Manager
Mid-May to Early June	Finalize and approve Annual Assessment and Annual Water Shortage Assessment Report.	District staff and General Manager
Before July 1	Submit Annual Assessment and finalized Annual Water Shortage Assessment Report to DWR.	District General Manager



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Should the Annual Assessment find that available supply will not meet expected demands, the District will coordinate internally, with YWA, and with the County for the possible proclamation of a local emergency. The General Manager will present the finalized assessment to the District Board of Directors, along with recommendations on water shortage condition determination and actions. Recommended actions may include declaration of a water shortage emergency, declaration of a water shortage stage, and water shortage actions.

Based on the findings of the Annual Assessment, the Board of Directors will determine if a water shortage condition exists and, if needed, adopt a resolution declaring a water shortage emergency and an associated water shortage stage and authorizing water shortage actions. District staff will then prepare the District's Annual Water Shortage Assessment Report, incorporating District Board of Directors determinations and approved actions. The schedule of decision-making activities is provided in Table 2. The start and end dates and the activities shown in this table are approximate and may be adjusted as needed.

Table 2. Schedule of Decision-Making Activities if Water Shortage Condition Exists

Schedule	Activities	Responsible Party
Early May	Based on finalized determinations of Annual Assessment regarding water shortage condition and recommended actions, prepare recommendations on water shortage condition determination and actions.	District staff and General Manager
Early May	Prepare resolutions approving determinations and actions.	District staff and General Manager
Mid-May	Coordinate internally, with YWA, and with the County for the possible proclamation of a local emergency.	District General Manager
Early May to Mid-May	Present finalized determinations and recommendations, along with resolutions approving determinations and actions.	District General Manager
Late May to Early June	Receive presentation of finalized determinations and recommendations. Make determination of degree of emergency and act on resolutions that declare a water shortage emergency condition. Authorize water shortage response actions for implementation.	District Board of Directors
Mid-June	If a water shortage emergency condition is declared, implement the WSCP and the water shortage response actions as approved by District Board of Directors.	District staff
July 1	Finalize Annual Water Shortage Assessment Report and submit to DWR.	District staff and General Manager



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2.2 Key Data Inputs

The Annual Assessment requires evaluating supplies and demands for the current year and one subsequent dry year.

In reviewing planned water supplies, the Annual Assessment will consider the following key inputs:

- Hydrological conditions
- Water quality conditions
- Groundwater well production limitations (e.g., issues with physical assets or SGMA constraints)
- Infrastructure capacity constraints or changes
- Capital improvement project implementation

Planned water supply sources and quantities will be described and should be reasonably consistent with the supply projections in Chapter 6 of the District's most recent UWMP. If the Annual Assessment and UWMP supply sources and projections differ significantly, the District will explain the difference.

In reviewing planned unconstrained (i.e., without conservation) water demands, the Annual Assessment will consider the following key inputs:

- Weather conditions
- Water year type
- Population changes (e.g., due to development projects)
- Anticipated new demands (e.g., changes to land use)
- Pending policy changes that may impact demands

Planned water demand types and quantities will be described and should be reasonably consistent with the demand projections in Chapter 4 of the District's most recent UWMP. If the Annual Assessment and UWMP demand differ significantly, the District will explain the difference.

2.3 Assessment Methodology

In preparing the Annual Assessment, the District will use the following assessment methodology and evaluation criteria to evaluate water supply reliability for the current year and one subsequent dry year.

Supply and demand will be compared to determine the reliability of the District's water supply in the current year and one subsequent dry year. The District's water supply for the current year and the subsequent dry year will be deemed reliable if projected water supply can meet projected water demands. If the projected water supply cannot meet the projected water demands in the current year or the subsequent dry year, the extent of the water shortage condition will be determined, and the District will prepare response actions in accordance with this WSCP.

The Annual Assessment findings will be presented to the District Board of Directors, along with recommendations for action for Board of Directors consideration.



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3.0 SIX STANDARD WATER SHORTAGE STAGES

The District's WSCP, as included in the District's 2015 UWMP, included four stages of actions based on increasing severity up to a water shortage of 50 percent. Those four stages were as follows:

- Stage 1 – Water Supply Warning
 - Mandatory restrictions on water use
 - Expected reduction up to 10 percent
- Stage 2 – Water Shortage Alert
 - Mandatory restrictions on water use
 - Expected reduction up to 20 percent
- Stage 3 – Water Shortage Crisis
 - Mandatory restrictions and prohibitions
 - Expected reduction up to 35 percent
- Stage 4 – Water Shortage Emergency
 - Mandatory restrictions and water allocations
 - Expected reduction up to 50 percent

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 ranges of up to 10, 20, 30, 40, 50 percent, and greater than 50 percent shortages from the normal supply condition. 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 and shortage response actions. These water shortage stages apply to both foreseeable and unforeseeable water supply shortage conditions. As noted above, the District's previous WSCP (as included in the District's 2015 UWMP) had four stages, but has been updated to align with the State's standard stages as shown in Table 3.



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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"> Annual Assessment shows that water supply is not able to meet normal demands by up to 10%; or Definable event has reduced the District's ability to meet normal demands by up to 10%. 	Water Supply Warning (Implement actions per Table 4)
2	Up to 20%	<ul style="list-style-type: none"> Annual Assessment shows that water supply is not able to meet normal demands by up to 20%; or Definable event has reduced the District's ability to meet normal demands by up to 20%. 	Water Shortage Alert (Implement actions per Table 4)
3	Up to 30%	<ul style="list-style-type: none"> Annual Assessment shows that water supply is not able to meet normal demands by up to 30%; or Definable event has reduced the District's ability to meet normal demands by up to 30%. 	Water Shortage Crisis (Implement actions per Table 4)
4	Up to 40%	<ul style="list-style-type: none"> Annual Assessment shows that water supply is not able to meet normal demands by up to 40%; or Definable event has reduced the District's ability to meet normal demands by up to 40%. 	Water Shortage Severe Crisis (Implement actions per Table 4)
5	Up to 50%	<ul style="list-style-type: none"> Annual Assessment shows that water supply is not able to meet normal demands by up to 50%; or Definable event has reduced the District's ability to meet normal demands by up to 50%. 	Water Shortage Emergency (Implement actions per Table 4)
6	>50%	<ul style="list-style-type: none"> Annual Assessment shows that water supply is not able to meet normal demands by more than 50%; or Definable event has reduced the District's ability to meet normal demands by more than 50%. 	Water Shortage Catastrophic Emergency (Implement actions per Table 4)

Notes: Annual Assessment = Annual Water Supply and Demand Assessment

As described in Section 2.0, the District will conduct an Annual Assessment to determine its water supply condition for the current year and a subsequent dry year. Preparing the Annual Assessment helps the District ascertain the need to declare a water shortage emergency and water shortage stage. In other cases, the District may need to declare a water shortage emergency due to unforeseen water supply interruptions. When the District anticipates or identifies that water supplies may not be adequate to meet the normal water supply needs of its customers, the District Board of Directors may determine that a water shortage exists and consider a resolution to declare a water shortage emergency and associated stage. The shortage stage provides direction on shortage response actions.



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4.0 SHORTAGE RESPONSE ACTIONS AND EFFECTIVENESS

CWC §10632 (a)(4) requires shortage response actions that align with the defined shortage levels. The District's shortage response actions consist of a combination of demand reduction and operational changes. The District'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, the District plans to use a balanced approach, combining demand reduction and operational changes to respond to the event and the resulting water shortage stage. As described further in Section 4.3 below, supply augmentation opportunities, beyond additional pumpage of groundwater, are not currently available to the District. The District will adapt 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.

Water meters allow the District to compare current water demands with demand reduction goals and adjust its shortage response actions accordingly. Nearly all of the District's water customers are metered; remaining unmetered connections in the Olivehurst system will be metered by the end of 2022. Meters are read monthly to track the extent of the effectiveness of the District's response actions.

Water production and water use can be compared to previous periods by customer sector or individual customer. This continuous monitoring allows the District to assess water system demands and compare with water demand reduction goals. The District may then adjust its shortage response actions as needed to balance demands with available water supplies. For example, the District may intensify its public outreach or more vigorously enforce compliance to water use prohibitions if needed water demand reduction goals are not met for any specific stage. Conversely, the District may reduce public outreach frequency or decrease compliance actions if demand reduction goals are exceeded.

The shortage response actions discussed below may be considered as tools that allow the District to respond to water shortage conditions. Shortage response actions are initiated at the shortage levels shown and continue to be implemented at higher shortage levels. Because the District may continuously monitor and adjust its response actions to reasonably balance demands with available supply, the extent to which implementation of each action reduces the gap between water supplies and water demand is difficult to accurately quantify and can only be estimated. For example, 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

During water shortage conditions, the District plans to reduce demand by implementing the actions shown in Table 4. Demand reduction actions 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 the District uses compliance actions such as penalties, charges, or other enforcement. Demand reduction actions are initiated at the shortage levels shown and will continue to be implemented at higher shortage levels.



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Table 4. Water Shortage Contingency Plan 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? Include units used (volume type or percentage)	Additional Explanation or Reference (optional)	Penalty, Charge, or Other Enforcement? <i>For Retail Suppliers Only</i> <i>Drop Down List</i>
<i>Add additional rows as needed</i>				
Stage 1	CII - Restaurants may only serve water upon request	50 gal/day/commercial connection		No
Stage 1	Other water feature or swimming pool restriction	No data available	All pools, spas, and ornamental fountains/ponds shall be equipped with recirculating pumps and shall be constructed to be leak proof	No
Stage 1	Other water feature or swimming pool restriction	No data available	Pool draining and refilling shall be allowed only for health, maintenance, or structural considerations	No
Stage 1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	No data available		No
Stage 1	Other - Require automatic shut of hoses	50 gal/day/connection	Free flowing hoses are prohibited for all uses, including vehicle and equipment washing, ponds and evaporative coolers	No
Stage 1	Other - Prohibit use of potable water for washing hard surfaces	50 gal/day/connection	Washing down of sidewalks, driveways, parking lots, or other paved surfaces is prohibited except to alleviate immediate fire or sanitation hazards	No
Stage 2	Landscape - Limit landscape irrigation to specific days	Based on 2020 water use data, and assuming that 30% of single family water use is for landscape water use, it is estimated that irrigation would be reduced by about 50%, with a savings of about 180 MG	Landscape irrigation shall be limited to a maximum of three days per week when necessary based on the following an odd-even schedule: -Odd numbered street addresses may irrigate only on Tuesdays, Thursdays, and Saturdays -Even numbered street addresses may irrigate only on Wednesdays, Fridays, and Sundays -No Irrigation on Mondays	Yes
Stage 2	Landscape - Limit landscape irrigation to specific times	Depends on times that irrigation will be allowed, but can reduce water use by 20-25 gallons per day per household	Automatic sprinkler systems shall only operate during off-peak hours between 12:00AM and 6:00AM	Yes
Stage 2	CII - Restaurants may only serve water upon request	50 gal/day/commercial connection		Yes
Stage 2	Other - Prohibit use of potable water for washing hard surfaces	50 gal/day/connection	Washing down of sidewalks, driveways, parking lots, or other paved surfaces is prohibited except to alleviate immediate fire or sanitation hazards	Yes



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Stage 3	Landscape - Limit landscape irrigation to specific days	Based on 2020 water use data, and assuming that 30% of single family water use is for landscape water use, it is estimated that irrigation would be reduced by about 75%, with a savings of about 270 MG	Landscape irrigation shall be limited to a maximum of two days per week only when necessary based on the following odd-even schedule: -Odd numbered street addresses may irrigate only on Tuesdays and Saturdays -Even numbered street addresses may irrigate only on Wednesdays and Sundays -No irrigation on Mondays, Thursdays, and Fridays	Yes
Stage 3	Water Features - Restrict water use for decorative water features, such as fountains	No data available	Water use for ornamental ponds and fountains is prohibited	Yes
Stage 3	Other water feature or swimming pool restriction	No data available	No potable water from the utility's system shall be used to fill or refill new swimming pools, artificial lakes, ponds, or streams until the water crisis is over	Yes
Stage 3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	100-200 gal/year/residential connection	Washing of automobiles or equipment shall be done on the lawn or at a commercial establishment that uses recycled or reclaimed water	Yes
Stage 4	Landscape - Limit landscape irrigation to specific days	Based on 2020 water use data, and assuming that 30% of single family water use is for landscape water use, it is estimated that irrigation would be reduced by about 50%, with a savings of about 180 MG	Landscape irrigation shall be limited to a maximum of one day per week when necessary based on the following odd-even schedule: -Odd numbered street addresses may irrigate only on Saturdays -Even numbered street addresses may irrigate only on Sundays -No irrigation on Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays	Yes
Stage 5	Other	Depends on extent and frequency of current flushing activities	Flushing of fire hydrants is prohibited except in case of emergency or only for essential operations	Yes
Stage 5	Other	Prevents an increased shortage gap	No potable water shall be sold outside the District's service area	Yes
Stage 5	Other	Prevents an increased shortage gap	New connections to the District system will not be allowed	Yes
Stage 6	Landscape - Prohibit all landscape irrigation	Based on 2020 water use data, and assuming that 30% of single family water use is for landscape water use, savings would be about 365 MG		Yes



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The District may request that its customers reduce their water demands in response to any water shortage stage, including imposing additional mandatory restrictions as discussed in Section 4.2.

The District will monitor water production, water consumption, 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

In response to the then on-going drought conditions, in 2015 the State Water Resources Control Board (SWRCB) adopted emergency regulations that were passed into law in March 2015, which included prohibitions against certain wasteful water use practices. The following actions were prohibited, except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency:

- The application of potable water to any driveway or sidewalk.
- Using potable water to water outdoor landscapes in a manner that causes runoff to adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots or structures.
- Using a hose that dispenses potable water to wash a motor vehicle, unless the hose is fitted with a shut-off nozzle.
- The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system.
- The application of potable water to outdoor landscapes during and within 48-hours after measurable rainfall.
- The serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased.
- To promote water conservation, operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood language.

To implement the mandatory potable water use restrictions imposed by the SWRCB, the District implemented its Water Shortage Contingency Plan in 2015. The mandatory prohibitions against specific water use practices required by the District's Water Shortage Contingency Plan, as of March 17, 2015, included the following:

- Water is to be used for beneficial and useful purposes only. All unnecessary and wasteful uses of water are prohibited.
- Washing down sidewalks, driveways, parking lots or other paved surfaces is prohibited except to alleviate immediate fire or sanitation hazards.
- Free-flowing hoses are prohibited for all uses, including vehicle and equipment washing, ponds, and evaporative coolers. Automatic shut-off devices shall be installed on any hose or other large-volume filling apparatus in use.



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- Leaking consumer pipes or faulty sprinklers shall be repaired within five days or less if warranted by the severity of the problem.
- All pools, spas, and ornamental fountains/ponds shall be equipped with recirculating pumps and shall be constructed to be leak-proof. Pool draining and refilling shall be allowed only for health, maintenance or structural considerations.
- Landscape irrigation shall be limited to a maximum of three days per week when necessary based on the following odd-even schedule:
 - Customers with street addresses that end with odd numbers may irrigate only on Tuesdays, Thursdays, and Saturdays.
 - Customers with street addresses that end with even numbers may irrigate only on Wednesdays, Fridays, or Sundays.
 - No irrigation is permitted on Mondays.
- Automatic sprinkler system timers shall be set to operate only during off-peak hours between 9:00 p.m. and 6:00 a.m.
- Washing of streets, parking lots, driveways, sidewalks, or buildings is prohibited except as necessary for health, sanitary or fire protection services.
- Restaurants shall serve water only upon request.

The SWRCB expanded, updated, extended, and readopted the emergency regulations several times, most recently in February 2017. Governor Brown ended the drought State of Emergency in April 2017. In response, the SWRCB partially repealed the February 2017 drought emergency conservation regulations, maintaining urban water supplier reporting requirements and the prohibitions on wasteful water use practices. These requirements remained in place until November 25, 2017.

As part of the Making Conservation a California Way of Life legislation, the SWRCB is currently proposing permanent water use prohibitions. The proposed permanent prohibitions are similar to the emergency prohibitions on wasteful water uses that were in effect during the 2012-2017 drought. There are a few differences that reflect the permanent nature of these prohibitions. The following wasteful practices would be prohibited, unless exempt to protect health and safety, to meet state and federal permit obligations, when used exclusively for commercial agricultural purposes, or for other reasons noted below:

- Using potable water to wash sidewalks and driveways;
- Allowing more than incidental runoff when irrigating turf and other ornamental landscapes;
- Using hoses without automatic shutoff nozzles to wash motor vehicles;
- Using potable water in ornamental fountains or decorative water features that do not recirculate the water
- Irrigating turf and ornamental landscape during and within 48 hours following measurable rainfall;
- Hotels and motels laundering towels and linens daily without providing guests the option of using them again;
- During a drought emergency, the serving of drinking water in restaurants and bars without it being requested; and



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- As of January 1, 2025, irrigating turf on public street medians and parkways unless the turf serves a community recreational or civic function, the turf is irrigated incidentally with trees, or the turf is watered with recycled water by an irrigation system installed prior to January 1, 2018.

4.3 Supply Augmentation and Other Actions

The District's water supply portfolio consists exclusively of local groundwater. At any water shortage stage and depending on the water shortage event, the District may adjust its groundwater pumping rate. Since the District's groundwater pumping is already considered for reliability and dry conditions, it is included in determining the gap between available supply and customer water use and should not be counted again as a potential shortage response.

Potential supply augmentation actions include transfer, exchanges, other purchases, new recycled water, rain seeding, and stored emergency supply; however, none of these actions are currently available to the District. Therefore, Table 5 indicates that no supply augmentation actions are currently available under any of the District's shortage levels.

Table 5. Water Shortage Contingency Plan 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 WJEdata 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>
<i>Add additional rows as needed</i>			
Stage 1			No supply augmentation methods available
Stage 2			No supply augmentation methods available
Stage 3			No supply augmentation methods available
Stage 4			No supply augmentation methods available
Stage 5			No supply augmentation methods available
Stage 6			No supply augmentation methods available

NOTES: The District does not have any supply augmentation methods.

4.4 Operational Changes

Beginning at Stage 3, the District will adjust operations to minimize supply losses and more closely track customer water use. These adjustments include increasing meter reading and increasing water waste patrols. At Stage 5, flushing of fire hydrants will be prohibited except in case of an emergency or only for essential operations, no potable water shall be sold outside of the District's service area, and no new connections to the District's system will be allowed.

4.5 Emergency Response Plan

As stated in Section 3.0, the District's water shortage stages outlined in Table 3 apply to both foreseeable and unforeseeable water supply shortage conditions, including catastrophic water shortage conditions. Catastrophic water shortage conditions are addressed in the District's Emergency Response Plan (ERP), which is being updated concurrent with preparation of the District's 2020 UWMP. ERPs outline the preparation, response, and recovery procedures associated with unforeseeable incidents such as water supply contamination, earthquake, infrastructure failure, and other events.



Water Shortage Contingency Plan

The District's ERP describes the equipment and resources available in an unforeseen water shortage, including backup generators (stationary and portable). The District has standby generators at its each of its active wells, and all new water facilities being planned will include backup power. Repair or replacement of the electrical equipment control panels and wiring could be accomplished within 24 hours.

A power outage would be a significant threat to the District's water system. The devastating effect of major natural disasters on power systems can cause widespread outages over a long period of time. Windstorms, flooding and earthquakes can take down power lines and interrupt service. In the event of a power outage, the following steps shall be initiated:

- Obtain the estimated down time from PG&E
- Initiate backup power
- Increase disinfectant residual
- Issue "Boil Water", "Do Not Drink", or "Do Not Use" orders and press releases, as appropriate
- Initiate appropriate stage of Water Shortage Contingency Plan

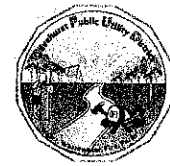
Earthquakes can and have been very destructive to water utility systems in California. Heavy damage results from loss of power to ruptured pumping stations and displacement of soil causing broken lines, cracks in concrete storage tanks and structural damage. Connection pipes can break due to movement; pump and motor housings can be damaged from ground shaking events. In the event of an earthquake, the following steps shall be initiated:

- Initiate backup power
- Increase disinfectant residual
- Issue "Boil Water", "Do Not Drink", or "Do Not Use" orders and press releases, as appropriate
- Initiate appropriate stage of Water Shortage Contingency Plan

In the event of an emergency that impacts water delivery, the District will coordinate with YWA and the County to organize and deliver alternate water supplies to their customers, if available.

4.6 Seismic Risk Assessment and Mitigation Plan

CWC §10632.5(a) requires that UWMPs include a seismic risk assessment and mitigation plan to assess and mitigate a water system's seismic vulnerabilities. At time of preparation of this plan, Yuba County is in the process of preparing a 2021 Local Hazard Mitigation Plan (LHMP) update of its 2015 Multi-Jurisdictional Local Hazard Mitigation Plan (MHMP), which is under public review through the following link: [Yuba County 2021 LHMP Update](#). The 2021 update recognizes earthquake events as hazards that can have a significant impact on the County. Although the likelihood of future earthquake occurrences is considered to be unlikely (less than a 1 percent chance of occurrence in the next 100 years, or has a recurrence interval of greater than 100 years), the magnitude/severity is considered to be critical (with 25 to 50 percent of property severely damaged; shutdown of facilities for at least two week; and/or injuries) and the significance is considered to be medium (with moderate potential impact).



Water Shortage Contingency Plan

Yuba County is located within an area of relatively low seismic activity and is not located within a highly active fault zone. No Alquist-Priolo Earthquake Fault Zones are located in the County. Faults include primarily inactive faults of the Foothills Fault System, running south-southeastward near Loma Rica, Browns Valley, and Smartville. Faults include the Prairie Creek Fault Zone, the Spenceville Fault, and the Swain Ravine Fault. There have been no disaster declarations in the County related to earthquakes. Although the County has felt ground shaking from earthquakes with epicenters located elsewhere, no major earthquakes have been recorded within the County. The risks associated with earthquakes, such as surface fault rupture, within the County are considered low.

The 2021 Local Hazard Mitigation Plan Update does include modeling to evaluate the potential impacts from a probabilistic 7.0 magnitude seismic event in the County. Key losses included 8,740 households in the County experiencing a loss of potable water the first day after the earthquake and damage to utility systems in the County including seven facilities with at least moderate damage, 384 potable water line breaks, 193 wastewater line breaks, and 1 natural gas line break.¹

The District has implemented efforts in addressing its facilities' vulnerabilities. In accordance with *America's Water Infrastructure Act (AWIA)*, the District completed a *Risk and Resilience Assessment (RRA)* of its water system in September 2021. The RRA systematically evaluated the District's assets, threats, and risks, as well as countermeasures that might be implemented to minimize overall risk to the system. This included assessment of natural hazards, including seismic, on the District's source water. To ensure the security of the District's water system, the RRA is retained by the District as a confidential document.

5.0 COMMUNICATION PROTOCOLS

In the event of a water shortage, the District must inform their customers, the general public and interested parties, the County, 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. Cell phone numbers for District staff are shared internally, and District email accounts are available for internal and external communication.

5.1 Communication for Foreseeable Events

Water shortage may be foreseeable when the District conducts its Annual Assessment as described in Section 2.0. When the District determines the potential of a water shortage event, the Board of Directors may declare a water shortage emergency by resolution and authorize shortage response actions.

The District will follow the communication protocols and procedures detailed below. The District may trigger any of these protocols at any water shortage stage.

- If a water shortage emergency is anticipated, the District will coordinate internally and with the County and the YWA for the possible proclamation of a local emergency.

¹ Table 4-59 HAZUS-MH Earthquake Loss Estimation Probabilistic 2,500-Year Scenario Results, Yuba County 2021 Local Hazard Mitigation Plan Update, July 2021 Public Review Draft.



Water Shortage Contingency Plan

- The District will conduct a Board of Directors meeting in which the Annual Assessment findings and recommendations for a water shortage emergency and shortage response actions are presented.
- The District will communicate conditions to the general public using some or all of the following options, as needed at the various shortage levels: press releases, radio/television coverage, social media posts, bill inserts, newsletters, and postings on the District's website. Public entities and officials are informed of water shortage information via email.

5.2 Communication for Unforeseeable Events

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

All District staff are provided their communication responsibilities. Depending on the event, the District may designate a spokesperson to interact with the media. The ERP also provides a list of relevant contacts to notify at the local, regional, and state level.

6.0 COMPLIANCE AND ENFORCEMENT

When a water shortage is anticipated, the District Board of Directors will adopt a resolution declaring a water shortage emergency condition and the regulations and restrictions that should be enforced in response to the declared water shortage level.

Provisions for administrative citations are provided in the District's Ordinance No. 185 (also referred to as the Olivehurst Water Ordinance). If the District believes that water has been or is being used in violation of the above restrictions, the District will send a written notice to the customer specifying the nature of the violation and the date and time of occurrence and request that the customer cease the violation and take remedial action. The District will provide the customer with a copy of the ordinance and inform the customer that failure to comply may result in termination of water service.

7.0 LEGAL AUTHORITIES

Appendix K of the District's 2020 UWMP includes the District's Ordinance No. 185, which establishes rules and regulations for water service and provides procedures and penalties for enforcement.

8.0 FINANCIAL CONSEQUENCES OF WSCP

An extended water shortage would reduce the amount of water sold by the District to its customers. The most severe restrictions could reduce consumption by possibly more than 50 percent. In the event of a water shortage scenario, District revenues may decrease from the implementation of conservation measures and corresponding reduction in water sales. Conversely, expenses could increase as a result of the implementation and enforcement of water conservation measures.



Water Shortage Contingency Plan

In October 2015, in response to the then on-going drought conditions, the District adopted Resolution No. 2300, which provided for drought emergency water service surcharges and the adoption of a tiered drought emergency water rate system. For the District's metered customers, this rate structure encouraged further water conserving behavior by incorporating a tiered volumetric surcharge in addition to the normal (non-drought) unit service charge. Consequently, water usage reductions directly reduced the surcharge to the metered customer, while excessive water use resulted in increased surcharges to the metered customer.

A copy of Resolution No. 2300 is provided in Appendix L of the District's 2020 UWMP. A similar resolution could be enacted by the District if needed during future drought emergencies.

9.0 MONITORING AND REPORTING

Meter readings are an important tool to help the District adjust public outreach, enforcement, and other water shortage response actions. The District has meters at its water sources (groundwater production wells) and meters almost all of its water customers. Some remaining unmetered residential customers served by the Olivehurst system are anticipated to be metered by the end of 2022. Customers' water meters are read monthly to track the extent of their compliance with the District's water use restrictions. Water production information may be read daily.

At the time of preparation of this WSCP, the State Water Resources Control Board is preparing regulations for monthly reporting of water production and other uses, along with associated enforcement metrics. The District regularly records its water meter readings, along with enforcement actions, ensuring that the District will be able to comply with upcoming reporting requirements.

10.0 WSCP REFINEMENT PROCEDURES

This WSCP is an adaptive management plan. It is subject to refinements as needed to ensure that the District' shortage response actions and mitigation strategies are effective and produce the desired results. Based on monitoring described in Section 9.0 and the need for compliance and enforcement actions described in Section 6.0, the District may adjust its response actions and modify its WSCP. The District may also modify its WSCP based on improvements identified through systematic monitoring or feedback from District staff and customers as discussed below. When a revised WSCP is proposed, the revised WSCP will undergo the process described in Section 12.0 for adoption by the District Board of Directors and distribution to Yuba County, the District's customers and the general public.

10.1 Systematic Monitoring

The District will monitor meters at its water sources to evaluate the overall effectiveness of its response actions in meeting the declared water shortage stage. Should overall demands fall short of the goals of the declared water shortage stage, the District can increase the intensity of public outreach for water conservation and the extent of enforcement of water use restrictions. Conversely, should overall demands meet or exceed the goals of the declared water shortage stage, the District can decrease the intensity of public outreach for water conservation and the extent of enforcement of water use restrictions.



Water Shortage Contingency Plan

The District may implement operational changes in combination with enforcement of its water use restrictions and prohibitions to meet the objectives of the water shortage stage while maintaining overall public health and safety.

10.2 Feedback from District Staff and Customers

Feedback from District staff and the public is important in refining or incorporating new actions. The District seeks input from staff who interface with customers to gauge the effectiveness of its response actions and solicit response action ideas.

Customer water meter data may be evaluated for each customer sector or each individual customer. The District tracks water use violations and may evaluate their frequency to determine restrictions that customers may not be able to meet. This evaluation may also show water demand reduction actions that customers can implement effectively.

The District seeks input from its customers and the general public through its website, through public hearings, and through regularly scheduled Board of Directors meetings.

11.0 SPECIAL WATER FEATURE DISTINCTION

CWC §10632(b) requires that water suppliers analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls and fountains, separately from swimming pools and spas. The District distinguishes special water features, such as decorative fountains and ponds, differently from swimming pools and spas in its WSCP demand reduction actions (see Table 4 above).

12.0 PLAN ADOPTION, SUBMITTAL, AND AVAILABILITY

This WSCP is adopted concurrently with the District's 2020 UWMP, by separate resolution. Prior to adoption, a duly noticed public hearing was conducted. An electronic copy of this WSCP will be submitted to DWR within 30 days of adoption.

No later than 30 days after adoption, a copy of this WSCP will be available at the District's offices. A copy will also be provided to Yuba County. An electronic copy of this WSCP will also be available for public review and download on the District's website, www.opud.org

The District's WSCP is an adaptive management plan and is subject to refinements as needed to ensure that the District's shortage response actions and mitigation strategies are effective and produce the desired results. When a revised WSCP is proposed, the revised WSCP will undergo the process described above for adoption by the District Board of Directors and distribution to Yuba County, the District's customers, and the general public.