FINAL PLAN | JUNE 2021

Dublin San Ramon Services District Water Shortage Contingency Plan

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LIST OF ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
AFY	Acre-Feet per Year
AMI	Advanced Metering Infrastructure
AWSDA	Annual Water Supply and Demand Assessment
Board	Board of Directors
Cal Water	California Water Service-Livermore District
CWC	California Water Code
DSRSD	Dublin San Ramon Services District
DWR	Department of Water Resources
GPQ	Groundwater Pumping Quota
Legislature	California State Legislature
Livermore	City of Livermore
M&I	Municipal and Industrial
PIO	Public Information Officer
Pleasanton	City of Pleasanton
SB	Senate Bill
UWMP	Urban Water Management Plan
WARN	Water/Wastewater Agency Response Network
Water ERP	Water Emergency Response Plan
WSCP	Water Shortage Contingency Plan
Zone 7	Zone 7 Water Agency

Dublin San Ramon Services District
Water Shortage Contingency Plan

Water shortages occur whenever the available water supply cannot meet the normally expected customer water use. Water shortages 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 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.

This Water Shortage Contingency Plan (WSCP) describes the Dublin San Ramon Services District's (DSRSD) strategic plan to prepare and respond to water shortage conditions resulting from a drought, regulatory action, emergency, or other types of events. The WSCP also includes defined actions to reduce demand over six shortage condition levels, from 10 percent to more than 50 percent demand reductions. This WSCP provides a guide for DSRSD to prevent catastrophic service disruptions and has been updated to be consistent with the 2018 Water Conservation Legislation requirements. As part of this WSCP, DSRSD's legal authorities, communication protocols, compliance and enforcement, and monitoring and reporting are described. District Code Chapter 4.10 supports DSRSD's WSCP.

DSRSD 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 DSRSD to modify this WSCP outside of the Urban Water Management Plan (UWMP) process.

1.0 WATER SUPPLY RELIABILITY ANALYSIS

Chapters 6 and 7 of DSRSD's 2020 UWMP present DSRSD's water supply sources and reliability, respectively. Zone 7 Water Agency (Zone 7) is DSRSD's exclusive water wholesaler, so DSRSD's water supply reliability is fundamentally linked with Zone 7's water supply reliability. Findings show DSRSD 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, therefore affecting DSRSD. 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. Besides DSRSD, Zone 7's retailers include the California Water Service-Livermore District (Cal Water), the City of Livermore (Livermore), and the City of Pleasanton (Pleasanton).

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

- SWP supply allocations and storage levels
- Delta vulnerability to seismic events, changing environmental and regulatory requirements, and climate change
- Salts, nutrients, or contaminants in the Main Basin groundwater supply

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) and an Annual Water Shortage Assessment Report to the Department of Water Resources (DWR). This section provides the procedures for DSRSD to conduct its AWSDA, which will inform DSRSD's Annual Water Shortage Assessment Report and assist DSRSD with planning for potential water supply shortages. The objective of the AWSDA is to forecast near-term supply conditions so that DSRSD can prepare logistically and financially for any anticipated water supply constraints, as well as enact appropriate shortage response actions in a timely manner.

DSRSD's AWSDA will be developed from Zone 7's "Annual Review of the Sustainable Water Supply Report" (Annual Sustainability Report), which covers near-term planning of water supplies over the upcoming five years and includes the following:

- An estimate of the current annual demand for municipal and industrial (M&I) water, as well as a five-year projection (including water losses and water conservation) based on projections from Zone 7's retailers
- 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 M&I water demands for single-dry and multiple-dry year conditions, as specified in Zone 7's UWMP

This section provides the decision-making process, key data inputs, and methodology necessary for DSRSD to produce its AWSDA. This includes steps DSRSD may take to declare a water shortage emergency and associated water shortage stage (see Section 0) and implement water shortage response actions (see Section 0).

2.1 Decision-Making Process

DSRSD will use the decision-making process described below to produce its AWSDA. DSRSD may adjust and improve this process as needed.

DSRSD's Engineering Department Planning Unit is responsible for preparing DSRSD's AWSDA and Annual Water Shortage Assessment Report and submitting them to DWR by July 1st of each year (starting in 2022). Typically, by April of each year, staff will finalize the assessment based on Zone 7's Annual Sustainability Report, and present the AWSDA and Annual Water Shortage Assessment Report to the Engineering Services Manager, or designee, for review and approval. If the AWSDA finds that the 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.

DSRSD's AWSDA development process, is described in Table 1. Due to variations in climate and hydrologic conditions, DSRSD's assessment schedule may vary. DSRSD intends to implement 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 Sustainability Report Activities

Schedule	Activities	Responsible Party
January	Plan for water demands for the current year and one subsequent dry year. Provide demand projections to Zone 7.	Planning Staff
Late March to Mid-April	Zone 7 finalizes its Annual Sustainability Report and determines if a water shortage condition is expected.	Zone 7
Late-March to mid-April	Complete AWSDA based on Zone 7's Annual Sustainability Report, which is typically presented to their Board by the beginning of April.	Planning Staff
Late April-May	Based on determinations of the AWSDA, prepare the Annual Water Shortage Assessment Report with recommendations on water shortage condition determination and response actions. Submit to Engineering Services Manager, or designee, for review.	Planning Staff
Late April-May	Review AWSDA and Annual Water Shortage Assessment Report and provide comments as needed.	Engineering Services Manager
Early June	Finalize and approve AWSDA and Annual Water Shortage Assessment Report.	Planning Staff and Engineering Services Manager
Late June	Submit finalized AWSDA and Annual Water Shortage Assessment Report to DWR by July 1.	Planning Staff

Should the AWSDA find that available supply will not meet expected demands, the General Manager, or designee, will coordinate with the region's water service providers and Alameda County and Contra Costa County for the possible proclamation of a local emergency. Staff will present the finalized assessment and recommendations on water shortage condition determination and actions to DSRSD Board of Directors (Board). Recommended actions may include a declaration of a water shortage emergency, a water shortage stage, and water shortage actions.

Based on the findings of the AWSDA, DSRSD Board will determine if a water shortage condition exists and, if needed, adopt a resolution or ordinance declaring a water shortage emergency and an associated water shortage stage and authorizing water shortage actions. Staff will then prepare DSRSD's Annual Water Shortage Assessment Report, incorporating DSRSD Board determinations and approved actions. The sequence of decision-making activities is provided in Table 2. The schedule of the activities may be adjusted as appropriate to allow DSRSD sufficient time to implement shortage response actions in a timely manner.

Table 2. Schedule of Decision-Making Activities if Water Shortage Condition Exists		
Schedule	Activities	Responsible Party
Late April-May	Prepare recommendations on water shortage condition determination and action based on AWSDA findings. Prepare resolution or ordinance approving determinations and actions.	Planning Staff
Late April-May	Coordinate with the region's water service providers, Alameda County, and Contra Costa County for the possible proclamation of a local emergency.	General Manager or Designee
Late April-May	Present finalized determinations and recommendations, along with resolutions approving determinations and actions.	Engineering Services Manager or Designee
May	Receive presentation of finalized determinations and recommendations. Make a determination of the degree of emergency and act on resolutions that declare a water shortage emergency condition. Authorize water shortage response actions for implementation.	DSRSD Board
May	If a water shortage emergency condition is declared, implement the WSCP and the water shortage response actions as approved by DSRSD Board.	General Manager or Designee
May	Finalize AWSDA and incorporate Board decision in Annual Water Shortage Assessment Report.	Planning Staff
June	Submit final AWSDA and Annual Water Shortage Assessment Report to DWR by July 1.	Planning Staff

2.2 Key Data Inputs

The State requires that the AWSDA evaluate supplies and demands for, at a minimum, the current year and one subsequent dry year. The planned water supply and demand for the current year and a subsequent dry year will be used to evaluate DSRSD's water supply reliability.

Planned water supplies will be used as input to the AWSDA for the current year and the following one dry year. In planning for water supplies, the following factors are considered, as applicable and appropriate:

1. Zone 7 water supply availability
2. Hydrological conditions
3. Regulatory conditions
4. Contractual constraints
5. Water quality conditions
6. Infrastructure capacity constraints or changes
7. Capital improvement project implementation

Planned water supply sources and quantities will be described and be reasonably consistent with the supply projections in Chapter 6 (Water Supply Characterization) of DSRSD's most recent UWMP. Should supply sources and projections differ significantly between the AWSDA and the UWMP, an explanation for the difference will be provided.

Planned unconstrained water demands will be used as input to the AWSDA for the current year and the following one dry year. Unconstrained water demands are customer demands where no water conservation measures are in effect. In planning for water demands, the following factors are considered, as applicable and appropriate:

1. Weather conditions
2. Water year type
3. Population changes (e.g., due to development projects)
4. Anticipated new demands (e.g., changes to land use)
5. Pending policy changes that may impact demands
6. Infrastructure operations

Planned water demand types and quantities will be described and should be reasonably consistent with the demand projections in Chapter 4 (Water Use Characterization) of DSRSD's most recent UWMP. Should the demand projections deviate significantly between the AWSDA and the UWMP, an explanation for the difference will be provided.

2.3 Assessment Methodology

In preparing the AWSDA, DSRSD will use the following assessment methodology and criteria to evaluate the agency's water supply reliability for the current year and following one dry year.

DSRSD uses a spreadsheet to plan for current year and future year supply and demands. Planned supply and demand inputs described in Section 2.2 will be entered in the spreadsheet in annual increments. As needed, the increments may be revised to monthly or seasonal periods to more closely evaluate specific conditions and needs.

Supply and demand will be compared to determine DSRSD's water supply reliability in the current year and the following one dry year. DSRSD's water supply will be deemed reliable if it can meet planned water demands in both the current year and the following dry year. 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 DSRSD will prepare response actions in accordance with this WSCP.

Findings from the AWSDA will be presented to DSRSD Board for consideration, along with recommendations for action.

3.0 SIX STANDARD WATER SHORTAGE LEVELS

To provide a consistent regional and statewide approach for 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 the normal reliability 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. These water shortage stages apply to both foreseeable and unforeseeable water supply shortage conditions. DSRSD's 2015 UWMP included four stages that addressed up to 50 percent water demand reduction. Table 3 presents DSRSD's reorganized stages, which align with the State's standard stages.

As described in Section 2.0, DSRSD will conduct an AWSDA to determine its water supply condition for the current year and the following one dry year. Preparing the AWSDA helps DSRSD ascertain the need to declare a water shortage emergency and water shortage stage. In other cases, DSRSD may need to declare a water shortage emergency due to unforeseen water supply interruptions. When DSRSD anticipates or identifies that water supplies may not be adequate to meet the normal water demands to serve its customers, DSRSD Board 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.

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

Shortage Level	Percent Shortage Range	Shortage Response Actions (*Narrative description*)	Water Shortage Condition (Narrative description)
1	Up to 10%	Voluntary Reduction; See Table 8-2.	• DSRSD has adequate supply and seeks to preserve water resources for the future; or, • Assessment shows that water supply is not able to meet normal demand and up to 10% demand reduction will be required.
2	Up to 20%	Minimal Reduction; See Table 8-2.	• Assessment leads to a reasonable conclusion that water supplies may not adequately meet normal demands in the current or upcoming years. Up to 20% demand reduction will be required.
3	Up to 30%	Moderate Reduction; See Table 8-2.	• Previous water conservation target has not been met; or, • Under definable events, demand reduction up to 30% is required in the current or upcoming years.
4	Up to 40%	Significant Reduction; See Table 8-2.	• Previous water conservation target has not been met; or, • Under definable events, demand reduction up to 40% is required in the current or upcoming years.
5	Up to 50%	Severe Reduction; See Table 8-2.	• Previous water conservation target has not been met; or, • Under definable events, demand reduction up to 50% is required in the current or upcoming years.
6	>50%	Critical Reduction; See Table 8-2.	• Previous water conservation target has not been met; or, • Under definable events, a critical demand reduction greater than 50% is required in the current or upcoming years.

4.0 SHORTAGE RESPONSE ACTIONS AND EFFECTIVENESS

CWC §10632 (a)(4) requires shortage response actions that align with the defined shortage levels. DSRSD's shortage response actions consist of a combination of demand reduction, supply augmentation, and operational changes. The specific suite of response actions implemented 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 DSRSD's water system infrastructure. In general, DSRSD 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.

The shortage response actions discussed below may be considered as tools that allow DSRSD to respond to water shortage conditions. During the previous drought, DSRSD implemented shortage response actions in concert with each other. DSRSD monitored system-wide water use as described in Section 9, and continuously monitored and adjusted its suite of response actions to reasonably equate demands with available supply.

Because DSRSD has implemented shortage response actions in concert with each other and made continuous adjustments, 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

During water shortage conditions, DSRSD plans to reduce demand by implementing the actions shown in Table 4. The District may request voluntary conservation when minimal water use reductions are needed such as in the lower water shortage levels. 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 DSRSD 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. DSRSD will continue to use these actions in higher stages unless otherwise noted.

Table 4. Water Shortage Contingency Plan Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only***
1	Expand Public Information Campaign	Boosts the effectiveness of other methods; varies based on outreach intensity - not readily quantifiable	Continue and expand the current public notification on conservation, and escalate notification as shortage level moves up to next level	No
1	Other - Require automatic shut off hoses	Varies based on activity - not readily quantifiable.	DSRSD distributes hose shut off valves to customers on request or during events	No
1	Landscape - Restrict or prohibit runoff from landscape irrigation	Varies based on landscape area and duration of activity - not readily quantifiable.	Monitor large user usages through AMI meter data, bi-monthly usage comparison are provided to customers in the bill	No
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Boosts the effectiveness of AMI system - not readily quantifiable	Continue and expand notification to customers of potential leaks obtained from AMI analytics	No
1	Implement or Modify Drought Rate Structure or Surcharge	Boosts the effectiveness of other methods - not readily quantifiable	Under normal water supply condition and in shortage Stage 1 - voluntary condition, the then-current water rate structure remains in place. The Drought Rate Structure will be applied when DSRSD Board declares a mandatory water shortage emergency at Stage 1.	Yes
1	Provide Rebates on Plumbing Fixtures and Devices	Up to 9,000 gal/year/participating household depending on the number and type of fixtures being replaced	DSRSD distributes low-flow fixtures to customers.	No
2	CII - Lodging establishment must offer opt out of linen service	250-500 gal/day/hotel	Provide conservation message stickers for bathroom mirrors	No
2	CII - Restaurants may only serve water upon request	50 gal/day/commercial connection	Provide table tents with water conservation message	No
2	CII - Commercial kitchens required to use pre-rinse spray valves	50 gal/day/restaurant		No
2	Decrease Line Flushing	Depends on extent and frequency of current flushing activities	Only perform line flushing for water quality and hydrant maintenance when it is required for health and safety needs	No
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	Watering is allowed only between 9 pm and 6 am	Yes
2	Landscape - Limit landscape irrigation to specific days	Every third day - 22% reduction; twice a week - 33% reduction; once a week - 56% reduction	Irrigation is limited to three, non-consecutive days per week	Yes

Table 4. Water Shortage Contingency Plan Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only***
2	Other - Prohibit use of potable water for construction and dust control	3,000 gal/acre/day for construction areas	Customers with the temporary potable water construction meter are required to replace meter with recycled water construction meter	Yes
2	Other - Prohibit use of potable water for washing hard surfaces	Varies based on surface area - not readily quantifiable	Except for building exteriors and fences for the sole purpose of repainting or making repairs. Pressurized washer is required to be equipped with a quick action shutoff nozzle. Windows may be cleaned using a bucket.	No
3	Provide Rebates on Plumbing Fixtures and Devices	Up to 9,000 gal/year/participating household depending on the number and type of fixtures being replaced	DSRSD provides additional funding to Zone 7 rebate program fund for High Efficiency Clothes Washer	No
3	Provide Rebates for Landscape Irrigation Efficiency	Not quantifiable. Depends on the number of participants and fixtures replaced.	DSRSD provides additional funding to Zone 7 rebate program funds for Weather-Based Irrigation Controllers	No
3	Provide Rebates for Turf Replacement	Up to 45 gallons/year per square foot of lawn replaced	DSRSD provides additional funding to Zone 7 Water-Efficient Lawn Conversion rebate fund for turf replacement	No
3	Increase Water Waste Patrols	Boosts the effectiveness of other methods - not readily quantifiable	Utilize analytics on AMI meter system to identify water waste	Yes
3	Offer Water Use Surveys	Boosts the effectiveness of other methods - not readily quantifiable	Residential Water Survey Program; Large Landscape Audit Support Services Program	No
3	Landscape - Limit landscape irrigation to specific days	Every third day - 22% reduction; twice a week - 33% reduction; once a week - 56% reduction	Irrigation is limited to two, non-consecutive days per week	Yes
4	Pools and Spas - Require covers for pools and spas	Evapotranspiration of approximate surface area of pools	DSRSD provides rebates fund for pool cover	No
4	Pools - Allow filling of swimming pools only when an appropriate cover is in place.	Evapotranspiration of approximate surface area of pools		No
4	Other water feature or swimming pool restriction	Evapotranspiration of approximate water surface area	Must be equipped with a recirculating pump; Allow drain and refill of pools and spas only for health or structural needs; Prohibit initial filling	No

Table 4. Water Shortage Contingency Plan Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only***
4	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	100-200 gal/year/residential connection	Vehicles may be washed at a residence home using a hose equipped with a shutoff nozzle. At a dealership or other commercial facility, vehicles may be washed using buckets or a self-contained washing system that not directly connected to a potable water supply.	No
5	Water Features - Restrict water use for decorative water features, such as fountains	Evapotranspiration of approximate water surface area	Decorative water features must be equipped with a recirculating pump; Prohibit potable water use; Allow drain and refill only for health or structural needs	Yes
5	Moratorium or Net Zero Demand Increase on New Connections	No additional connections.		No
5	Landscape - Prohibit certain types of landscape irrigation	Boosts the effectiveness of other methods - not readily quantifiable	Prohibit spray irrigation for new developments or replacement projects; allow drip to save trees and non-turf plants	Yes
6	Landscape - Prohibit all landscape irrigation	30% to 60% of irrigation demands		Yes
NOTES: Katz, D. et al. 2015. Evaluating the Effectiveness of a Water Conservation Campaign: Combining experimental and field methods. Journal of Environmental Management 180: 335-343.				

The District may adopt mandatory prohibitions in addition to State prohibitions as needed should it find that its water shortage response actions are not closing the gap between anticipated supply and demands. Prohibitions may include further restrictions on days and hours of landscape irrigation and washing of vehicles or hard surfaces listed in Table 4.

DSRSD will monitor water production, demands, its customers water usage as necessary, 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 Supply Augmentation and Other Actions

Chapter 6 of DSRSD's 2020 UWMP describes DSRSD's normal supply portfolio, which includes purchased treated water from Zone 7 and local groundwater pumped by Zone 7 on behalf of DSRSD. Per its water supply contract with Zone 7, DSRSD has a groundwater pumping quota (GPQ) of 645 acre-feet per year (AFY).

Furthermore, DSRSD has emergency interties with Livermore, Pleasanton, and EBMUD. During short-term water shortage events, DSRSD may opt to activate those interties to augment its supplies.

Table 5 lists the supply augmentation actions and other actions that DSRSD may take during higher water shortage levels.

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

Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier	How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*
All Level	Expand Public Information Campaign	Action boost other measures; not quantifiable.	Continue and expand the current public notification on conservation, and escalate notification as shortage level moves up to next level
All Level	Other Actions (describe)	Depends on extent and frequency of current flushing activities; not quantifiable.	DSRSD performs line flushing only in critical areas of the distribution system to meet water quality requirements
5	New Recycled Water	Up to contractural amount	Pump groundwater from Fringe Basin and deliver to wastewater treatment plant to be treated for recycled water. Obtaining new recycled water will require new agreement.
5	Transfers	Up to contractual amount	City of Pleasanton Interties
5	Transfers	Up to contractual amount	City of Livermore Interties
5	Transfers	Up to contractual amount	EBMUD Interties

4.3 Operational Changes

DSRSD can make several operational changes to address water shortages. Operational changes may include the following:

- Limit its line flushing only in critical areas of the distribution system to address water quality issues
- Require users to use recycled water in lieu of potable water for short-term non-potable water use, such as construction use

4.4 Emergency Response Plan

As stated in Section 3, DSRSD's water shortage stages (Table 3) apply to both foreseeable and unforeseeable water supply shortage conditions. The latter includes catastrophic water shortage conditions, which are addressed in DSRSD's Water Emergency Response Plan (Water ERP). Currently being revised in 2021, the Water ERP outlines preparation, response, and recovery procedures associated with unforeseeable incidents such as water supply contamination, earthquake, infrastructure failure, and other events.

Per DSRSD Policy No. P300-20-3, under emergency conditions in which immediate actions must be taken to protect lives and property, respond to emergencies, and to restore essential services for public health and safety, DSRSD's designated Emergency Manager (General Manager or designee) may proclaim a State of Emergency and activate the DSRSD ERP. The ERP includes action plans that are to be used in response to such events and incidents.

DSRSD will also follow the lead of Zone 7, or the State of California, during a major catastrophe or drought period. When Zone 7 announces a curtailment in water deliveries, DSRSD will assess the impact on its water supplies and determine its water shortage level. DSRSD will monitor the situation closely, both from a supply and demand perspective, and carefully select the appropriate shortage response actions to close

the gap between anticipated supplies and demand. DSRSD will move from one stage to the next if the situation worsens and reduce restrictions when it subsides. To provide supplies during an emergency, DSRSD has two interties with EBMUD, one intertie with Livermore, and two interties with Pleasanton. DSRSD maintains backup power generators to provide power to critical facilities in the event of area-wide electrical power failure.

DSRSD has mutual aid agreements with Central Contra Costa Sanitary District, County of Alameda, East Bay Municipal Utility District, City of Livermore, City of Pleasanton, and Zone 7. After exhausting its own resources, DSRSD can call on these neighboring agencies for aid. DSRSD 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, DSRSD 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 DSRSD staff are provided cell phones and email accounts to communicate internally and externally.

5.1 Communication for Foreseeable Events

Water shortage may be foreseeable when DSRSD reviews Zone 7's Annual Sustainability Report and prepares its AWSDA, as described in Section 2.0. When DSRSD determines the potential of a water shortage event, DSRSD Board may proclaim a water shortage emergency. For imminent events, DSRSD General Manager may proclaim a water shortage emergency.

If a water shortage emergency is anticipated, DSRSD staff will coordinate interdepartmentally, with the region's water service providers, and with Alameda County and Contra Costa County, for the possible proclamation of a local emergency.

In a duly noticed meeting, DSRSD Board will receive presentation of the current or predicted shortage as determined by the AWSDA. DSRSD Board will determine if a water shortage emergency condition exists and the degree of the emergency, while considering the shortage response actions triggered or anticipated to be triggered by the shortage level. As necessary, DSRSD Board will act on the water shortage emergency declaration, associated water shortage stage, and shortage response actions.

If DSRSD Board proclaims a water shortage emergency, the Public Information Officer (PIO) and DSRSD staff will coordinate to communicate with its customers and the public to inform them about the declared water shortage emergency, water shortage level, and authorized water use restrictions. DSRSD may use bill stuffers or newsletters, social media (such as FaceBook, Twitter, NextDoor, Instagram), its website, and press releases.

If needed, DSRSD staff will communicate with the appropriate State agencies regarding the water shortage emergency.

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. DSRSD's ERP provides specific communication protocols and procedures to convey water shortage response actions during these events. DSRSD 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 Emergency Manager, with external communications managed by the PIO. The Water ERP provides a list of relevant contacts to notify at the local, regional, and state level.

The PIO is the official spokesperson for DSRSD and is responsible for establishing an information center and providing information for news media. In addition, the PIO maintains a list of contacts to disseminate information to the public, typically via social media, its website, radio, television, or newspapers.

6.0 COMPLIANCE AND ENFORCEMENT

Section 10632(a)(6) of the California Water Code requires a water supplier to penalize or charge for excessive water use, where applicable. District Code Title 1, Chapter 1.30, which provides general penalties, remedies for violations, penalties of increasing severity, and imposition of costs. DSRSD's schedule of penalty fees are available on its website at www.dsrsd.com/your-account/rates-fees/miscellaneous-fees, under Administrative Fees. Violations may be punishable as misdemeanors or infractions, depending on the severity of the violation. The DSRSD General Manager is authorized to apply penalties as he or she deems appropriate, including flow restriction, submetering, and discontinuance of water service, until the violation is corrected. DSRSD may also seek damage and/or remedies, including fees or fines and the amount of costs incurred by DSRSD to investigate and correct the violation.

When mandatory water use reduction is declared at any of the above stages, DSRSD Board may adopt a progressive schedule of penalties and fines to be levied against customers and users for successive violations of mandatory water use restrictions established in Stages 2 and greater. Additionally, DSRSD may authorize the addition of drought rate surcharges to encourage compliance.

DSRSD's may use its Advanced Metering Infrastructure (AMI) system to identify customers who are not in compliance with water use restrictions. AMI water meters record customer water consumption, including volume and time of use. Using this system, DSRSD can periodically query AMI records and identify customers who may be violating restrictions—for example, customers who are irrigating outside of allowed day and time, customers who may have unrepaired leaks, and customers who are using excessive water. Water use may be compared to a previous period's water use to determine the extent of violation. DSRSD may also receive reports of violations from the general public, which may be field investigated or researched through AMI records.

DSRSD issues notice of violations letters to users who are out of compliance. The notices require compliance within 30 days of letter issuance. If violations continue, DSRSD may take progressive steps in obtaining compliance, including the issuance of fines and penalties as adopted by the DSRSD Board, or as allowed by DSRSD Code.

District Code Section 1.80.050 provides appeal procedures. Within 10 days of issuance of a notice of violation, the user, also known as the appellant, may appeal a determination of violation to the General Manager by filing a written notice of appeal and specifying the grounds of the appeal. The General Manager, or designee, will respond with a written notice of the time and date the appeal will be considered. The General Manager, or designee, will act on the appeal after reviewing records of determination and provide notice to the appellant.

The appellant may appeal the General Manager's decision, by filing a notice of appeal and specifying the grounds of the appeal with DSRSD Secretary withing 10 days of issuance of the notice of determination from the General Manager, or designee. DSRSD Secretary will provide a written notice to the appellant of the time and date of the Board meeting at which the appeal will be considered. The Board will act on the appeal after reviewing records of determination and provide notice to the appellant.

7.0 LEGAL AUTHORITIES

The rules and regulations of DSRSD are codified under the authority of Article 2 of Chapter 1 of Division 1 of Title 5 of the of California Government Code. DSRSD Code is available on its website: www.dsrsd.com/about-us/district-code.

District Code Section 4.10.030(C) defines the regulations for water use during any type of water shortage. This provision authorizes DSRSD General Manager to prescribe and enforce rules governing water allocation and use of water. It also provides DSRSD General Manager with guidelines for allocating water supply during shortages. At the time of preparation of this WSCP, DSRSD is updating the provisions of this section to incorporate changes in presented herein.

District Code Chapter 1.30, provides general penalties, remedies for violations, penalties of increasing severity, and imposition of costs.

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

District Code Section 4.10.030(C)(2) authorizes the General Manager to declare a water emergency under imminent water shortage. As soon as practical, the General Manager will notify the Board. In a duly noticed meeting, DSRSD 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. DSRSD Board 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

This section describes the financial impacts of implementing the WSCP and mitigation actions needed to address these impacts. During periods of water shortage and reduced customer consumption, revenue is expected to decrease due to decreased demand for water. Some expenditures are also expected to decrease due to the decreased demand for water; however, implementing water conservation measures is anticipated to increase expenditures (e.g., for customer service activities and additional funding for rebate programs). To compensate for lost revenue and possible increase in expenditures, DSRSD may need to use water shortage surcharges and financial reserves to maintain fiscal health. These two components are discussed below.

8.1 Drought Rate Structures and Surcharges

Current water rates are available on DSRSD's website: https://www.dsrsd.com/your-account/rates-fees/water-rates. The drought rate surcharges are added to the water rates in place at the time a shortage stage is declared. While drought rate surcharges vary by water shortage stage, declaration of a stage does not automatically activate the surcharge. DSRSD Board will determine when a surcharge is necessary.

At the time of preparation of this WSCP, DSRSD is reviewing its drought surcharges for alignment with updated water shortage stages.

8.2 Use of Financial Reserves

Under an emergency proclamation by the General Manager in accordance to DSRSD Board Emergency Response Plan Policy, the Purchasing Agent and designees may let contracts for any amount without giving notice for bids for repair or replacement of a public facility, take any directly related and immediate action required by that emergency and procure the necessary equipment, services, and supplies for those purposes in accordance with the provisions of 22050 of the California Public Contract Code.

Any emergency action taken by the Purchasing Agent or designees will be reviewed by DSRSD Board at its next regular scheduled meeting but in no event later than 14 days after the action.

9.0 MONITORING AND REPORTING

DSRSD's water system is fully metered and monitored with a supervisory control and data acquisition (SCADA) system. All connections to DSRSD's water system are metered under the AMI system. More than 67 percent of DSRSD's water customers subscribe to AquaHawk, where they can monitor their real-time use and adjust accordingly. Aquahawk sends notifications through text or email to registered customers when high consumption alerts are triggered and sends notices through mail to non-registered customers. DSRSD continuously works with its customers to address abnormal water use patterns, which usually indicates leaks or broken valves.

Water use data from customer meters will be critical for monitoring customer compliance. AMI data can be used to track the effectiveness of DSRSD's response actions. DSRSD can use meters to compare current water demands with demand reduction goals. This real-time information will allow DSRSD to quickly

adjust public outreach, enforcement, and other water shortage response actions as needed to meet available supplies. For example, DSRSD may intensify its public outreach or more vigorously enforce compliance to water use prohibitions if a shortage stage's water demand reduction goals are not met.

DSRSD can use both SCADA systemwide metering and AMI metering data together to meet State reporting requirements in the future.

10.0 WSCP REFINEMENT PROCEDURES

This WSCP is an adaptive management plan. It is subject to refinements as needed to ensure that DSRSD'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, DSRSD may adjust its response actions and modify its WSCP. DSRSD will also seek input from staff 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 DSRSD Board and distribution to Alameda County, Contra Costa County, Zone 7, and the general public.

11.0 SPECIAL WATER FEATURE DISTINCTION

DSRSD distinguishes special water features, such as decorative fountains and ponds, from pools and spas. Special water features are regulated separately.

12.0 PLAN ADOPTION, SUBMITTAL, AND AVAILABILITY

This WSCP is adopted concurrently with DSRSD'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 the Office of DSRSD Secretary, the Dublin Library in Dublin, and the Dougherty Station Library in San Ramon. A copy will also be provided to Alameda County, Contra Costa County and Zone 7. An electronic copy of this WSCP will also be available for public review and download on DSRSD's website.