CHAPTER 8

WATER SHORTAGE CONTINGENCY PLAN

LAY DESCRIPTION – CHAPTER 8

WATER SHORTAGE CONTINGENCY PLAN

Chapter 8 (Water Shortage Contingency Plan) of the District's 2020 Plan discusses and provides the following:

- The District's Water Shortage Contingency Plan is a detailed approach which presents how the District intends to act, or respond, in the case of an actual water shortage contingency.
- Preparation of the District's "Annual Water Supply and Demand Assessment" (or Annual Assessment) is discussed. Commencing July 1, 2022, the District is required to submit the Annual Assessment. The Annual Assessment will include a review of the District's "unconstrained" water demands for the current year and for a potential upcoming single dry year. Unconstrained water demands represent the District's water demands prior to any "response actions" the District may invoke pursuant to the District's Water Shortage Contingency Plan.
- The District will manage water supplies to minimize the adverse impacts of water shortages. The District's plan for water usage during periods of shortage is designed to incorporate six standard water shortage levels corresponding to progressive ranges from up to a 10, 20, 30, 40, and 50 percent shortage, and greater than a 50 percent shortage.
- For each declared water supply shortage level, customers will be required to reduce their consumption by the percentage specified in the corresponding water supply shortage level.

- For each declared water supply shortage level, the District has established response actions to reduce demand on water supplies and to reduce any shortage gaps in water supplies. These demand reduction actions include irrigation and other outdoor use restrictions, rate structure changes, and other water use prohibitions.
- The operational changes the District will consider in addressing water shortages on a short-term basis are discussed and include improved monitoring, analysis, and tracking of customer water usage to enforce demand reduction measures.
- The District's Emergency Response Plan is summarized. The Emergency Response Plan provides the management, procedures, and designated actions the District and its employees will implement during emergency situations (including catastrophic water shortages) resulting from natural disasters, system failures, and other unforeseen circumstances.
- The preparation of the District's seismic risk assessment and mitigation plan is discussed. The locations of earthquake faults in the vicinity of the District's water service area are provided.
- The effectiveness of the shortage response actions for each of the District's standard water shortage levels is presented. The District has been able to provide sufficient water supplies to its customers, including during long-term droughts and years with historically high water demands.
- The communication protocols implemented by the District when it declares any water shortage level are presented.
- The compliance and enforcement procedures associated with District's standard water shortage levels are presented.
- The legal authorities associated with District's standard water shortage levels are presented.
- The financial consequences associated with District's standard water shortage levels are presented.

- The District will evaluate the need for revising the Water Shortage Contingency Plan in order to resolve any water shortage gaps, as necessary. The steps necessary for the District to adopt and amend its Water Shortage Contingency Plan are presented.

The following Water Shortage Contingency Plan includes references to Chapters and Sections from the Walnut Valley Water District's 2020 Urban Water Management Plan:

8.1 WATER SUPPLY RELIABILITY ANALYSIS

CWC 10632.

(a)(1) The analysis of water supply reliability conducted pursuant to Section 10635.

The District's sources of supply were discussed in Section 6.2 of the 2020 UWMP and consist of groundwater from Main Basin (through CDWC), Puente Basin, Spadra Basin, and treated imported water purchased from TVMWD. In addition, the District provides recycled water for irrigation instead of potable supplies. Both Main Basin and Puente Basin are adjudicated, and groundwater supplies are managed. A GSP is being developed for Spadra Basin. The reliability of the various sources of supply are discussed in Chapter 7 of the 2020 UWMP. Based on the adjudication provisions in the Main Basin, the District is able to purchase groundwater, provided an applicable assessment is paid to the Main Basin Watermaster to purchase untreated imported water for groundwater replenishment. Imported water supplies (both treated and untreated) may be impacted in the event MWD implements its WSAP due to a water supply shortage. Finally, recycled water is locally generated and generally is not impacted by drought conditions.

8.2 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

CWC 10632.

(a)(2) The procedures used in conducting an annual water supply and demand assessment that include, at a minimum, both of the following:

(A) The written decision-making process that an urban water supplier will use each year to determine its water supply reliability.

(B) The key data inputs and assessment methodology used to evaluate the urban water supplier's water supply reliability for the current year and one dry year, including all of the following:

(i) Current year unconstrained demand, considering weather, growth, and other influencing factors, such as policies to manage current supplies to meet demand objectives in future years, as applicable.

(ii) Current year available supply, considering hydrological and regulatory conditions in the current year and one dry year. The annual supply and demand assessment may consider more than one dry year solely at the discretion of the urban water supplier.

(iii) Existing infrastructure capabilities and plausible constraints.

(iv) A defined set of locally applicable evaluation criteria that are consistently relied upon for each annual water supply and demand assessment.

(v) A description and quantification of each source of water supply.

CWC 10632.1.

An urban water supplier shall conduct an annual water supply and demand assessment pursuant to subdivision (a) of Section 10632 and, on or before July 1 of each year, submit an annual water shortage assessment report to the department with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the supplier's water shortage contingency plan. An urban water supplier that relies on imported water from the State Water Project or the Bureau of Reclamation shall submit its annual water supply and demand assessment within 14 days of receiving its final allocations, or by July 1 of each year, whichever is later.

Commencing July 1, 2022, the District is required to submit an "Annual Water Supply and Demand Assessment" (Annual Assessment) in accordance with DWR's guidance and requirements. The Annual Assessment will include a review of the District's unconstrained

water demands (i.e. water demands prior to any projected response actions the District may trigger under this Water Shortage Contingency Plan) for the current year and the upcoming (potential single dry) year. The District will also include information regarding anticipated shortages, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the District's Water Shortage Contingency Plan.

For each Annual Assessment, the District plans to prepare a preliminary assessment which evaluates the adequacy of its water supplies for the current and upcoming years by April of each year. The preliminary assessment will include a review of water supplies for at least a single dry year.

The components of Annual Assessment consist of the following:

- A written decision-making process
- Key data inputs and assessment methodology

8.2.1 DECISION MAKING PROCESS

The District purchases treated, imported water from the Metropolitan Water District of Southern California through Three Valleys Municipal Water District as its primary source of water supply and that source is managed on a fiscal year basis. Consequently, during the third quarter of each fiscal year the District will review its water demands from the initial six months. This information will be used to help develop the Annual Assessment. A draft of the Annual Assessment will be circulated internally within the District for peer review and comment. Based on comments received, a redraft will be prepared and provided to District managers during the Spring of each year. The draft subsequently will be provided to the General Manager for final review. Subsequently, a final draft of the Annual Assessment will be provided to the District's Board of Directors for review and

included in the agenda as part of a Board meeting such that it can be approved and any recommended specific shortage response actions may be enacted. The final Annual Assessment will be provided to DWR no later than July 1 of each year.

The Annual Assessments will be instrumental in providing guidance to the District for decisions regarding potential declarations of a water supply shortage and implementation of water reduction stages, instituting mandatory water restrictions, promoting water use efficiency and conservation programs, water rates and drought rate surcharges, and the necessity of pursuing alternative water supplies. This process will help ensure adequate water supplies resources are available to the District.

8.2.2 DATA AND METHODOLOGIES

The key data inputs and methodologies which will be evaluated by the District during the preparation of the preliminary assessment will include the following:

1) Evaluation Criteria: The locally applicable evaluation criteria used to prepare the Annual Assessment will be identified. The evaluation criteria will include, but is not limited to, an analysis of current local hydrology (including rainfall and groundwater levels), current water demands, a review of water system improvement plans which may impact infrastructure availability, and water quality regulations which may impact groundwater availability.

2) Water Supply: A description of each available water supply source will be provided. The descriptions will include a quantification of each available water supply source and will be based on review of current production capacities, historical production, Urban Water Management Plans, and prior water supply studies (including Water Supply Assessments and/or Master Plans).

3) Unconstrained Water Demand: The potential unconstrained water demands during the current year and the upcoming (potential single dry) year, prior to any special shortage response actions, will be reviewed. The review will include factors such as weather, existing and projected land uses and populations, actual customer consumption and water use factors, monthly Urban Water Supplier Monthly Reports, existing water shortage levels (see Section 8.3), and existing water conservation ordinances (see Section 9.2.1).

4) Planned Water Use for Current Year Considering Dry Subsequent Year: The water supplies available to meet the demands during the current year and the upcoming (potential single dry) year will be considered and identified for each source of supply. The evaluation will include factors such as estimated water demands, weather, groundwater basin operating safe yields, water quality results, existing available pumping capacities, imported water allocations, contractual obligations, regulatory issues, use of emergency interconnections, and the costs associated with producing each water supply source.

5) Infrastructure Considerations: The capabilities of the water distribution system infrastructure to meet the water demands during the current year and the upcoming (potential single dry) year will be considered. Available production capacities (e.g. groundwater well capacities) and distribution system water losses (see Section 4.2.4) will be reviewed. In addition, capital improvement and replacement projects, as well as potential projects which may increase water system and production capacities (see Section 6.2.8), will be considered.

6) Other Factors: Additional local considerations, if any, which can affect the availability of water supplies will be described.

8.3 SIX STANDARD WATER SHORTAGE LEVELS

CWC 10632.

(a)(3)(A) Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50 percent shortages and greater than 50 percent shortage. Urban water suppliers shall define these shortage levels based on the suppliers' water supply conditions, including percentage reductions in water supply, changes in groundwater levels, changes in surface elevation or level of subsidence, or other changes in hydrological or other local conditions indicative of the water supply available for use. Shortage levels shall also apply to catastrophic interruption of water supplies, including, but not limited to, a regional power outage, an earthquake, and other potential emergency events.

(a)(3)(B) An urban water supplier with an existing water shortage contingency plan that uses different water shortage levels may comply with the requirement in subparagraph (A) by developing and indicating a cross-reference relating its existing categories to the six standard water shortage levels.

The District has a legal responsibility to provide water utility services, including water for residential, commercial, industrial, public authority, and for public fire hydrants and private fire services. The District will manage water supplies prudently to minimize the adverse impacts of water shortages. In its 2015 Plan, the District's WSCP was designed to provide a minimum of 50 percent of normal supply during a severe or extended water shortage. For its 2020 Plan, the District's WSCP is designed to provide water supplies in the event there is less than 50 percent of normal supply during a severe or extended water shortage. Water shortage trigger mechanisms have been established to ensure that this policy is implemented. This includes structured stages of action referred to as water shortage planning levels.

Table 8-1 provides a description of the six standard stages of action which may be triggered by a shortage in one or more of the District's water supply sources, depending on the severity of the shortage and its anticipated duration.

Table 8-1 Water Shortage Contingency Planning Levels

Submittal Table 8-1 Water Shortage Contingency Plan Levels		
Shortage Level	**Percent Shortage Range**	**Shortage Response Actions** (*Narrative description*)
1	Up to 10%	Watering or irrigating of lawn, landscape, or other vegetated area with potable water will be limited to a maximum number of days per week, to be determined by the District's Board of Directors, or as modified by the General Manager, based on the District's then existing water supply conditions. All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within five days after written notification by the District unless other arrangements are made by the District.
2	Up to 20%	In additon to Shortage Level 1, re-filling of water constituting more than one foot of depth and initial filling of residential swimming pools or outdoor spas with potable water is prohibited.
3	Up to 30%	In additon to Shortage Level 2, filling or re-filling ornamental lakes or ponds is prohibited, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to declaration of a supply shortage level under Ordinance No. 07-16-09.
4	Up to 40%	In addition to Shortage Level 3, watering or irrigating of lawn, landscape, or other vegetated area with potable water will be limited to a maximum of two days per week on a schedule established and posted by the District.
5	Up to 50%	In addition to Shortage Level 4, watering or irrigating of lawn, landscape, or other vegetated area with potable water is limited to a maximum of one day per week on a schedule established and posted by the District.
6	>50%	In addition to Shortage Level 5; Additional restrictions may be implemented as determined by the District, after notice to customers.
NOTES:		

The 2020 Plan requires urban water suppliers to have six standardized water shortage response actions in accordance with the DWR. The District's previous WSCP, originally included in its 2015 Plan as Ordinance No. 07-16-09 (see Appendix L), described a permanent Initial Stage followed by four water shortage levels that would be mandatory once put into effect. The Initial Stage accounted for less than 10 percent reduction, Stage 1 accounted for 10 percent to 15 percent reduction, Stage 2 accounted for 15 percent to 25 percent reduction, Stage 3 accounted for 25 percent to 35 percent reduction, and Stage 4 accounted for 35 percent to 50 percent reduction.

For its 2020 Plan, the District will continue to incorporate the permanent Initial Stage at all times. The District's existing Stage 1 and Stage 2 will be used to address a DWR water supply shortage Stage 1 and 2 of up to 10 percent and 20 percent, respectively. The District's existing Stage 3 will be used to address a DWR Stage 3 and Stage 4, which will address a water supply shortage of up to 30 percent and 40 percent, respectively. The District's existing Stage 4 will be used to address a DWR Stage 5 and Stage 6. The District's planned Stage 5 will be used to address a water supply shortage of up to 50 percent. The planned Stage 6 will address a water supply shortage of more than 50 percent.

A crosswalk of the existing (prior) and planned stages of action are shown on the figure below.

Corresponding Relationships Between Supplier's 2015 Shortage levels and the 2020 WSCP Mandated Shortage Levels

Established Level	Supply Condition/ Shortage
1	10 to 15%
2	15 to 25%
3	25 to 35%
4	35 to 50%

2020 Standard Level	Shortage Level
1	≤10%
2	10 to 20%
3	20 to 30%
4	30 to 40%
5	40 to 50%
6	> 50%

8.4 SHORTAGE RESPONSE ACTIONS

CWC 10632.

(a)(4) Shortage response actions that align with the defined shortage levels and include, at a minimum, all of the following:

(A) Locally appropriate supply augmentation actions.

(B) Locally appropriate demand reduction actions to adequately respond to shortages.

(C) Locally appropriate operational changes.

(D) Additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions.

(E) For each action, an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.

8.4.1 DEMAND REDUCTION

As a part of the District's ongoing commitment to consistent water use efficiency, the following water use efficiency requirements are effective at all times and are permanent requirements set forth by the District's Rules and Regulations, Section 4.07.01. Violations of this initial stage will be considered waste and an authorized use of water, which will result in penalties outlined in Section 12 of Ordinance No. 07-16-09.

1) Limit on Water Duration: Watering or irrigating of lawn, landscape, or other vegetated area with potable water using a landscape irrigation system or a watering device that is not continuously attended is limited to no more than 15 minutes watering per day per station. This does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than two gallons of water per hour and water based controllers or stream rotor sprinkles that meet 70 percent efficiency standard.

2) Limits on Watering Hours: Watering or irrigation of lawn, landscape, or other vegetated area with potable water is prohibited between the hours of 8:00 a.m. and 5:00 p.m. on any day, except by use of a hand-held bucket or similar container, a hand-held house equipped with a positive self-closing water shut-off nozzle or device, or for short periods of time for the express purpose of adjusting or repairing an irrigation system.
3) Limits on Watering Following Precipitation/Rainfall: Watering or irrigating of lawn, landscape, or other vegetated area with potable water within 48 hours following measurable precipitation is prohibited.
4) No Excessive Water Flow or Runoff: Watering or irrigating of any lawn, landscape, or other vegetated area in a manner that causes or allows excessive water flow or runoff onto an adjoining sidewalk, driveway, street, alley, gutter, or ditch is prohibited.
5) No Washing Down Hard or Paved Surfaces: Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios, or alleys, is prohibited except when necessary to alleviate safety or sanitary hazards, and then only by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off device, a low-volume, high-pressure cleaning machine equipped to recycle any water used, or a low-volume, high-pressure water broom.
6) Obligation to Fix Leaks, Breaks, or Malfunctions: Excessive use, loss, or escape of water through breaks, leaks, or other malfunctions in the water user's plumbing or distribution system for any period of time after such escape of water should have reasonably been discovered and corrected and in no event more than seven days after receiving written notice from the District is prohibited.
7) Limits on Washing Vehicles: Using water to wash or clean a vehicle, including but not limited to any automobile, truck, van, bus, motorcycle, boat, or trailer, whether motorized or not, is prohibited, except by use of a hand-held bucket or similar container or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device. This does not apply to any commercial car washing facility.

8) Re-circulating Water Required for Water Fountains and Decorative Water Features: Operating a water fountain or other decorative water feature that does not use re-circulated water is prohibited.
9) No Installation of Single Pass Cooling Systems Water System: Installation of single pass cooling systems is prohibited in buildings requesting new water service.
10) No Installation of Non-re-circulating in Commercial Car Wash and Laundry Systems: Installation of non-re-circulating water systems is prohibited in new commercial conveyor car wash and new commercial laundry systems.
11) No Irrigating Ornamental Turf on Public Street Medians: Irrigating ornamental turf on Public Street Medians with potable water is prohibited.
12) Negligent Waste of Water: At the discretion of the General Manager, the District reserves the right to determine negligent waste or misuse of water supplies. Such water use constitutes an unauthorized waste of water and is subject to the imposition penalties outlined in Section 12 of Ordinance No. 07-16-09.

Stage 1 Water Supply Shortage Level (Up to 10%)

A Stage 1 Water Supply Shortage exists when the District, through its Board of Directors, determines that due to drought, a water supply shortage or a threatened water shortage exists, and customer allocations are necessary to make more efficient use of water and appropriately respond to existing water conditions and a reduction of water use of up to 10 percent will be required to lower overall water demand.

In addition to the prohibited uses of water identified above, the following water conservation requirements apply during a declared Stage 1 Water Supply Shortage:

1) Limits on Watering Days: Watering or irrigating of lawn, landscape, or other vegetated area with potable water will be limited to a maximum number of days per week, to be determined by the District's Board of Directors, or as modified by the General Manager, based on the District's then existing water supply conditions. The irrigation day limitation and schedule will be as posted by the District. This

does not apply to landscape irrigation zones that exclusively use very low-flow drip type irrigation systems when no emitter produces more than two gallons of water per hour. This also does not apply to watering or irrigating by use if a hand-held bucket or similar container, or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system. The District reserves the right to amend the watering day limits within each prescribed stage as determined by conservation necessity.

2) Obligation to Fix Leaks, Breaks, or Malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within five days after written notification by the District unless other arrangements are made by the District.

Stage 2 Water Supply Shortage Level (Up to 20%)

A Stage 2 Water Supply Shortage exists when the District, through its Board of Directors, determines that due to drought, a water supply shortage or a threatened water shortage exists, and customer allocations are necessary to make more efficient use of water and appropriately respond to existing water conditions and a reduction of water use of up to 20 percent will be required to lower overall water demand.

In addition to the prohibited uses of water identified above, the following water conservation requirements apply during a declared Stage 2 Water Supply Shortage:

3) Limits on Watering Days: Watering or irrigating of lawn, landscape, or other vegetated area with potable water will be limited to a maximum of three days per week on a schedule established and posted by the District. This does not apply to landscape irrigation zones that exclusively use very low-flow drip type irrigation systems when no emitter produces more than two gallons of water per hour. This also does not apply to watering or irrigating by use if a hand-held bucket or similar container, or a hand-held hose equipped with a positive self-closing water shut-off

nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system. The District reserves the right to amend the watering day limits within each prescribed stage as determined by conservation necessity.

4) Obligation to Fix Leaks, Breaks, or Malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within 72 hours after written notification by the District unless other arrangements are made by the District.
5) Limits on Filling Residential Swimming Pools and Spas: Re-filling of water constituting more than one foot of depth and initial filling of residential swimming pools or outdoor spas with potable water is prohibited.

Stage 3 Water Supply Shortage Level (Up to 30%)

A Stage 3 Water Supply Shortage exists when the District, through its Board of Directors, determines that due to drought, a water supply shortage or a threatened water shortage exists, and customer allocations are necessary to make more efficient use of water and appropriately respond to existing water conditions and a reduction of water use of up to 30 percent will be required to lower overall water demand.

In addition to the prohibited uses of water identified above, the following water conservation requirements apply during a declared Stage 3 Water Supply Shortage:

1) Limits on Watering Days: Watering or irrigating of lawn, landscape, or other vegetated area with potable water will be limited to a maximum of two days per week on a schedule established and posted by the District. This does not apply to landscape irrigation zones that exclusively use very low-flow drip type irrigation systems when no emitter produces more than two gallons of water per hour. This also does not apply to watering or irrigating by use if a hand-held bucket or similar container, or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of

adjusting or repairing an irrigation system. The District reserves the right to amend the watering day limits within each prescribed stage as determined by conservation necessity.

2) Obligation to Fix Leaks, Breaks, or Malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within 48 hours after written notification by the District unless other arrangements are made by the District.
3) Limits on Filling Ornamental Lakes or Ponds: Filling or re-filling ornamental lakes or ponds is prohibited, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to declaration of a supply shortage level under Ordinance No. 07-16-09.

Stage 4 Water Supply Shortage Level (Up to 40%)

A Stage 4 Water Supply Shortage exists when the District, through its Board of Directors, determines that due to drought, a water supply shortage or a threatened water shortage exists, and customer allocations are necessary to make more efficient use of water and appropriately respond to existing water conditions and a reduction of water use of up to 40 percent will be required to lower overall water demand.

In addition to the prohibited uses of water identified above, the following water conservation requirements apply during a declared Stage 4 Water Supply Shortage:

1) Limits on Watering Days: Watering or irrigating of lawn, landscape, or other vegetated area with potable water will be limited to a maximum of two days per week on a schedule established and posted by the District. This does not apply to landscape irrigation zones that exclusively use very low-flow drip type irrigation systems when no emitter produces more than two gallons of water per hour. This also does not apply to watering or irrigating by use if a hand-held bucket or similar container, or a hand-held hose equipped with a positive self-closing water shut-off

nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system. The District reserves the right to amend the watering day limits within each prescribed stage as determined by conservation necessity.

2) Obligation to Fix Leaks, Breaks, or Malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within 48 hours after written notification by the District unless other arrangements are made by the District.
3) Limits on Filling Ornamental Lakes or Ponds: Filling or re-filling ornamental lakes or ponds is prohibited, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to declaration of a supply shortage level under Ordinance No. 07-16-09.

Stage 5 Water Supply Shortage Level (Up to 50%)

A Stage 5 Water Supply Shortage exists when the District, through its Board of Directors, determines that due to drought, a water supply shortage or a threatened water shortage exists, and customer allocations are necessary to make more efficient use of water and appropriately respond to existing water conditions and a reduction of water use of up to 50 percent will be required to lower overall water demand.

In addition to the prohibited uses of water identified above, the following water conservation requirements apply during a declared Stage 5 Water Supply Shortage:

1) Limits on Watering Days: Watering or irrigating of lawn, landscape, or other vegetated area with potable water is limited to a maximum of one day per week on a schedule established and posted by the District. This does not apply to landscape irrigation zones that exclusively use very low-flow drip type irrigation systems when no emitter produces more than two gallons of water per hour. This also does not apply to watering or irrigating by use if a hand-held bucket or similar

container, or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system. This restriction does not apply to the following categories of use:

i. Maintenance of vegetation, including trees and shrubs, that are watered using a hand-held bucket or similar container, hand-held hose equipped with a positive self-closing water shut-off nozzle or device
ii. Maintenance of existing landscape necessary for fire protection
iii. Maintenance of existing landscape for soil erosion control
iv. Maintenance of plant materials identified to be rare or essential to the well-being of protected species
v. Maintenance of landscape within active public parks and playing fields, daycare centers, golf course greens, and school grounds, provided that such irrigation does not exceed two days per week according to the schedule established in Section 6(8)(1) and time restrictions in Section 5(8)(1) of Ordinance No, 07-16-09
vi. Actively irrigated environmental mitigation projects

Stage 6 Water Supply Shortage Level (More than 50%)

Stage 6, also referred to as an “Emergency” condition, exists when the District, through its Board of Directors, declares a water shortage emergency and notifies its residents and businesses that more than 50 percent reduction of water use is necessary to maintain sufficient water supplies for public health and safety.

In addition to the prohibited uses of water identified above, the following water conservation requirements apply during a declared Stage 6 Water Supply Shortage:

1) Limits on Watering Days: Watering or irrigating of lawn, landscape, or other vegetated area with potable water is limited to a maximum of one day per week on a schedule established and posted by the District. This does not apply to

landscape irrigation zones that exclusively use very low-flow drip type irrigation systems when no emitter produces more than two gallons of water per hour. This also does not apply to watering or irrigating by use if a hand-held bucket or similar container, or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system. This restriction does not apply to the following categories of use:

i. Maintenance of vegetation, including trees and shrubs, that are watered using a hand-held bucket or similar container, hand-held hose equipped with a positive self-closing water shut-off nozzle or device
ii. Maintenance of existing landscape necessary for fire protection
iii. Maintenance of existing landscape for soil erosion control
iv. Maintenance of plant materials identified to be rare or essential to the well-being of protected species
v. Maintenance of landscape within active public parks and playing fields, daycare centers, golf course greens, and school grounds, provided that such irrigation does not exceed two days per week according to the schedule established in Section 6(8)(1) and time restrictions in Section 5(8)(1) of Ordinance No, 07-16-09
vi. Actively irrigated environmental mitigation projects

Table 8-2 Demand Reduction Actions

Submittal Table 8-2: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions ***Drop down list*** *These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.*	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*** *Drop Down List*
Add additional rows as needed				
1	Landscape - Limit landscape irrigation to specific times	Collective reduction from all Shortage Level 1 actions is up to 2,041 AF	Limits on watering hours	Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation	Collective reduction from all Shortage Level 1 actions is up to 2,041 AF	No excessive water flow or runoff	Yes
1	Other - Prohibit use of potable water for washing hard surfaces	Collective reduction from all Shortage Level 1 actions is up to 2,041 AF	No washing down of paved surfaces	Yes
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Collective reduction from all Shortage Level 1 actions is up to 2,041 AF	Obligation to fix leaks, breaks, or malfunctions	Yes
1	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	Collective reduction from all Shortage Level 1 actions is up to 2,041 AF	Limits on washing vehicles	Yes
1	Water Features - Restrict water use for decorative water features, such as fountains	Collective reduction from all Shortage Level 1 actions is up to 2,041 AF	Re-circulating water required for water fountains and decorative water features	Yes
1	Other	Collective reduction from all Shortage Level 1 actions is up to 2,041 AF	No Installation of single pass cooling systems water system in buidings requesting new water service	Yes
1	Other	Collective reduction from all Shortage Level 1 actions is up to 2,041 AF	Installation of non re-circulating water system is prohibited in new commercial conveyor car wash and new commercial laundry systems	Yes
1	CII - Restaurants may only serve water upon request	Collective reduction from all Shortage Level 1 actions is up to 2,041 AF	Drinking water served upon request only	Yes
1	CII - Lodging establishment must offer opt out of linen service	Collective reduction from all Shortage Level 1 actions is up to 2,041 AF	Option to decline daily linen services at commercial lodging establishments	Yes
2	Other	Collective reduction from all Shortage Level 2 actions is up to 4,082 AF	Includes all Stage 1 actions	Yes

2	Other water feature or swimming pool restriction	Collective reduction from all Shortage Level 2 actions is up to 4,082 AF	Re-filling of water constituting more than one foot of depth and initial filling of residential swimming pools or outdoor spas with potable water is prohibited	Yes
3	Other	Collective reduction from all Shortage Level 3 actions up to 6,124 AF	Includes all Stage 2 actions	Yes
3	Other water feature or swimming pool restriction	Collective reduction from all Shortage Level 3 actions up to 6,124 AF	Filling or refilling ornamental lakes or ponds is prohibited, except to the extent needed to sustain aquatic life	Yes
4	Other	Collective reduction from all Shortage Level 4 actions up to 8,165 AF	Includes all Stage 3 actions	Yes
5	Other	Collective reduction from all Shortage Level 5 actions up to 10,206 AF	Includes all Stage 4 actions	Yes
6	Other	Collective reduction from all Shortage Level 6 actions up to >10,206 AF	includes all Stage 5 actions	Yes
NOTES:				

8.4.2 SUPPLY AUGMENTATION

The District does not plan to add a new source of water supply to address customer demands, but instead will consider increased supplies from existing sources. Table 8-3 reflects this approach and does not identify any new supplies. Instead, the District will focus on demand reduction measures in the event existing sources of supply are not sufficient to meet customer demands. As discussed in Chapter 6, the District's water supply sources include treated, imported surface water purchased from MWD through Three Valleys Municipal Water District, recycled water supplies (from recycled water purchased from LACSD and from groundwater pumped from the Puente and Spadra Basin), and groundwater pumped from Main Basin (purchased through CDWC). As noted in Section 8.2, beginning July 1, 2022, the District will prepare and submit an Annual Assessment which will include a review of water supplies available to meet water demands for the current and upcoming years. In the event the District is currently in, or considers entering into, one of the standard water shortage levels identified in Section 8.3, the District will consider the water supply augmentation actions described below.

Groundwater rights from the Main Basin, Puente Basin and Spadra Basin are fixed and production cannot be increased. However, for each water shortage level discussed in Section 8.3, the District may consider augmenting its existing water supplies through purchase of additional groundwater which CDWC produces from the Main Basin. As noted in Section 6.2.2, the Main Basin is managed by the Main Basin Watermaster. During the period of management under the Main Basin Judgment, significant drought events have occurred. In each drought cycle the Main Basin has been managed to maintain water levels. Parties to the Main Basin Judgment, including CDWC, are authorized to produce groundwater in excess of their rights and pay assessments for such production to the Main Basin Watermaster. The assessments are used to purchase untreated imported water to replenish the Main Basin. The Main Basin Watermaster purchases untreated imported water to replenish the Main Basin from MWD through Three Valleys Municipal Water District. Groundwater quality is carefully monitored and managed by the Main Basin Watermaster. Treatment facilities and/or blend plans have been developed by water agencies to meet potable water standards and to prevent the spread of any groundwater contamination. Groundwater quality in the Main Basin is not expected to impact potable supplies or constrain supply reliability. Based on historical and on-going management practices, the District can rely on the Main Basin for adequate supplies in response to each of the standard water shortage levels identified in Section 8.3.

For each water shortage level discussed in Section 8.3, the District will consider supplementing its existing water supplies through increased groundwater production instead of the purchase of additional imported water supplies. Due to previous critically dry conditions, MWD developed the Water Supply Allocation Plan whereby available supplies are equitably allocated to its member agencies, including Three Valleys Municipal Water District. The WSAP establishes ten different shortage levels and a corresponding drought allocation to each member agency. Based on the shortage level established by MWD, the WSAP provides a reduced drought allocation to a member agency for its M&I retail demand. The ratio of MWD water supply drought allocation to

local water supply will change based on the WSAP stage. MWD drought allocation can be used to make Full Service water deliveries at the Tier 1 rate up to a Tier 1 allocation. Any Full Service water delivered in excess of a drought allocation is subject to a penalty rate in addition to the normal rate paid for the water.

In addition to the WSAP, MWD describes supply augmentation actions in its Regional 2020 UWMP, which is incorporated by reference. MWD's primary first response to any gap between core supplies (from the State Water Project and Colorado River) and demand is to make optimal use of its supply augmentation options, consisting of drawing from flexible supply programs and storage reserves. MWD has developed and actively manages a portfolio of water supply programs including water transfer, storage, and exchange agreements. MWD pursues voluntary water transfer and exchange programs to help mitigate supply/demand imbalances and provide additional dry-year supply sources. In addition, MWD has developed significant storage capacity in reservoirs, conjunctive use, and other groundwater storage programs totaling approximately 6.0 million AF. Pursuant to MWD's "Emergency Storage Objective", updated in 2019, approximately 750,000 AF of total stored water is emergency storage reserved by MWD for use in the event of supply interruptions. Based on MWD's historical and on-going water supply and storage programs and management practices, the District will use up to the treated imported water supply made available from MWD through Three Valleys Municipal Water District in association with each of the standard water shortage levels identified in Section 8.3. Water demands will be addressed through increased use of the local groundwater supplies and implementation of demand reduction measures through the various stages of action.

Table 8-3 Supply Augmentation and Other Actions

Submittal Table 8-3: Supply Augmentation and Other Actions			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier ***Drop down list*** *These are the only categories that will be accepted by the WUEdata online submittal tool*	How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*
Add additional rows as needed			
1	Transfers	Not applicable (see Notes)	
2	Transfers	Not applicable (see Notes)	
3	Transfers	Not applicable (see Notes)	
4	Transfers	Not applicable (see Notes)	
5	Transfers	Not applicable (see Notes)	
6	Transfers	Not applicable (see Notes)	
NOTES: The District will consider increased purchased water from the Main Basin, through CDWC, to address increased demands. As noted in Table 8-2, the District plans to implement demand reduction measures in the event water supplies from existing sources are not sufficient to meet anticipated demands.			

8.4.3 OPERATIONAL CHANGES

During a water supply shortage situation, the District will manage its water supply resources to provide sufficient water supplies capable of meeting the demands of its customers. Section 8.4.1 describes the District's standard water shortage levels and associated demand reduction measures. Section 8.4.2 describes the District's water supply sources and water supply augmentation actions available. The supply augmentation actions and demand reduction measures, when implemented, may potentially result in short-term operational changes which are necessary to allow the District to utilize all available water supply sources in response to water shortage situations.

As noted in Section 8.4.2, beginning July 1, 2022, the District will prepare and submit an Annual Assessment which will include a review of the water supplies available to meet

water demands for the current and upcoming years. Preparation of the Annual Assessment will assist the District in determining any potential operational changes. In addition, the District's standard water shortage levels and the associated demand reduction measures, in conjunction with the District's existing Demand Management Measures (discussed in Chapter 9), will be essential to the District in reducing water demands during any water shortage period. The operational changes the District will consider in addressing non-catastrophic water shortages on a short-term basis include the following:

- Improved monitoring, analysis, and tracking of customer water usage to enforce demand reduction measures
- Optimized production from existing available water supply sources
- Potential use of emergency supply sources, including emergency interconnections
- Potential blending of water supply resources
- Improved monitoring, maintenance, and repairs to reduce water distribution system losses

8.4.4 ADDITIONAL MANDATORY RESTRICTIONS

The mandatory restrictions which are implemented by the District to reduce customer demands are discussed in Section 8.4.2. There are no additional mandatory restrictions planned at this time.

8.4.5 EMERGENCY RESPONSE PLAN

Catastrophic water shortages are incorporated in the District's standard water shortage levels (identified in Section 8.3) and the associated demand reduction measures (described in Section 8.4.2). In addition to the water supply augmentation actions

(Section 8.4.1) and potential operational changes (Section 8.4.3) which the District may consider in order to continue providing sufficient water supplies, the District will review and implement any necessary steps included in its “Emergency Response Plan”.

As part of the “America’s Water Infrastructure Act of 2018”, community water systems serving a population greater than 3,300 people, including the District, are required to review and update their “Risk and Resilience Assessment” (RRA) and the associated “Emergency Response Plan” (ERP) every five (5) years. However, due to security concerns regarding the submitting of these reports, water systems are required to submit certifications to the USEPA, from March 31, 2020 and December 30, 2021, confirming the current RRA and ERP have been reviewed and updated.

The District’s RRA, prepared in 2021, evaluates the vulnerabilities, threats, and consequences from potential hazards to the District’s water system. The District prepared its RRA (which is incorporated by reference) by evaluating the following items:

- Natural hazards and malevolent acts (i.e., all hazards);
- Resilience of water facility infrastructure (including pipes, physical barriers, water sources and collection, treatment, storage and distribution facilities, and electronic, computer and other automated systems);
- Monitoring practices;
- Financial systems (e.g., billing systems);
- Chemical storage and handling; and
- Operation and maintenance.

The District’s RRA evaluated a series of potential malevolent acts, natural hazards, and other threats in order to estimate the potential “monetized risks” (i.e. associated economic consequences to both the water system and surrounding region, and the likelihood of

occurrence) associated with the District's water facility assets. The cost-effectiveness of implementing potential countermeasures to reduce risks was also reviewed.

The District's ERP, prepared in 2021, provides the management, procedures, and designated actions the District and its employees will implement during emergency situations (including catastrophic water shortages) resulting from natural disasters, system failures and other unforeseen circumstances. The District's ERP (which is incorporated by reference) provides the guidelines for evaluating an emergency situation, procedures for activating an emergency response, and details of the different response phases in order to ensure that customers receive a reliable and adequate supply of potable water. The scope of the ERP includes emergencies which directly affect the water system and the ability to maintain safe operations (such as a chlorine release, and earthquake or a threat of contamination). The ERP also incorporates the results of District's RRA and includes the following:

- Strategies and resources to improve resilience, including physical and cybersecurity
- Plans and procedures for responding to a natural hazard or malevolent act
- Actions and equipment to lessen the impact of a natural hazard or malevolent act
- Strategies to detect natural hazards or malevolent act

The District will review the ERP for procedures regarding the utilization of alternative water supply sources in response to water supply shortages, including during the standard water shortage levels. The District will also review applicable procedures described in the ERP regarding any necessary temporary shutdown of water supply facilities, including appropriate regulatory and public notifications.

8.4.6 SEISMIC RISK ASSESSMENT AND MITIGATION PLAN

CWC 10632.5.

(a) In addition to the requirements of paragraph (3) of subdivision (a) of Section 10632, beginning January 1, 2020, the plan shall include a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities.

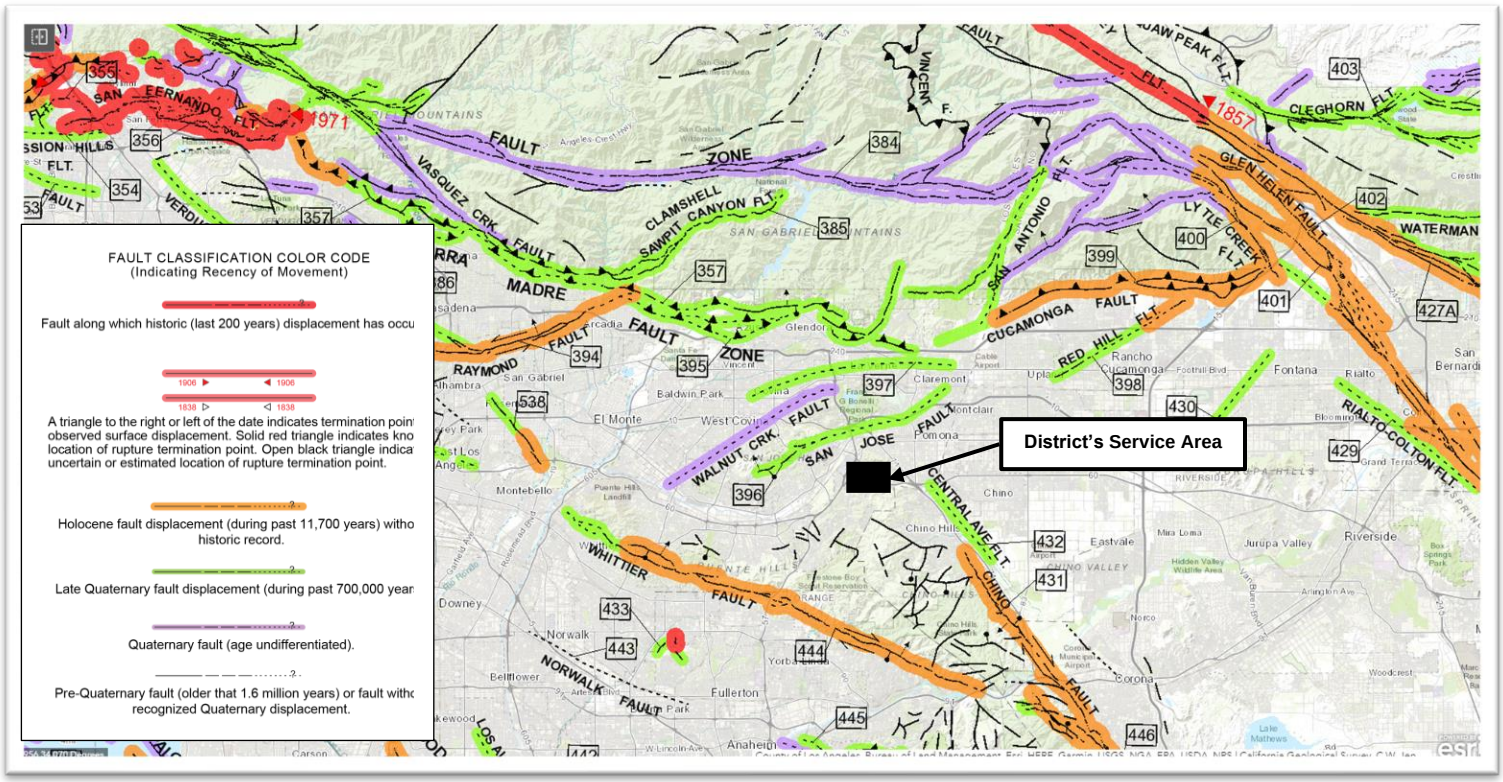
(b) An urban water supplier shall update the seismic risk assessment and mitigation plan when updating its urban water management plan as required by Section 10621.

(c) An urban water supplier may comply with this section by submitting, pursuant to Section 10644, a copy of the most recent adopted local hazard mitigation plan or multihazard mitigation plan under the federal Disaster Mitigation Act of 2000 (Public Law 106-390) if the local hazard mitigation plan or multihazard mitigation plan addresses seismic risk.

The County of Los Angeles prepared a "All-Hazards Mitigation Plan" in 2019 which identified methods to assess significant natural hazards (including earthquakes) affecting areas throughout Los Angeles County, and the mitigation strategies necessary to reduce risks, including seismic risk. The County's All-Hazards Mitigation Plan is provided in Appendix M.

The California Geological Survey has published the locations of numerous faults which have been mapped in the Southern California region. Although the San Andreas fault is the most recognized and is capable of producing an earthquake with a magnitude greater than 8 on the Richter scale, some of the lesser-known faults have the potential to cause significant damage. The locations of these earthquake faults in the vicinity of the District's water service area are provided in the figure below. The faults that are located in close proximity to and could potentially cause significant shaking in the District's water service area include the San Andreas fault, the Walnut Creek fault, the Whittier fault, the San Jose fault, the Chino fault, the Central Avenue fault, and the Sierra Madre fault.

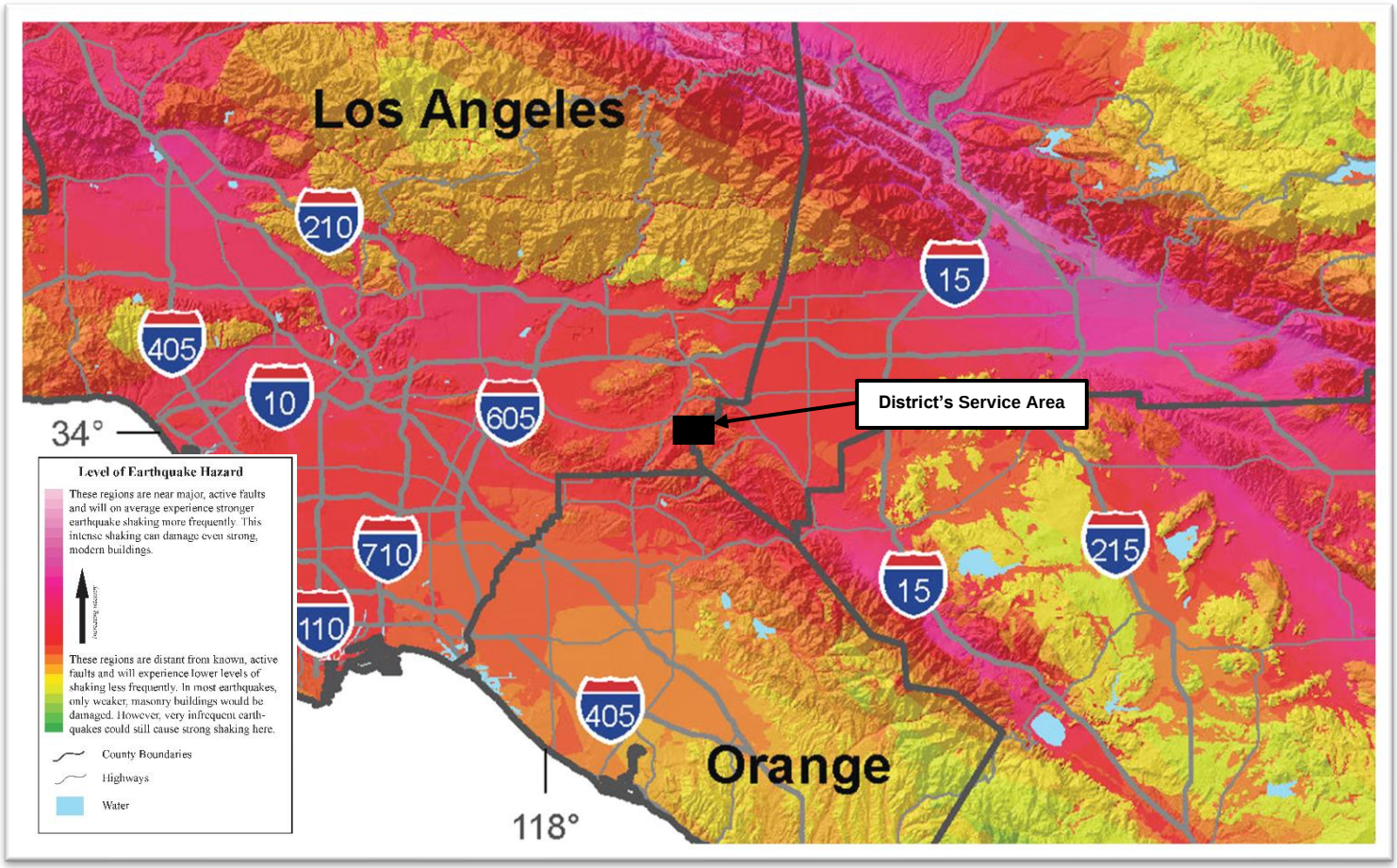
Location of Earthquake Faults



Source: https://maps.conservation.ca.gov/cgs/fam/App/

The following figure provides the relative intensity of ground shaking in the vicinity of the District's service area from anticipated future earthquakes. The locations of relatively long-period (1.0 second) earthquake shaking, including the District's service area, are provided. Long-period shaking affects tall, relatively flexible buildings, but also correlates with earthquake damage. The shaking potential is calculated based on the level of ground motion that has a 2 percent chance of being exceeded in 50 years (or the level of ground-shaking with an approximate 2,500-year average repeat time). As discussed in Section 8.4.5, the District has prepared an Emergency Response Plan which provides the management, procedures, and designated actions the District and its employees will implement during emergency situations resulting from natural disasters, including during earthquakes, to ensure that customers receive a reliable and adequate supply of potable water. The District's ERP is incorporated by reference.

Earthquake Shaking Potential



Source: "Earthquake Shaking Potential for California", 2016, California Geological Survey and United States Geological Survey

8.4.7 SHORTAGE RESPONSE ACTION EFFECTIVENESS

The effectiveness of the shortage response actions for each of the standard water shortage levels identified in Section 8.3, is evident in the District's historical ability to meet its customer's water demands in response to a water supply shortage. In addition, the District imposes water consumption regulations and restrictions, and supports local agencies in efforts to enforce regulations and prohibitions on water use. The effectiveness of each of the District's shortage response actions, in order to reduce any potential gaps between supply and demand, has been quantified in the expected demand reduction provided in Table 8-2 and Table 8-3.

Section 6.1 provides a tabulation of the District's historical annual water demands for each water supply source. During the past 10 years, the District experienced a five consecutive year drought within its service area from FY 2011-12 to FY 2015-16. Throughout this extended dry year period, the District's annual water production ranged from 21,183 AF to 29,886 AF, with an average of approximately 24,022 AF. In addition, historical records indicate the District previously produced a maximum of up to 29,886 AF during FY 2013-14. The District has been able to provide sufficient water supplies to its customers, including during long-term droughts and years with historically high water demands. In addition, the District has been able to provide water service to meet maximum day water demands for these years, including during the summer months.

The District's water demands during the most recent five years (from FY 2015-16 to FY 2019-20) averaged approximately 21,787 AFY. Due to conservation efforts and demand management measures (discussed in Chapter 9), the District's recent water demands have been significantly less than its historical water demands, including during long-term droughts. The District's projected water demands (during normal, single dry, and multiple dry years) are provided in Section 7.2.3 and are anticipated to incorporate similar reductions in water use rates as a result of the shortage response actions, ongoing conservation efforts, and demand management measures. Because the District's projected water demands are similar to, it is anticipated the District will be able to continue providing sufficient water supplies to its customers to meet projected water demands, including during long-term droughts. In addition, as discussed in Section 8.4.2, based on historical and on-going management practices, the District can rely on its water supply source from the Main Basin for adequate supply augmentation in response to each of the standard water shortage levels identified in Section 8.3.

The District previously adopted Ordinance No. 07-16-09 in July 2016 which declared a water supply shortage and established water-use restrictions and regulations equivalent to the standard water shortage Stage 1 identified in Section 8.3. During this Stage 1 water shortage period, the District was able to reduce water demands by up to 10 percent and

provide sufficient water supplies to its customers. This Stage 1 water shortage period currently remains in effect throughout the District's service area. A copy of the Ordinance is provided in Appendix L.

Based on the District's demonstrated ability to meet water demands during past water supply shortages, the adopted water shortage levels, the adjusted operating safe yields, and water supplies during long-term droughts, it is anticipated that the District will be able to provide sufficient water supplies to its customers during each of its standard water shortage stages. Although adequate supplies are anticipated, the cost of those water supplies may become incrementally more expensive. The District will enact varying stages of its WSCP to encourage retail customers to reduce water consumption and at the same time reduce the need to use the more expensive water supplies. Notwithstanding, the effectiveness of each of the District's shortage response actions, in order to reduce any potential gaps between supply and demand, has been quantified in the expected demand reduction section provided in Table 8-2 and Table 8-3. The effectiveness of the District's shortage response actions is based on the District's water demands prior to 2015 (unconstrained demands). The District reduced its water demands in 2015 in response to the Governor's April 1, 2015 Executive Order B-29-15 which mandated statewide reduction in water use of 25 percent. The District's actual water demand reduction during this period was used to estimate the extent of water use reductions for the District's Water Shortage Stages. The District's Water Shortage Stages 1, 2, 3, 4, 5, and 6 are expected to reduce water demands by up to 10%, 20%, 30%, 40%, 50%, and greater than 50%, respectively.

8.5 COMMUNICATION PROTOCOLS

CWC 10632.

(a)(5) Communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding, at a minimum, all of the following:

(A) Any current or predicted shortages as determined by the annual water supply and demand assessment described pursuant to Section 10632.1.

(B) Any shortage response actions triggered or anticipated to be triggered by the annual water supply and demand assessment described pursuant to Section 10632.1.

(C) Any other relevant communications.

Under Section 10 of Ordinance No. 07-16-09: The existence of Water Supply Shortage Stage conditions may be declared by resolution and adopted at a regular or special Board meeting held by the District in accordance with State law. The mandatory conservation requirements applicable to each Water Shortage Stage condition will take effect on the tenth day after the Stage level is declared. Within five days of following the declaration of the shortage level, the District will publish a copy of the resolution in a newspaper used for publication of official notices.

8.6 COMPLIANCE AND ENFORCEMENT

CWC 10632.

(a)(6) For an urban retail water supplier, customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions as determined pursuant to Section 10632.2.

Violations of Ordinance No. 07-16-09 may be considered an unauthorized use of water and subject to penalties established in the District's Rules and Regulations, Article 4.05.02.03 and/or Article 4.03.07.06. Each day that a violation of this ordinance occurs is considered a separate offense by the District.

Penalties for failure to comply with any provisions of Ordinance No. 07-16-09 are as follows:

1) First Violation: The District will issue a written notice of non-compliance and deliver a copy of this ordinance by certified mail.
2) Second Violation: For a second violation within the preceding 12 calendar months, the District will issue a final written notice of non-compliance.
3) Third and Subsequent Violations: A third violation, and any subsequent violation, within the preceding 12 calendar months may be considered an unauthorized use of water and subject to penalties established in Article 4.05.02.03 and/or Article 4.03.07.06 of the District's Rules and Regulations.
4) Water Flow Restrictor: In addition to any fines, the District may install a water flow restrictor device of approximately one gallon per minute capacity for services up to one and one-half inches in size and comparatively sized restrictors for larger services after providing written notice to the customer of intent to install a flow restrictor for a minimum of 48 hours prior to such installation.

A person or entity that violates this ordinance is responsible for payment of the District's charges for installing and/or removing any flow restricting device and for disconnecting and/or reconnecting service per the District's schedule of charges then in effect. The charge for installing and/or removing any flow restricting device and disconnection service must be paid to the District before water supply is returned. Nonpayment will be subject to the same remedies as nonpayment of basic water rate established in the District's Rules and Regulations.

The District will issue a Notice of Violation by certified mail or personal delivery at least 10 days before taking enforcement action. Such notice must describe the violation and the date by which corrective action must be taken. A customer may appeal the Notice of Violation by filing a written notice of appeal with the District no later than the close of business on the day before the date scheduled for enforcement action. Any Notice of Violation not timely appealed will be final. Upon receipt of a timely appeal, a hearing on the appeal will be scheduled, and the District will send by certified mail a written notice of the hearing date to the customer at least 10 days before the date of the hearing. Pending receipt of a written appeal or pending a hearing pursuant to an appeal, the District may take appropriate steps to prevent the unauthorized use of water appropriate to the nature and extent of the violations and the current declared water level condition.

8.7 LEGAL AUTHORITIES

CWC 10632.

(a)(7)(A) A description of the legal authorities that empower the urban water supplier to implement and enforce its shortage response actions specified in paragraph (4) that may include, but are not limited to, statutory authorities, ordinances, resolutions, and contract provisions.

(B) A statement that an urban water supplier shall declare a water shortage emergency in accordance with Chapter 3 (commencing with Section 350) of Division 1.

(C) A statement that an urban water supplier shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency, as defined in Section 8558 of the Government Code.

CWC Division 1, Section 350

The governing body of a distributor of a public water supply, whether publicly or privately owned and including a mutual water company, 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.

Under Section 4 of Ordinance No. 07-16-09, the District's General Manager or his or her designated representative is hereby authorized and directed to implement the staged water conservation and enforcement provisions of the Ordinance, as necessary. In that regard, the General Manager or his or her designated representative shall have the authority to select from among the mandatory water use restrictions, including daily irrigation limitations, specified for each stage of water supply shortage based on the District's then existing water supply conditions.

The District's General Manager, or designee, may declare a water shortage emergency and may immediately enact the mandatory requirements of any of the water supply shortage stages designated herein. The required measures of the designated water supply shortage stage will be effective immediately and will be communicated to the public. The emergency implementation will be ratified by resolution of the District's Board of Directors at its next meeting.

The District shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency. This includes the Cities of Diamond Bar, Industry, Pomona, Walnut, and West Covina, as well as the County of Los Angeles.

8.8 FINANCIAL CONSEQUENCES OF WSCP

CWC 10632.

(a)(8) A description of the financial consequences of, and responses for, drought conditions, including, but not limited to, all of the following:

(A) A description of potential revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).

(B) A description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).

(C) A description of the cost of compliance with Chapter 3.3 (commencing with Section 365) of Division 1.

Potential revenue reductions and expense increases associated with activated shortage response actions are regulated and tracked by the District's Finance Manager.

During periods of water supply shortages, state-mandated water use restrictions, or emergency conditions, the District may require its customers to reduce demands below levels projected under the current water rate structure. Under any of these circumstances, the District may experience a decrease in revenues that may result in insufficient funds to meet projected expenses.

In order to offset any decline in revenues, the District's Board of Directors may adopt resolutions to make additional adjustments to the water rates based on the District's increased costs to provide water to its customers.

8.9 MONITORING AND REPORTING

CWC 10632.

(a)(9) For an urban retail water supplier, monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.

During times of drought, the District closely monitors customer consumption to ensure its efforts are effective in reducing system-wide demand. Data collected assists the District in making critical decisions and prioritizing drought response actions. The District employs various tools to monitor, evaluate, and report on its conservative objectives. In addition, the District submits the monthly Urban Water Supplier Monitoring Report to SWRCB.

Monthly Reporting

The District evaluates both billed consumption and monthly production data relative to established goals. Using this data allows District staff to gauge effectiveness in managing overall demand and customers' responsiveness to requests to conserve. The results are compiled and presented to the Board on a monthly basis.

Customer Metering

Customer accounts are metered and billed monthly. Using these records, the District tracks and evaluates consumption data by customer category, meter size, tier-width, and neighborhood, to determine whether customer groups are reaching conservation targets. If drought surcharges are implemented, billing data is evaluated to determine how the surcharges affect customer demand.

Advanced Metering Technology (AMI)

The District has installed approximately 13,000 smart meters, with the remaining meters to be converted to AMI by 2024. From the utility side, smart meters provide multiple

benefits including leak detection, demand forecasting, performance indicators, and improved reporting. By leveraging this data, the District can identify, monitor, and target programs to specific users. This will allow the District to focus conservation messaging and programs on specific customers, or groups of customers. From the customers' side, smart meters can provide information of when and where water is used, establish water budget and water usage alerts, comparisons of water use against other customers, forecasting, and quick leak detection.

Water Conservation and Data Management Services

The District has recently entered into a contract for the use of water conservation and data management software known as Eagle Aerial. Eagle Aerial allows the District to analyze total water allocation at the parcel level, spot water use trends, and identify large water users. The information will be critical in calculating indoor and outdoor water use for purposes of complying with the recently enacted water conservation legislation (AB 1668 and SB 606).

Water Use Efficiency Strategic Plan

The District recently completed its Water Use Efficiency Strategic Plan. The Water Use Efficiency Strategic Plan will enable the District to project long-range demands, identify attainable conservation goals, develop strategies, and raise awareness. This plan includes a cost-effective suite of water conservation measures that will help meet future water needs locally and regionally. In addition, by adhering to the Water Use Efficiency Strategic Plan, the District can meet the State of California's current and future requirements and objectives.

8.10 WSCP REFINEMENT PROCEDURES

CWC 10632.

(a)(10) Reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the water shortage contingency plan in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.

The District's WSCP has been prepared as an adaptive management plan. As discussed in Section 8.9, the District will monitor and report in the implementation of the WSCP. The District will evaluate the need for revising the WSCP in order to resolve any shortage gaps, as necessary. The District will consider the following potential revisions in the event of a potential shortage gap:

- Implementation of additional public outreach, education, and communication programs (in addition to the programs discussed in Chapter 9)
- Implementation of more stringent water use restrictions under the standard water shortage levels (discussed in Section 8.4.1)
- Implementation of stricter enforcement actions and penalties (discussed in Section 8.6)
- Improvements to the water supply augmentation responses (discussed in Section 8.4.2), as well as any associated operational changes (discussed in Section 8.4.3) which may be required
- Incorporation of additional actions recommended by the District staff or other interested parties

The District will use the monitoring and reporting data to evaluate the ability for these potential revisions to resolve any shortage gaps which may occur within the standard water shortage levels.

The WSCP is adopted as part of the District's 2020 Urban Water Management Plan adoption process discussed in Section 10.3. It is anticipated the District will review, revise, and adopt an updated WSCP as part of preparing its 2025 Urban Water Management Plan, as necessary. However, the District will continue to review the monitoring and reporting data, and if needed, update the WSCP more frequently. Any updates to the District's WSCP will include a public hearing and adoption process by the District's Board of Directors (see Section 8.12).

8.11 SPECIAL WATER FEATURE DISTINCTION

CWC 10632.

(b) For purposes of developing the water shortage contingency plan pursuant to subdivision (a), an urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

The District's WSCP defines "decorative water features" as water features which are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, but excluding pools and spas. In general, there are additional health and safety considerations in the water supplied to pools and spas compared to decorative water features. As a result, the District's WSCP has reviewed the response actions, enforcement actions, and monitoring and reporting programs separately for decorative water features and for pools and spas, as applicable.

Under Ordinance No. 07-16-09, filling or refilling ornamental lakes or ponds is prohibited, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to declaration of a supply shortage level (discussed in Section 8.4.1).

8.12 PLAN ADOPTION, SUBMITTAL, AND AVAILABILITY

CWC 10632.

(c) The urban water supplier shall make available the water shortage contingency plan prepared pursuant to this article to its customers and any city or county within which it provides water supplies no later than 30 days after adoption of the water shortage contingency plan.

The District's WSCP is adopted as part of the District's 2020 Urban Water Management Plan adoption process discussed in Chapter 10. The process for adopting the District's WSCP includes the following:

- The District will conduct a public hearing and make the WSCP available for public inspection.
- The District will provide notification of the time and place of the public hearing to any city or county in which water is provided.
- The District will publish notice of public hearing in a newspaper once a week, for two successive weeks (with at least five days between publication dates).
- The District's Board of Directors will adopt the 2020 Urban Water Management Plan and the WSCP.
- As part of submitting the 2020 Urban Water Management Plan to DWR, the District will also submit the WSCP (electronically through DWR's online submittal tool) within 30 days of adoption and by July 1, 2021. The District will submit a copy of the WSCP to the California State Library and to any city or county in which water is provided within 30 days of adoption. In addition, the District will make the WSCP available for public review within 30 days of adoption.

If there are any subsequent amendments required, the process for adopting an amended WSCP includes the following:

- The District will conduct a public hearing and make the amended WSCP available for public inspection.
- The District's Board will adopt the amended WSCP.
- The District will submit the amended WSCP to DWR (electronically through DWR's online submittal tool) within 30 days of adoption.

Additional information regarding the adoption, submittal, and availability of the District's WSCP (and 2020 Urban Water Management Plan) is provided in Chapter 10.