

8.1 Chapter Summary

The District has included this summary of Chapter 8 in accordance with CWC Section 10630.5. The CWC mandates that water agencies include in their UWMPs a water shortage contingency plan (WSCP). A WSCP, which is a detailed proposal for how an urban water supplier intends to act in the case of an actual water shortage condition, exists as a stand-alone document and can be amended, as needed, without amending the UWMP. A water shortage may occur due to a number of reasons, such as drought, climate change, or catastrophic events. A water shortage means that there are insufficient water supplies to meet the District's normal customer water use demands at a given point in time. The District has developed this WSCP to serve as an operating manual to prevent catastrophic service interruptions through proactive, rather than reactive management. If and when shortage conditions arise, the WSCP allows the District's board, staff, and the public to identify and efficiently implement predetermined steps to manage a water shortage. The District's WSCP includes and addresses the following elements:

- 1) Water supply reliability assessment
- 2) Annual water supply and demand assessment procedures
- 3) Six standard water shortage stages
- 4) Shortage response actions
- 5) Communication protocols
- 6) Compliance and enforcement
- 7) Legal authorities
- 8) Financial consequences of the WSCP
- 9) Monitoring and reporting
- 10) WSCP refinement procedures
- 11) Special water feature distinction
- 12) Plan adoption, submittal, and availability

The WSCP is intended to be consistent with the District's UWMP and CWA's UWMP and is further intended to implement CWA's WSCP. CWA's WSCP is a response program developed by CWA in consultation with its member agencies for responding to water supply limitations resulting from drought conditions. The response levels included in the District's WSCP correspond with CWA's WSCP.

8.2 Water Supply Reliability Analysis

The District is located in a region with limited local water supplies. Since 1948, the District has relied on imported water as its primary water supply source, and it maximizes the use of available local supplies to supplement imported supplies.

As discussed in Chapter 7 of the District's 2020 UWMP, historically, water from CWA has accounted for the majority of the District's water supplies and has accounted for 80% of the District's water supply on average. Imported water is purchased from CWA, the water wholesaler for the San Diego region. The imported supplies from CWA are a mix of sources including water from the Delta and Colorado River. Looking forward, imported water is estimated to account for 3,400 to 3,500 AF of the district's annual water supplies over the next 20 years. Due to constraints on the Delta and Colorado River supplies, CWA has developed a mix of projects to diversify the imported water supply portfolio to increase reliability and reduce dependence solely on the Delta and Colorado River. Projects completed by CWA to increase reliability of supply for the region and the District include the Imperial Irrigation Conservation and Transfer Agreement, All American Canal and Coachella Canal Relining projects, San Vicente Dam Raise and Carryover Storage project, and the Carlsbad Desalination project. Additional details on CWA's water supply reliability are discussed in Chapter 9 of CWA's UWMP and are incorporated by reference herein.

Local ground water accounts for 20% of the District's supplies on average. The district estimates that groundwater will provide 900 AF annually of the district's water supplies over the next 20 years. Groundwater, which is sourced from the El Monte Valley Basin within the San Diego River Valley Basin, is pumped from our well field located at the administrative headquarters. In fiscal year 2020, the well produced 593 AF.

Every five years, the District updates its Urban Water Management Plan, which includes projecting supplies over the next 25 years, in five-year increments, for a normal water year, a single dry year, and a drought lasting five consecutive years. CWA notes that certain of its supplies, which consist of the Imperial Irrigation District water transfer, All-American Canal and Coachella Canal lining projects, and regional seawater desalination, no reduction in the availability over the five-year drought period is assumed due to the drought resilience of those supplies.

Given the development of CWA's and the District's supplies as planned and the achievement of conservation targets, as quantified in the District's Urban Water Management Plan, the District anticipates having sufficient supplies to meet demand during future normal water years, single dry years, and for a drought lasting five consecutive years.

However, low probability, high impact events can result in sudden, unanticipated loss of water supply on a catastrophic scale. These threats can be naturally occurring, such as earthquakes, wildfires or lightning that could result in dependency hazards such as loss of utility power that in turn could affect the conveyance of imported water or the functionality of the District's treatment plant. These threats can also be malevolent, such as various forms of acts of terrorism. CWA, as the regional wholesaler, has created an Integrated Contingency Plan (ICP) in conjunction with its member agencies to address catastrophic events that could eliminate access to imported water supplies. CWA's ICP identifies potential emergency situations and incidents that could trigger activation of CWA's ICP and Emergency Operations Centers, along with the policies, procedures, multi-agency coordination, mutual aid agreements and activation/deactivation guidelines associated with emergency response activities.

CWA has also created the Emergency Storage Project which is a system of reservoirs, pipelines, pump stations and other conveyance facilities (See Section 8.2 of CWA's 2021 Water Shortage Contingency Plan) intended to improve San Diego County's regional water storage capacity and allow stored emergency water to be delivered to CWA's member agencies within San Diego County during a prolonged regional interruption. The ESP facilities can be used to help deliver emergency water supply to member agencies during two- and six-month emergency events in which the region is either completely unable or partially able to receive imported water deliveries due to a disaster that renders their transmission system inoperable. CWA also has Emergency Water Delivery Plans, which identify emergency water supply deliveries to its member agencies during two- and six-month emergency events through CWA Quantification Settlement Agreement transfers, spot transfers, out-of-region storage supplies, and MWD supplies.

8.3 Annual Water Supply and Demand Assessment Procedures

Water Code Section 10632(a)(2) requires urban water suppliers to conduct an annual water supply and demand assessment and submit an Annual Assessment Report to the state beginning July 1, 2022.

The information below provides an overview of the District's process to annually assess projected water supplies and customer demands. The assessment is used to determine if there will be a shortfall in District supplies for the current year and one dry year. If the assessment identifies a shortfall in District supplies, it would trigger the District's shortage response actions as outlined in the District's WSCP.

8.3.1 Decision-Making Process

This section summarizes the decision-making process that the District will use each year to determine, and subsequently report to the state, its annual water supply and demand assessment:

Table 8-A: Decision Making Process for Annual Water Supply and Demand Assessment Procedures		
Timeframe (No Later Than)	Action	Responsible District Department
May 1	Authority announces member agency allocation determination for current year, if applicable	Authority provides to Systems, if applicable
May 1	Authority determines carryover (and emergency storage apportionments if under emergency), if applicable	Authority provides to Systems, if applicable
May 1	District determines District local supply available	Systems
May 1	District determines total supply available – inclusive of local and imported supplies	Systems
May 1	District determines infrastructure constraints	Systems
May 1	District determines expected demands	Finance
May 1	District compares supply and demand and makes a determination of the water supply reliability for the current and one dry year	Water Conservation
June 15	District prepares and submits Annual Assessment Report to the state in coordination with CWA	Water Conservation
July 1, if applicable	District implements its water shortage response actions as outlined in this WSCP, if there is a gap between available water supplies and projected demand	Water Conservation makes recommendation to General Manager and/or Board as outlined in WSCP, if applicable

8.3.2 Data and Methodologies

The District will evaluate current year available supply and one dry year available supply in its annual assessment. The District’s systems department will conduct the water supply evaluation annually by May 1 and by assessing the following hydrological conditions:

8.3.2.1 Local Sources

- Local stored water - Determine storage in each reservoir available for transfer.
- Wells - Determine last year’s production and potential production constraints.

8.3.2.2 Imported Sources

Imported water - Allocation determined by CWA, including available CWA carryover and CWA emergency storage, based on local and statewide hydrological conditions and contractual availability, if applicable CWA's supply allocation methodology, developed in collaboration with CWA and its member agencies, is detailed in CWA's WSCP. Since the District relies primarily on imported water, continued coordination with CWA is crucial in determining the District's available water supply.

8.3.2.3 Infrastructure Considerations

The District's systems department will also consider the District's existing infrastructure capabilities and potential constraints for the upcoming fiscal year and one dry year. The District's existing water supply infrastructure is documented in the District's geographical information system, including its treatment plant, storage tanks, pump stations, pipelines, and valves. Constraints that could potentially limit water supply availability include shutdowns due to maintenance, construction impacts, and water quality impacts. The District will also coordinate with CWA to identify regional infrastructure constraints to determine if, and how, they would impact District water supply availability. Once constraints have been identified, the District will determine if the total water supply identified as available under local and imported sources should be adjusted.

8.3.2.4 Projected Water Demand

The annual assessment will use the District's latest demand forecast. The demand forecast is completed by the District's finance department by May 1 each year. Key inputs include, but are not limited to, the District's unconstrained demand, recent water demand trends, pending water use efficiency regulations, mandatory water use restrictions, weather, and population and economic growth.

8.3.2.5 Water Supply Reliability Annual Assessment Report

The CWA's systems and finance departments will provide projected water supply and demand data to the water conservation department by May 1. CWA's water conservation department will compare supply and demand and make a determination of the water supply reliability for the current and one dry year by June 1. The District will complete and submit the District's Annual Assessment Report, and will coordinate with CWA as appropriate. The report will be submitted to the state within 14 days of receiving final allocation from the State Water Project or by July 1.

8.3.2.6 Gap Between Available Water Supplies and Projected Water Demand

If there is a gap between available water supply and projected water demand, the District's water conservation department will recommend implementation of the District's water shortage response actions as outlined in this WSCP, or reasonable alternative action, provided that descriptions of the alternative actions are submitted with the Annual Assessment Report pursuant to Water Code 10632.1.

8.4 Six Standard Water Shortage Levels

The District has established six levels of water shortages, outlined in this WSCP and in coordination with CWA, to be implemented in times of shortage, with increasing restrictions on water use in response to decreasing available supplies due to drought or emergency events. See Submittal Table 8-1 below. To determine the appropriate level, the District will assess the water supply and demand per the procedures outlined in Section 8.3.

Submittal Table 8-1		
Water Shortage Contingency Plan Levels		
Shortage Level	Percent Shortage Range	Shortage Response Actions (<i>Narrative description</i>)
1	Up to 10%	Communicates supply shortage with customers and promotes voluntary water conservation measures including recommended watering schedules and ways to reduce water waste.
2	Up to 20%	Increases conservation communications. Begins the enforcement of mandatory water use prohibitions and places limits on watering days and times.
3	Up to 30%	Increases water use efficiency and conservation communication. Deploys more restrictive water use prohibitions and gives District opportunity to issue water allocations and/or ban new connections.
4	Up to 40%	Makes more restrictive water use prohibitions. Focuses communication on extraordinary need for conservation. Expands resources for customers to help avoid damage from extreme conservation.
5	Up to 50%	Stops all landscape irrigation except for specific reasons. Bans all new connections unless project meets stringent criteria. Focuses communication and messaging to handle imminent needs.
6	>50%	Limits exemptions for watering days. Communicates the need for all businesses and residents to work together to help weather the situation.
NOTES:		

8.5 Shortage Response Actions

Although the District has ongoing demand reduction measures in place, the District has identified three additional potential supply mitigation tools that can be utilized in response to water shortages:

- 1) Communication plan
- 2) Mandatory water use prohibitions
- 3) Operational changes

As noted in Table 8-B, below, the Shortage Response Matrix includes a list of potential shortage response actions available to the District at each of the six standard water shortage levels. To determine the locally appropriate actions that should be taken at each level, the District will evaluate conditions specific to the timing, supply availability, supply reduction levels, costs, and other variables. Depending on the situation, the District may not implement each of the identified actions in a response level but select only those that are most appropriate.

Table 8-B: Shortage Response Matrix					
Water Shortage Level	Use Restrictions	Ongoing Water Use Efficiency	Communication Plan	Mandatory Water use Prohibitions	Operational Changes
Normal Conditions		X			
Level 1: Up to 10% (Voluntary)	Voluntary	X	X		
Level 2: Up to 20% (Mandatory)	Mandatory	X	X	X	X
Level 3: Up to 30% (Mandatory)	Mandatory	X	X	X	X
Level 4: Up to 40% (Mandatory)	Mandatory	X	X	X	X
Level 5: Up to 50% (Mandatory)	Mandatory	X	X	X	X
Level 6: Above 50% (Mandatory)	Mandatory	X	X	X	X

8.5.1 Demand Reduction

The District has adopted policies and procedures manual Section 10.1, which is also known as the Water Shortage Response Policy and Procedure and has been provided by the District in Appendix L. This policy and procedure establishes both permanent water use efficiency measures and additional demand reduction measures to be implemented during times of declared water shortages, or declared water shortage emergencies. It establishes six levels of water shortage response actions to be implemented in times of shortage, with increasing restrictions on water use in response to worsening drought conditions and/or decreasing available supplies. The demand reduction measures correspond to the District’s six water shortage levels and CWA’s WSCP, as noted in Table 8-B:

Water Shortage Contingency Plan

Additionally, Table 8-2 summarizes the demand reduction actions, estimated percent demand reduction per action, operational changes, and whether a penalty applies.

Submittal Table 8-2: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions <i>Drop down list</i> <i>These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.</i>	How much is this going to reduce the shortage gap?	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
1	Expand Public Information Campaign	5%		No
1	Landscape - Restrict or prohibit runoff from landscape irrigation	2%		No
1	Other - Require automatic shut of hoses	1%		No
1	Other - Prohibit use of potable water for washing hard surfaces	1%		No
2	Expand Public Information Campaign	5%		No
2	Landscape - Limit landscape irrigation to specific times	1%		Yes
2	Landscape - Limit landscape irrigation to specific days	2%	3 days/wk	Yes
2	Water Features - Restrict water use for decorative water features, such as fountains	1%		Yes
2	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	1%	5 days	Yes
3	Expand Public Information Campaign	5%		No
3	Landscape - Limit landscape irrigation to specific days	1%	2 days/wk	Yes
3	Implement or Modify Drought Rate Structure or Surcharge	5%		Yes
3	Moratorium or Net Zero Demand Increase on New Connections	1%		No
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	1%	3 days	Yes
4	Expand Public Information Campaign	5%		No
4	Landscape - Prohibit certain types of landscape irrigation	1%		Yes
4	Implement or Modify Drought Rate Structure or Surcharge	5%		Yes
4	Increase Water Waste Patrols	1%		Yes
4	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	1%	2 days	No
5	Expand Public Information Campaign	5%		No
5	Landscape - Prohibit all landscape irrigation	1%		Yes
5	Implement or Modify Drought Rate Structure or Surcharge	5%		Yes
5	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	1%	1 day	Yes
5	Implement or Modify Drought Rate Structure or Surcharge	1%		No
6	Expand Public Information Campaign	3%		No
6	Landscape - Prohibit all landscape irrigation	5%		Yes
6	Implement or Modify Drought Rate Structure or Surcharge	5%		Yes
6	Increase Water Waste Patrols	2%		Yes

NOTES: In each progressing level restrictions are cumulative.

PERMANENT WATER USE EFFICIENCY MEASURES

At all times, the following practices shall be in effect:

1. No outdoor watering during a rain event or within 48 hours after measurable rainfall.
2. No watering down a sidewalk with a hose instead of using a broom or a brush except to alleviate safety or sanitary conditions.
3. No washing of automobiles with hoses not equipped with a shut-off nozzle.
4. No overwatering a landscape in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures.
5. Home owners associations (HOAs) and local governments may not penalize homeowners for certain outdoor conservation practices during a declared shortage.
6. No use of a non-recirculated potable water in fountain or other decorative water feature.
7. No serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased
8. No irrigation with potable water of ornamental turf on public street medians
9. No irrigation with portable water of landscapes outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and The Department of Housing and Community Development.

Level 1 through 6 Water Shortage Contingency Plan details are in Appendix L as updated from the Drought Response Plan in 2020.

8.5.2 Supply Augmentation

The District purchases the majority of its water from CWA, the regional water wholesaler for the San Diego region. As previously described, the District is dependent on both the CWA and the Helix Water District facilities to supply its potable water needs. CWA and its 24-member agencies, including the District, have worked collaboratively over the past two decades to diversify water supplies and develop robust water supply shortage plans. If CWA identifies a water supply shortfall, it evaluates the use of stored water reserves from CWA's Carryover Storage or pursues supply augmentation measures, such as dry-year transfers, to reduce or eliminate the shortfall. Details on CWA's supply augmentation plan are available in CWA's WSCP, referenced and incorporated herein as Appendix K. These supply augmentations occur before the district purchases water from CWA.

At a local level, the District maintains imported treated water and local groundwater. In the event that the treated water supply was interrupted, the District would have to rely on the operational storage contained in its 10 potable water reservoirs. The wells can currently supply less than one-fifth of the normal day demands. If the District were to have supplies reduced by 50 percent for a lengthy duration, as might result from a severe drought, compensatory reductions in potable water consumption would need to occur. Therefore, a 50 percent reduction in the District's supply would be matched by a 50 percent reduction in consumption throughout the District. A Level 5 would go into effect (Appendix L) and Tier 3 and Tier 4 pricing levels would also go into effect for high water usage customers.

The current combined total potable emergency water storage of 12.6 MG available in District reservoirs can provide approximately five days use under existing maximum day demand. With a 50 percent reduction in customer maximum day demand and outdoor use banned this reserve could last for 10 days. Additionally, the district maintains another 5 days of emergency storage or 11.73 MG in Padre Dams's wholesale storage system. Combined storage could last up to 20 days with 50% conservation level. The district would consider using this emergency storage in shortage Levels 5 and above. The exact amount of emergency storage available, and how long it would last, depends on projected demands and the water shortage level.

8.5.3 Operational Changes

When faced with a potential water shortage, the District will consider the following operational changes, as appropriate, to help address the shortage on a short-term basis:

- Evaluate customer water monthly using bimonthly billing data which is available on a rolling basis
- Increase customer communications
- Reduce water budget allocations for irrigation accounts
- Implement customer water shortage penalties
- Begin water patrols and enforcement
- Expedite system repairs and prioritize maintenance projects to reduce water loss
- Defer routine maintenance projects that involve extensive flushing/drainage

8.5.4 Additional Mandatory Restrictions

The District's mandatory restrictions, which include limitations on outdoor watering and restrictions on using water for certain functions, are outlined in the District's Water Shortage Levels 2 through 6. See Appendix L. These will be flexibly deployed as locally appropriate to each unique water shortage situation.

8.5.5 Emergency Response Plan

The District maintains an Emergency Response Plan that establishes policies, procedures, and organizational structure for responses to major emergencies such as natural disasters, power outages, and water supply disruptions. The plan establishes emergency organization, assigns tasks, specifies policies and general procedures, and provides for coordination of planning efforts that utilize the Standard Emergency Management System (SEMS), as described by Government Code 8607(a) for managing the response to emergencies in California. It also incorporates the elements of the National Incident Command System (NIMS) which is a nationwide standardized approach to incident management and response. The EOP meets state and federal emergency response and recovery requirements.

The District is a member of the East County Shared Service network of water agencies that supports and promotes statewide emergency preparedness, disaster response and mutual assistance between agencies

Supply interruption is possible by several means, including but not limited to, natural disasters such as earthquakes and local or regional power interruptions. The District maintains several water supplies that include water emergency interconnections with agencies that border the District. The District also maintains a fleet of stationary and mobile power generators capable of operating District facilities in the event of local or regional power outages. Additionally, the District maintains an inventory of critical system supplies including piping and valves for use in system repairs.

The plan addresses assessment and utilization of all water supply sources, stationary and mobile power generators, and critical inventory as required to meet the emergency at hand in order to maintain system supply during emergency interruptions.

8.5.6 Seismic Risk Assessment and Mitigation Plan

In 2019, Helix Water District our wholesale imported water connection, commissioned Jacobs Engineering Group Inc. (Jacobs) to conduct a Risk and Resilience Assessment (RRA) in accordance with the relevant requirements of the America's Water Infrastructure Act of 2018 (AWIA), Section 2013. This RRA addresses the following key goals and objectives:

- Identifying and evaluating risks for the Helix water system by employing an all-hazards approach to include evaluation of natural hazard, dependency, and proximity threats in addition to malevolent threats.
- Conducting an RRA applying the current industry-standard methodology.
- Developing cost-effective risk-reduction recommendations to address the risks identified in accordance with industry best practices.

To meet these needs, the RRA team used the American Water Works Association's (AWWA's) methodology entitled J100-10 Standard for Risk and Resilience Management of Water and Wastewater Systems, which is the current water and wastewater industry standard for RRAs. See Helix Water District's UWMP for more information. The RRA contains seismic risk analysis and mitigation recommendations. Accordingly, the District relies on it and incorporates herein its RRA for its seismic risk assessment and mitigation plan. In general, the estimated annual likelihood of a mission-defeating seismic event on the District's systems is estimated to be very low, on the order of 2% per year or less.

8.6 Communication Protocols

The District's communication protocols include the various channels the District will utilize to convey critical messages regarding voluntary and mandatory water shortage actions and allocations, if applicable.

Public outreach programs can help increase awareness of water shortages, while customer classes and workshops can encourage ratepayers to actively participate in demand reducing strategies. A strong communication plan will help educate District customers, including local leaders and the business community, on the water supply situation; what actions are proposed; what the intended achievements are; and how these actions are to be implemented.

While specific types of messaging are deployed at various shortage response levels, how these messages can be conveyed to the public are described here. The communication protocols can be initiated upon declaration of a water shortage Level 1. Utilization of the communication protocols will continue through all subsequent water shortage levels. At times, specific communities may require specialized outreach. The District will ensure outreach efforts are reaching key audiences.

The District will communicate to ratepayers the following when urgent conservation is needed:

- Specific actions needed to save water;
- How much water needs to be saved and for how long;
- Why water needs to be saved; and
- What the district is doing to correct the supply problem or address the situation.

8.6.1 Regional Coordination

In order to communicate effectively, avoid confusion and maintain credibility, the District will work in close coordination with CWA at various organizational levels. These levels include the Joint Public Information Council/Conservation Coordinators (JPIC; staff level), the Member Agency Managers group (management level), and CWA Board's Legislation and Public Outreach Committee (Board level). During droughts or other times of limited supply, the frequency and extent of coordination will increase to ensure outreach tactics are consistent with the changing needs of the District and its ratepayers. The District will seek opportunities to leverage external resources to complement its own outreach.

8.6.2 Communication Objectives

Communication objectives during the various water shortage levels of the WSCP include the following:

- Motivate water users to quickly increase conservation in ways that are consistent with any voluntary or mandatory actions called for at the current level of the WSCP.
- Raise awareness and understanding of the drought, regulatory, or other condition affecting water supplies and the need for increased conservation.
- Minimize confusion and maintain regional consistency with conservation messages using an appropriate tone that preserves credibility and avoids noncompliance backlash.
- Make water users feel appreciated for existing accomplishments in improving their water-use efficiency, and for supporting regional and local investments in water supply reliability.
- Educate regional civic and business leaders, elected officials, and the public that the District, in conjunction with the Authority and its member agencies, has greatly improved its regional water supply reliability.
- Prepare the District for any potential escalation (or de-escalation) of the WSCP based on trending supply conditions.
- Ensure all stakeholders believe they are being treated fairly in relationship to other stakeholders.
- Maintain communication effectiveness by soliciting or monitoring feedback from member agencies, key stakeholders, and the general public to update or adapt messages or communication tools.
- Exit WSCP implementation having demonstrated the effectiveness and value of conservation actions and water supply reliability investments in minimizing impacts to the District's economy and quality of life.

8.6.3 Communication Channels

The District has developed various channels and means of implementing its communication to customers. The District may update its website, newsletters, envelope snipes, and direct mailers to reflect conditions and convey key messaging. The District may also provide press releases and host interviews or hold other events to announce or explain changes in conditions.

8.6.4 Communication Protocols for Current or Predicted Shortage

A current or predicted shortage, as determined by the annual assessment, will be communicated to the public upon submittal of the Annual Assessment Report in June of any given year.

The existence of a water shortage response Level 1 condition may be declared by the general manager upon a written determination of the existence of the facts and circumstances supporting the determination. A copy of the written determination shall be filed with the board secretary and provided to the board of directors. The general manager may post in the lobby of the administration office and publish a notice of the determination of existence of drought response Level 1 condition in one or more newspapers, including a newspaper of general circulation within the District. The District may also post notice of the condition on its website.

The existence of water shortage response Level 2, Level 3, Level 4, Level 5, or Level 6 conditions may be declared by resolution of the District board of directors adopted at a regular or special public meeting held in accordance with state law. The mandatory conservation measures applicable to drought response Level 2, Level 3, Level 4, Level 5, or Level 6 conditions shall take effect on the tenth calendar day after the date the response level is declared. Within five days following the declaration of the response level, the District shall publish a notice of the resolution in a newspaper used for publication of official notices and post it on the District's website. If the District establishes a water allocation, it shall provide notice of the allocation by including it in the regular billing statement or by any other mailing to the address to which the District customarily mails the billing statement or fees or charges for ongoing water service. Water allocation shall be effective on the fifth calendar day following the date of mailing or at such later date as specified in the notice.

The existence of a water shortage response Level 6 condition may be declared in accordance with the procedures specified in California Water Code Sections 351 and 352. The mandatory conservation measures applicable to water shortage response Level 6 conditions shall take effect on the tenth day after the date the response level is declared. Within five days following the declaration of the response level, the District shall publish a notice of the resolution in a newspaper used for publication of official notices.

The District's board of directors may declare an end to a water shortage response levels 2 through 6 by the adoption of a resolution at any regular or special meeting held in accordance with state law.

8.6.5 Water Shortage Communications

To reduce water consumption during any water shortage level, the District will increase its public education and outreach efforts to build awareness of needed action from the public. In addition, the District's outreach campaign will be regularly revised to reflect current conditions. Key communication strategies and associated water shortage level implementation are listed below. Communication strategies built from previous levels are assumed to be built upon as the Shortage Level increases. Communication strategies by water shortage level may include, but are not limited to, the following:

8.6.5.1 Levels 1 and 2

- Announce status change to key stakeholders and the general public.
- Share regular updates to customers on conditions.
- Promote consistent regional messaging and conservation programs to customers in coordination with CWA and neighboring agencies.
- Engage with member agencies to develop a more serious campaign message that reflects the need for compliance with mandatory water-use restrictions (Level 2)
- Conduct briefings of shortage and restrictions to key civic and business leaders (Level 2)
- Provide conservation information and other support as necessary to government officials for their own media events, hearings, community meetings, etc.

- Send clear, consistent, and understandable messages regarding mandatory water-use restrictions in effect.
- Enhance media relations activities and social media communications related to water-use restrictions, conservation programs and drought conditions.
- Expand community engagement on drought campaign through bill inserts and website information.
- Enhance efforts to encourage customers to report incidents of water waste.
- Promote available resources to aid vulnerable populations.

8.6.5.2 Levels 3 and 4

- Announce status change to key stakeholders and the general public.
- Share regular updates to customers on conditions.
- Promote available water assistance resources for vulnerable populations.
- Work with member agencies to develop and share a more serious campaign message that reflects the need for higher level of extraordinary conservation.
- Initiate targeted outreach to major CII water users to help them identify, prepare for and, as much as possible, avoid negative impacts from extreme water conservation requirements.
- Promote compliance with specific, District-wide water-use restrictions.
- Provide specialized technical assistance sessions or resources to help homeowners achieve immediate reductions in water use while minimizing landscape damage.
- Consider providing specialized technical assistance to large landscape customers (HOAs, cities, schools, etc.) to help achieve large-scale reductions in discretionary outdoor water use.
- Conduct specialized outreach to industries (hospitality, car washes, restaurants, etc.) or other large-scale water users (schools, park, and recreation districts) that will likely experience impacts from emergency conservation to determine solutions for minimizing economic or quality of life impacts.

8.6.5.3 Levels 5 and 6

- Work with member agencies to develop campaign messages and tactics that raise awareness of the extreme shortage conditions facing the region and the likely need to focus water use on essential public health and safety needs.
- Announce status change to key stakeholders and the general public.
- Share regular updates to customers on conditions.
- Suspend promotion of long-term water use efficiency programs/tools to focus on imminent needs.
- Promote all available resources to aid vulnerable populations.
- Send clear, consistent, and understandable messages regarding what uses of water or levels of water use remain acceptable for residential, commercial, and public water users.
- Emphasize the need for all residents and businesses to work together to help the region successfully weather the situation.
- Coordinate with regional emergency response agencies/services on messaging/additional outreach tactics if needed.

8.6.6 Catastrophic Communications

In the event of a catastrophic supply interruption that requires water use to be quickly prioritized for or limited to essential public health and safety needs, the District will immediately deploy appropriate strategies from Water Shortage Levels 1 through 6. In addition, outreach messaging will reflect

emergency conditions and the need to focus on health and public safety. Catastrophic communications strategies may include, but are not limited to, the following:

- Announce status change to key stakeholders and the general public.
- Provide regular update to stakeholders and the media on conditions.
- Implementation of any appropriate strategies and tactics from Levels 1-6
- Shift to messages that reflect emergency condition and need to focus water use on health/safety needs
- Provide joint news release/news events with public health officials to announce conditions and explain needed action.
- Ensure ongoing coordination with emergency response services.
- Send clear, consistent, and understandable messages regarding what uses of water or levels of water use remain acceptable for residential, commercial and public water users, and the expected duration of this restricted level of water use.
- Conduct specialized outreach to landscape and related industries with significant outdoor water use to urge immediate end to landscape water use.

8.7 Compliance and Enforcement

The District's inclining block rate structure contains two or three different prices for water used in different quantities. The highest rate is called "High Water Usage" and is priced to discourage water used in quantities subject to these rates.

Contained within the District's Rules and Regulations are penalties or charges for violations of the water use restrictions during water shortage conditions. An increasing level of fines is levied for up to four violations at the same address. Any subsequent violations at the same address will result in appropriate limitation of service by use of a flow restrictor or discontinuance of service.

The District Policy 10.1-12 of the WSCP lists violations and penalties as follows:

(a) Any person, who uses, causes to be used, or permits the use of water in violation of this policy is guilty of an offense punishable as provided herein.

(b) Each day that a violation of this policy occurs is a separate offense.

(c) Administrative fines may be levied for each violation of a provision of this policy as follows:

1. A warning for a first violation.
2. One hundred dollars for a second violation.
3. Two hundred dollars for a third violation of any provision of this policy within one year.
4. Five hundred dollars for each additional violation of this policy within one year.

(d) Violation of a provision of this policy is subject to enforcement through installation of a flow-restricting device in the meter.

(e) Each violation of this policy may be prosecuted as a misdemeanor punishable by imprisonment in the county jail for not more than thirty (30) days or by a fine not exceeding \$1,000, or by both as provided in Water Code section 377.

(f) Willful violations of the mandatory conservation measures and water use restrictions as set forth in Section 7.0 and applicable during a Level 4 condition may be enforced by discontinuing service to the property at which the violation occurs as provided by Water Code section 356.

(g) All remedies provided for herein shall be cumulative and not exclusive.

Procedures for notice, nonpayment and appeal of water shortage penalties, along with procedures for hardship variances, are outlined in the District's Water Shortage Response Policy and Procedures (Appendix L).

8.8 Legal Authority

The District has the legal authority to implement and enforce its WSCP. California Constitution Article X, Section 2 and Water Code Section 100 provide that water must be put to beneficial use, the waste or unreasonable use or unreasonable method of use of water shall be prevented, and the conservation of water is to be exercised with a view of the reasonable and beneficial use thereof in the interest of the people and the public welfare. Sections of Water Code Chapter 3 commencing with Section 350 of Division 1, provide the authority for the governing body of a water agency to declare a water shortage and to adopt and enforce water conservation restrictions. (Water Code §§ 350- 359, 375-378.0.)

If necessary, the District shall declare a water shortage emergency in accordance with Water Code Chapter 3 of Division 1. Once having declared a water shortage, the District is provided with broad powers to implement and enforce regulations and restrictions for managing a water shortage. For example: Water Code Section 375(a) provides:

Notwithstanding any other provision of the law, any public entity which supplies water at retail or wholesale for the benefit of persons within the service area or area of jurisdiction of the public entity may, by ordinance or resolution adopted by a majority of the members of the governing body after holding a public hearing upon notice and making appropriate findings of necessity for the adoption of a water conservation program, adopt and enforce a water conservation program to reduce the quantity of water used by those persons for the purpose of conserving the water supplies of the public entity.

(Water Code Section 375(a).) CWC Section 375(b) grants the District with the authority to set prices to encourage water conservation. Under California law, including CWC Chapters 3.3 and 3.5 of Division 1, Parts 2.55 and 2.6 of Division 6, Division 13, and Article X, Section 2 of the California Constitution, the District is authorized to implement the water shortage actions outlined in this WSCP. In water shortage cases, shortage response actions to be implemented will be at the discretion of the District and will be based on an assessment of the supply shortage, customer response, and need for demand reductions as outlined in this WSCP and the District's adopted Water Shortage Response Policy and Procedure. The District has included a copy its Water Shortage Response Policy and Procedure in Appendix L.

It is noted that upon proclamation by the governor of a state of emergency under the California Emergency Services Act (Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code) based on drought conditions, the state will defer to implementation of locally adopted water shortage contingency plans to the extent practicable. The District will coordinate with regional and local water suppliers for which it provides water supply services for possible proclamation of a local emergency as necessary under California Government Code, California Emergency Services Act (Article 2, Section 8558).

8.9 Financial Consequences of WSCP

The Act requires that water suppliers prepare a shortage contingency analysis to address the impacts on revenue and expenditures when water shortages occur. The District completed an analysis of financial impacts and methods to mitigate the effects of reduced revenues as a result of severe water shortages of various levels of severity. High Usage water tiers would be implemented and added or adjusted to balance revenues and expenditures by drought stages ranging from 10% to 50% reduced water supply.

Initially, drought conditions may result in increased usage and water sales revenue as outdoor water use increases due to higher temperatures and below average rainfall. Severe or prolonged drought conditions could decrease water availability and cause usage to be curtailed resulting in a reduction of the District's water sales revenues.

With the decreased usage during severe drought conditions, water purchase expenses, pumping expenses, and water treatment costs would decrease by a corresponding amount. Other operating expenses, such as administrative expenses, would be relatively unaffected unless specific actions are taken to reduce staff and or services.

The District relies on water sales revenue to cover operating expenses. A shortfall in water sales could be covered by increasing of water use tiers and increases water rates and by reserve fund balances in the short term. The District has a rate stabilization reserve fund along with general reserve funds that could be utilized to cover operating expenses. However, in severe drought situations where the offset of reserve fund balances and acceptable rate increases are not enough to cover operating expenses, the nonessential operating expenses may need to be cut back in order to offset lower revenues.

8.10 Monitoring and Reporting

The District monitors how effective the combination of water shortage response actions in each water shortage level is with meters. All residential, commercial, and irrigation customer accounts are metered. During times of declared water shortages under the District's Water Shortage Response Policy and Procedure, the District will review the metered billing data and compare this data with water billing data in prior months and during non-shortage years to determine if demand is being reduced. If the needed percent reductions are not being met, the District can implement additional shortage response actions. The District will be required to report its annual supply and demand to the state in the annual assessment report, due June 1 of each year starting in 2022. Additionally, the District reports total monthly production to the State Water Resources Control Board as originally required by Governor Brown's Executive Orders B-29-15 and B-36-15.

The District has a 24-hour telemetry system, installed in 1992 and updated to utilize current technology, which monitors the water flows in the distribution system, pump stations, and reservoirs (water storage tanks), as well as control valve settings on the turnouts. If any difficulties or questions of accuracy develop in the telemetry monitoring of the District's facilities, due to power outages, etc., crews will be dispatched at least twice a day to take manual readings. During emergencies, or 50% supply cutbacks, the reservoir levels will be reported to the General Manager on a daily basis.

8.11 Special Water Feature Distinction

Per Water Code Section 10632(b), for purposes of developing a WSCP 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 demand reduction measures clearly define water features subject to restrictions to only include ornamental fountains, ornamental lakes, and ornamental ponds. Refer to Section 8.5.

8.12 Plan Adoption and Implementation

The District's adoption, submittal, and implementation of its WSCP is completed in a transparent manner that is accessible to all interested parties, including its customers, local government agencies and their employees, as well as proactive coordination with neighboring water agencies. Transparency is important for a successful operation and planning of our local, regional and state water resources.

In most cases, the District notices, adopts, submits and makes available its WSCP in conjunction with its UWMP every five years and follows the processes and schedule outlined in Chapter 10 of the District's UWMP. However, the WSCP may be periodically amended independently of the UWMP as needed. The District will adhere to the following steps for adoption, submittal and availability when independently amending the WSCP.

- Staff reviews WSCP and proposed amendments based on analysis
- Provide legally required notice to public, cities, and counties
- Public Hearing & Board Adoption, Implement
- Submit to Department of Water Resources
- Publish WSCP on website and notify customers via existing print/digital outreach channels