

ORDINANCE NO. 21-03

**AN ORDINANCE OF THE MOULTON NIGUEL WATER DISTRICT
ADOPTING THE WATER SHORTAGE CONTINGENCY PLAN AND PRESCRIBING
WATER CONSERVATION RULES AND REGULATIONS**

WHEREAS, the Moulton Niguel Water District (District) is a California Water District organized and operating according to California law; and

WHEREAS, periodic droughts are a historic fact in the State of California; and

WHEREAS, the District derives the water that it delivers to its customers from waters imported from outside District boundaries; and

WHEREAS, the quality and quantity of imported water is under the control of other agencies, and may be subject to conditions beyond the control of those other agencies or the District; and

WHEREAS, California Constitution Article X, Section 2 and California Water Code Section 100 provide that because of conditions prevailing in the state of California (the “State”), it is the declared policy of the State that the general welfare requires that the water resources of the State shall be put to beneficial use to the fullest extent of which they are capable, the waste or unreasonable use of water shall be prevented, and the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and the public welfare; and

WHEREAS, pursuant to California Water Code Section 106, it is the declared policy of the State that the use of water for domestic use is the highest use of water and that the next highest use is for irrigation; and

WHEREAS, pursuant to California Water Code Sections 375-378, the District is authorized to adopt and enforce a water conservation program to reduce the quantity of water used by persons within its jurisdiction for the purpose of conserving the water supplies of the District; and

WHEREAS, California, including Orange County, experienced significant dry year conditions in 2012-2017, which led local water agencies to declare water shortage conditions that triggered drought actions; and

WHEREAS, beginning on January 17, 2014, when then Governor Brown proclaimed condition of statewide drought, the District experienced a direct impact on the reliability of available water supplies. The District’s reliability was increased through customer curtailment due to demand management measures implemented; and

WHEREAS, following the end of the statewide drought conditions, the California Legislature amended the Urban Water Management Planning Act in 2018 to include additional water shortage planning requirements. Water Code Section 10632 now mandates the adoption of Water Shortage Contingency Plans (WSCP) with prescribed elements, and the District must describe in its WSCP the legal authorities that empower the District to enforce shortage response actions identified in its WSCP; and

WHEREAS, because of the prevailing conditions in the State and the declared policy of the State, the District hereby finds and determines that it is necessary and appropriate for the District to amend, adopt, implement, and enforce a water conservation program to reduce the quantity of water used by consumers within the District to ensure that there is sufficient water for human consumption, sanitation, and fire protection and to ensure the District can implement and enforce the shortage response actions specified in its WSCP; and

WHEREAS, pursuant to California Water Code Section 350, the Board of Directors is authorized to declare a water shortage emergency to prevail within its jurisdiction when it finds and determines that the District will not be able to or cannot satisfy the ordinary demands and requirements of water consumers without depleting the water supply of the District to the extent that there would be insufficient water for human consumption, sanitation, and fire protection, and as more fully set forth in this chapter, based upon the occurrence of one or more of the following conditions or circumstances:

- A. A general water supply shortage due to increased demand and/or limited supplies.
- B. Distribution or storage facilities of the District, or any agency supplying water to the District, become inadequate or are restricted.
- C. A major failure of the supply, storage, and/or distribution facilities of the District or any agency supplying water to the District.
- D. Contamination of the water supply, storage, and/or distribution facilities of the District or any agency supplying water to the District.
- E. Act of nature which in the opinion of the District constitutes an emergency situation or which require special water conservation actions.

WHEREAS, in the event the District determines that it is necessary to declare that a water shortage emergency exists, this Ordinance authorizes the District to implement certain shortage response measures and a water conservation and regulatory program to regulate water consumption activities within the District and ensure that the water delivered in the District is put to beneficial use for the greatest public benefit, with particular regard to domestic use, including human consumption, sanitation, and fire protection, and that the waste or unreasonable use of water is prevented; and

WHEREAS, the District is authorized to prescribe and define by ordinance restrictions, prohibitions, and exclusions for the use of water during a threatened or existing water shortage and adopt and enforce a water conservation and regulatory program to: (i) prohibit the waste of District water or the use of District water during such period; (ii) prohibit use of water during such periods for specific uses that the District may from time to time find nonessential; and (iii) reduce and

restrict the quantity of water used by those persons within the District for the purpose of conserving the water supplies of the District; and

WHEREAS, the District hereby finds and determines that as hereby amended, the District shall: (i) implement water conservation and water shortage response measures; (ii) regulate the water consumption activities of persons within the District for the purposes of conserving and protecting the District’s water supplies, reducing the quantity of water consumed, and deterring and preventing the waste or unreasonable use or unreasonable method of use of valuable water resources; and (iii) establish and collect regulatory fees and impose administrative penalties as set forth herein to accomplish these purposes and/or recover the costs of the District’s water conservation and regulatory program; and

WHEREAS, the District hereby finds and determines that it is desirable to codify the rules and regulations governing its actions, and the actions of persons using and consuming water within the District, particularly during declared water shortages and water shortage emergencies, to protect the general welfare and the District’s water supplies, and to reduce water consumption in accordance with the declared policies and laws of the State; and

WHEREAS, the District desires to adopt a WSCP in the form attached hereto as Exhibit A, and by this reference, incorporated herein, and further desires to establish standards and procedures to enable implementation and enforcement of local water shortage contingency measures. These measures align with the California Water Code Section 353 which specifies that “when the governing body has so determined and declared the existence of an emergency condition of water shortage within its service area, it shall thereupon adopt such regulations and restrictions on the delivery of water and the consumption within said area of water supplied for public use as will in the sound discretion of such governing body conserve the water supply for the greatest public benefit with particular regard to domestic use, sanitation, and fire protection.”

NOW THEREFORE BE IT ORDAINED by the Board of Directors of the Moulton Niguel Water District as follows:

Section 1. Findings and Determinations

The District hereby finds and determines that the above recitals are true and correct and incorporated herein.

Section 2. Adoption of Water Shortage Contingency Plan

The District hereby adopts the Water Shortage Contingency Plan in the form attached hereto as Exhibit A, and by this reference, such Water Shortage Contingency Plan is incorporated as if fully set forth herein. This Ordinance, including the Water Shortage Contingency Plan attached hereto and incorporated herein, shall also serve as the District’s Water Conservation Ordinance in accordance with Section 375 *et seq.* of the California Water Code.

Section 3. Amendments to District Rules and Regulations.

The District’s Article IV Rules and Regulations, Section 5.N., and Exhibit G, amendments to Section 5.N., are hereby amended in their entirety and replaced with the following rules and regulations governing water conservation:

N. Water Conservation

1. Findings and Intent

(A) **Findings.** The Board of Directors finds and determines that it is necessary and appropriate for the District to adopt, implement, and enforce a water conservation program, based on the WSCP, to reduce the quantity of water used by persons within the District to ensure that there is sufficient water for human consumption, sanitation, and fire protection. The District further finds and determines that during periods of drought, water shortages, and water shortage emergencies the general welfare requires that the District maximize the beneficial use of its available water resources to the extent that it is capable, and that the waste or unreasonable use, or unreasonable method of use of water shall be prevented and the conservation of water is to be extended with the view to the reasonable and beneficial use thereof in the interests of the people of the District and for the public health, safety, and welfare.

(B) **Intent.** This Section 5.N. is intended to establish:

(1) permanent water conservation Best Management Practices (BMPs) and response measures;

(2) six water shortage levels that provide defined response actions to be implemented during times of declared water shortage or declared water shortage emergency;

(3) rules, regulations, and restrictions on water use (the “Rules”) to be implemented during declared water shortage stages, with increasing restrictions on water use in response to decreasing water supplies and worsening water shortage conditions.

(C) **Demand Management Through Rate Structure Design.** The District’s water budget-based rate structure is designed and intended to be a water demand management tool and to proportionately recover the costs of providing water service within the District. The District’s efforts in managing its water supply are best achieved through its water budget-based rate structure and the calculated water budgets provided to the District’s customers.

(D) **Use of Property.** This Section 5.N. is not intended to repeal, abrogate, annul, impair or in any way interfere with the free use of property by covenant, deed, or other private agreement or with restrictive covenants running with the land to which the District provides water services.

2. Purposes and Scope

(A) **Purposes.** The purposes of this Section 5.N. are to:

(1) protect the health, safety, and welfare of the citizens and property owners of the District;

(2) assure the maximum beneficial use of available water supplies;

(3) attempt to provide sufficient water supplies to meet, at a minimum, the basic needs of human consumption, sanitation, and fire protection; and

(4) authorize restrictions in water use during declared water shortages to maximize the beneficial use of water, and the imposition of penalties for violations of the Rules.

(B) **Scope.** The provisions of this Section 5.N. shall apply to all persons within the District and all property served by the District wherever situated, regardless of whether any person using potable water or recycled water has a contract or account for water service. Nothing in this Section 5.N. is intended to affect or limit the ability of the District to respond to an emergency, including an emergency that affects the ability of the District to supply water.

3. Definitions

For the purposes of this Section 5.N., the following words, terms, and phrases shall have the following meanings:

(A) “Appellant” means the person appealing the imposition of a penalty imposed by the District for a violation of the Rules pursuant to this Section 5.N.

(B) “BMPs” mean best management practices.

(C) “Calculated water budget” means the water budget calculated by the District for each customer in accordance with the District’s water rate structures.

(D) “Calculated recycled water budget” means the recycled water budget calculated by the District for each customer in accordance with the District’s recycled water rate structure.

(E) “District” means the Moulton Niguel Water District.

(F) “General Manager” means the General Manager of the District or her or his authorized designee.

(G) “Immediate emergency” shall have the meaning set forth in Section 5.N.6.(C).

(H) “Person” means any natural person, firm, joint venture, joint stock company, partnership, public or private association, club, company, corporation, business trust,

organization, public or private agency, government agency or institution, school district, college, university, any other user of water provided by the District, or the manager, lessee, agent, servant, officer or employee of any of them or any other entity which is recognized by law as the subject of rights or duties.

(I) "Potable Water" means that water furnished to the customer which complies with federal and State drinking water regulations and standards, or any other applicable standards, for human consumption.

(J) "Property owner" or "owner" means the record owner of real property as shown on the most recently issued equalized assessment roll.

(K) "Recycled water" means water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource.

(L) "Rules" shall have the meaning set forth in in Section 5.N.1.(B)(3).

(M) "State" means the state of California, including any department or regulatory agency thereof.

(N) "Water customer" or "customer" means a person who, according to the District's records, has an account with the District and receives water service or recycled water service to a parcel of property.

(O) "WSCP" means Water Shortage Contingency Plan.

(P) "Water shortage emergency" means a condition existing within the District in which the ordinary water demands and requirements of persons within the District cannot be satisfied without depleting the water supply of the District to the extent that there would be insufficient water for human consumption, sanitation, and fire protection. A water shortage emergency includes both an immediate emergency, in which the District is unable to meet current water needs of persons within the District, as well as a threatened water shortage, in which the District determines that its future supply of water may not meet an anticipated future demand.

4. Permanent Water Conservation Requirements– Prohibition Against Waste

Water Conservation Best Management Practices. The District implements water conservation BMPs to conserve water, prevent the waste or unreasonable use or unreasonable method of use of water, and preserve the District's water supplies. The District's water conservation BMPs shall be in effect at all times as prescribed by the Board and shall be permanent. Violations of this Section constitute waste and an unreasonable use of water.

(A) **Installation of Water Conservation Devices.** No water shall be provided by the District for internal or external use to any residential, commercial, industrial, agricultural, recreational, governmental, or public building or structure of any kind which is constructed or

altered and in which either internal or external irrigation or domestic water piping or water fixtures are to be installed, extended, or altered in any way, including, but not limited to, any plumbing, water piping, or water fixtures for which a construction permit is required to be obtained from the County of Orange or its successor, or for which District approval of plans and service applications are required, unless the new, extended, or altered plumbing, water piping, or other water using facilities conform to the requirements and standards of the District's Rules and Regulations.

(B) **Standards for Water Conservation Devices.** The required water conservation devices and standards of the District are those set forth on Exhibit "F" to these Rules and Regulations. Nothing herein provided shall be deemed to relieve any person from compliance with the plumbing code of the County of Orange or any other state or local plumbing or building requirements.

(C) **Limits on Watering Hours.** Watering or irrigating any lawn, landscape, or other vegetated area with potable water may be prohibited between the hours of 9:00 a.m. and 5:00 p.m. Pacific time on any day, except by use of a hand-held bucket or similar container reasonably used to convey water for irrigation purposes, a hand-held hose equipped with a fully functioning, positive self-closing shut-off nozzle or device may be used during the otherwise restricted period. If necessary, and for very short periods of time for the express purpose of adjusting or repairing an irrigation system, one may operate an irrigation system during the otherwise restricted period.

(D) **No Watering During Rain.** Watering or irrigating any outdoor landscapes with potable water during and up to forty-eight (48) hours after one quarter inch (¼") rainfall within a twenty-four (24) hour period is prohibited.

(E) **Plant Low-Water Demand Plants and Trees.** When installing new or renovated landscaping, it is recommended that all customers utilize only low-water demand trees and plants. New turf should only be installed for functional purposes. Functional turf is defined as turf used for athletic or high traffic areas.

(F) **No Excessive Water Flow or Runoff.** No person shall cause or allow watering or irrigating any lawn, landscape, or other vegetated area in a manner that causes or allows excessive runoff of potable or recycled water onto an adjoining sidewalk, driveway, street, alley, gutter or ditch, parking lots, structures, non-irrigated areas, or off the property.

(G) **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 an a fully functioning, positive self-closing shut-off device or a low-volume, high-pressure cleaning machine equipped to recycle any water used.

(H) **Obligation to Fix Leaks, Breaks or Malfunctions.** Excessive use, loss or escape of potable or recycled water through breaks, leaks or other malfunctions in the water user's plumbing or distribution system should be avoided for any period of time after such escape of

water should have reasonably been discovered and corrected and in no event more than five (5) days of receiving notice from the District, is prohibited.

(I) **Re-circulating Water Required for Decorative Water Fountains and Decorative Water Features.** Operating a decorative water fountain or other decorative water feature that does not use re-circulated water is prohibited.

(J) **Limits on Washing Vehicles.** Using potable 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, a hand-held hose equipped with an a fully functioning, positive self-closing automatic water shut-off nozzle or a low volume power washer with a fully functioning, positive self-closing shut-off nozzle. This paragraph does not apply to commercial car washes or the washing of vehicle regulations where the health, safety, and welfare of the public is contingent upon frequent vehicle cleaning, such as garbage trucks and vehicles used to transport food and perishables.

(K) **Drinking Water Served Upon Request Only.** Eating or drinking establishments, including but not limited to a restaurant, hotel, café, cafeteria, bar, club or other public place where food or drinks are sold, served, or offered for sale, should only provide drinking water to persons when expressly requested.

(L) **Commercial Lodging Establishments Must Provide Option to Not Launder Linens Daily.** Hotels, motels and other commercial lodging establishments should provide customers the option of not having towels and linens laundered daily. Commercial lodging establishments should prominently display notice of this option in each bathroom using clear and easily understood language.

(M) **Installation of Single Pass Cooling Systems.** Single pass cooling systems shall not be installed in buildings requesting new potable water service.

(N) **Ceased Installation of Non-Recirculating Water Systems in Commercial Car Washes and Laundry Systems.** Non-recirculating water systems in commercial car washes and laundry systems shall not be installed.

(O) **Restaurants Required to Use Water Conserving Dish Wash Spray Valves.** Food preparation establishments, such as restaurants or cafés, shall not use non-water conserving dish wash spray valves.

(P) **Swimming Pools and Spa Covers.** Property owners who have a swimming pool or a spa are encouraged to cover the facilities to minimize water loss due to evaporation.

(Q) **Water Waste and Unreasonable Water Use Prohibited.** The waste or unreasonable use or unreasonable method of use of water by any person shall be prohibited at all times.

(R) **Recycled Water Use Required if Available.** After the District has provided to the user an analysis demonstrating that recycled water is available, cost effective, and safe for the intended use, and the user has been given a reasonable time to make the conversion to recycled water, the use of potable water is prohibited unless otherwise granted exemption by the General Manager or their designee.

(S) **Water Recycling – New Service.** Prior to the connection of any new service, the District will determine whether recycled water is available and safe for the intended use to supply all or some of the water needed by the user. If available, and safe for the intended use, recycled water must be used.

5. Water Shortages

Reductions in Water Supply. Should the water conservation BMPs be inadequate to protect the District’s potable water supply, the District Board of Directors reserves the right to implement further mandatory Rules to reduce the amount of water used within the District. The Rules are necessary to respond to any significant reductions to the District’s water supply as a result of drought, natural disasters, regulatory action, and planned or unplanned potable water shortages, including but not limited to, shortages arising from the following circumstances or events that are or may impact the District’s water supply:

(A) Metropolitan Water District of Southern California (MWD) and/or the Municipal Water District of Orange County (MWDOC), the District’s wholesale water supplier, has determined that a drought, water shortage, or water shortage emergency exists or has implemented or taken other actions requiring a reduction in water demand;

(B) MWD’s Water Supply Allocation Plan implementation or other actions resulting in a reduction in water supply;

(C) The State has determined that a drought, water shortage, or water shortage emergency exists;

(D) The State has implemented restrictions on the use of water or reduced or restricted the delivery of wholesale water to the District;

(E) Regional or statewide importation or local distribution systems or facility(ies) have failed or have been shut down (e.g., a main break, reservoir, pipeline, canal, or other distribution or conveyance system failure);

(F) Alternative water supplies are limited or unavailable; and,

(G) Any other natural disaster that impacts the availability of water to the District.

6. Declaration of Water Shortages

(A) **Determination of Water Supply Shortage.** The District will follow the written decision-making process defined in the WSCP to assess water supply reliability on an annual basis and shall submit a water shortage assessment report to the California Department of Water Resources by July 1 of each year.

(1) The District will determine if a water shortage exists based on the water shortage criteria and stages defined in the WSCP.

(2) In the event a water shortage is triggered according to the procedures and conditions defined in the WSCP, the Board of Directors will declare a shortage according to the defined water shortage levels in the WSCP and as set forth below.

(B) **Declaration of Water Shortage Emergency.** Excepting in event of a breakage or failure of water treatment, storage, or conveyance infrastructure causing an immediate emergency (an “immediate emergency”), the declaration of a water shortage emergency during any water shortage stage shall be made in accordance with California Water Code Sections 350 *et seq.* The District will follow the written decision-making process defined in the WSCP to declare a water shortage.

(C) **Determination of Immediate Emergency.** Notwithstanding the forgoing, if an immediate emergency occurs and the Board of Directors cannot meet in time to act to protect the public interest pursuant to this Section 5.N., the General Manager is hereby authorized and directed to implement such provisions of this Section 5.N. upon his or her written determination that the District cannot supply adequate water to meet the ordinary demands of water consumers, and that such implementation is necessary to protect the public health and safety.

(1) The implementation of any such provisions shall take effect immediately upon making a public announcement of the immediate emergency and publication of such immediate emergency on the District’s website.

(2) Such written determination shall be delivered to the Board of Directors and considered at a general or special meeting for review, revocation, or ratification. Such meeting shall be held upon the earliest date that a quorum of the Board of Directors is available.

(3) At the Board of Directors meeting, the General Manager shall update the Board of Directors on the severity and length of the immediate emergency.

(4) During an immediate emergency, the District may specify temporary restrictions on the use of potable and recycled water. Any person who willfully fails to comply with those temporary restrictions may be subject to an administrative penalty of \$500 per offense and have his or her water meter locked by the District.

(D) **Actions or Restrictions by the State or Other Agencies.** In the event the State or other agencies, through executive action, emergency legislation or other actions, impose water conservation requirements that are not included in this water conservation ordinance, the Board of Directors is authorized to implement and enforce such requirements as authorized by law.

7. **Water Supply Shortage Levels and Response Actions**

(A) **Shortage Stages.** The District hereby establishes 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, as set forth below. The District's water shortage levels and response actions are aligned with the State water shortage levels and defined in the District's WSCP and therefore comply with the Water Code Section 10632 (a)(3) as identified above. (Wat. Code Section 10632 (a)(3)(A).)

(B) **Water Shortage Stage 1** – Water Shortage Stage 1 constitutes a consumer demand reduction of up to 10%. Shortage response actions listed under this stage include:

(1) **Voluntary Reductions.** During Water Shortage Stage 1 (“Stage 1”), the District's conservation efforts will be focused on voluntary reductions in potable water use. Potable and recycled water customers may reduce demand by following the District's BMPs.

(2) **Refills of Swimming Pools.** Any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.

(3) **Mandatory Rules Governing Potable Water Use.** During Stage 1, recycled water customers shall be prohibited from using potable water for outdoor irrigation.

(C) **Water Shortage Stage 2** – constitutes a consumer demand reduction of up to 20%. Shortage response actions listed under this stage include:

(1) **Mandatory Rules Governing Customer Water Budgets.** During Water Shortage Stage 2 (“Stage 2”), all water customers, both potable and recycled, are prohibited from using water in excess of their calculated water budget.

(2) **Penalties.** During Stage 2, a Conservation Penalty will be applied to all billing units of water used in excess of 125% of the customer's monthly water budget. The Conservation Penalty for Residential and Multi-Family customers equals the difference between Tier 5 and Tier 3 rates, and for Commercial, Potable Irrigation, and Recycled customers, the Conservation Penalty equals the difference between Tier 4 and Tier 2. Stage 2 penalties for 2021 are listed in the table below for illustrative purposes. The

penalty would be based on the current rate in place at time the water shortage stage is implemented.

(a) Such penalty shall be in addition to the water service fees the District charges for the water delivered to the customer.

Single Family/Multi-Family Stage 2 Conservation Penalty
Tier 5 Water Rate - Tier 3 Water Rate = Conservation Penalty

Calendar Year	Tier 5 Water Rate (a)	Tier 3 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.86	3.59	6.27

Commercial and Irrigation Stage 2 Conservation Penalty
Tier 4 Water Rate - Tier 2 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 2 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.86	3.59	6.27

Recycled Stage 2 Conservation Penalty
Tier 4 Water Rate - Tier 2 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 2 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.32	3.05	6.27

(3) **Refills of Swimming Pools.** During Stage 2, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of their calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.

(4) **New Plant Bill Adjustments.** During Stage 2, any person installing new landscaping, a new plant variance will only be granted for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

(D) **Water Shortage Stage 3 –** Water Shortage Stage 3 constitutes a consumer demand reduction of up to 30%. Shortage response actions listed under this stage include:

(1) **Mandatory Rules Governing Customer Water Budgets.** During Water Shortage Stage 3 (“Stage 3”), all water customers, both potable and recycled, shall be prohibited from using water in excess of their individually calculated water budgets.

(2) **Penalties.** During Stage 3, a Conservation Penalty will be applied to all billing units of water used in excess of 100% of the customer’s monthly water budget. The Conservation Penalty for Residential and Multi-Family customers will equal the difference between the Tier 5 and Tier 2 water rates. The Conservation Penalty for Commercial, Irrigation, and Recycled customers will equal the difference between the Tier 4 and Tier 1 water rates. Stage 3 penalties for 2021 are listed in the table below for illustrative purposes. The penalty would be based on the current rate in place at time the water shortage stage is implemented.

(a) Such penalty shall be in addition to the water service fees the District charges for the water delivered to the customer.

Single Family/Multi-Family Stage 3 Conservation Penalty
Tier 5 Water Rate - Tier 2 Water Rate = Conservation Penalty

Calendar Year	Tier 5 Water Rate (a)	Tier 2 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.86	2.42	7.44

Commercial and Irrigation Stage 3 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.86	2.42	7.44

Recycled Stage 3 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.32	1.63	7.69

(3) **Refills of Swimming Pools.** During Stage 3, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.

(4) **New Plant Bill Adjustments.** During Stage 3, any person installing new landscaping, a new plant variance will only be granted for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

(E) **Water Shortage Stage 4** – Water Shortage Stage 4 constitutes a consumer demand reduction of up to 40%. Shortage response actions listed under this stage include:

(1) **Modification of Potable Water Budgets.** During Water Shortage Stage 4 (“Stage 4”), Single Family Residential, Multi-Family Residential, and Potable Irrigation customers shall have their outdoor water budgets reduced by 40% due to reduced water supplies.

(2) **Modification of Recycled Water Budgets.** During Stage 4, Recycled water customers shall have their outdoor water budgets reduced by 10% due to reduced recycled water supplies.

(3) **Mandatory Rules Governing Customer Water Budgets.** During Stage 4, all water customers, both potable and recycled, shall be prohibited from using water in excess of their individually calculated water budgets.

(4) **Penalties.** During Stage 4, any customer who willfully uses water in excess of his or her modified water budget will be subject to a Conservation Penalty. The Conservation Penalty for Residential and Multi-Family customers will equal the difference between the current Tier 5 and Tier 2 rates. The Conservation Penalty for Commercial, Irrigation, and Recycled water customers will equal the difference between the current Tier 4 and Tier 1 water rates. Stage 4 penalties for 2021 are listed in the table below for illustrative purposes. The penalty would be based on the current rate in place at time the water shortage stage is implemented.

(a) The penalty shall be in addition to the water service fees the District charges for the water delivered to the customer.

Single Family/Multi-Family Stage 4 Conservation Penalty
Tier 5 Water Rate - Tier 2 Water Rate = Conservation Penalty

Calendar Year	Tier 5 Water Rate (a)	Tier 2 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.86	2.42	7.44

Commercial and Irrigation Stage 4 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.86	2.42	7.44

Recycled Stage 4 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.32	1.63	7.69

(5) **Refills of Swimming Pools.** During Stage 4, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.

(6) **New Plant Bill Adjustments.** During Stage 4, any person installing new landscaping, a new plant variance will only be granted for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

(F) **Water Shortage Stage 5 –** Water Shortage Stage 5 constitutes a consumer demand reduction of up to 50%. Shortage response actions listed under this stage include:

(1) **Modification of Potable Water Budgets.** During Water Shortage Stage 5 (“Stage 5”), Single Family Residential, Multi-Family Residential, and Irrigation customers using potable water will have their outdoor water budgets reduced by 70% to meet reduced water supplies.

(2) **Modification of Recycled Water Budgets.** All Recycled water customers shall have their outdoor water budgets reduced by 20% due to reduced recycled water supplies.

(3) **Mandatory Rules Governing Customer Water Budgets.** During Stage 5, all water customers shall be prohibited from using water in excess of their modified water budgets.

(4) **Penalties.** During Stage 5, any customer who willfully uses water in excess of his or her modified water budget will be subject to a Conservation Penalty. The Conservation Penalty for Residential and Multi-Family customers will equal the

difference between Tier 5 and Tier 2 water rates. The Conservation Penalty for Commercial, Irrigation, and Recycled water customers will equal the difference between the current Tier 4 and Tier 1 water rates. Stage 5 penalties for 2021 are listed in the table below for illustrative purposes. The penalty would be based on the current rate in place at time the water shortage stage is implemented.

(a) Such penalty shall be in addition to the water service fees the District charges for the water delivered.

Single Family/Multi-Family Stage 5 Conservation Penalty
Tier 5 Water Rate - Tier 2 Water Rate = Conservation Penalty

Calendar Year	Tier 5 Water Rate (a)	Tier 2 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.86	2.42	7.44

Commercial and Irrigation Stage 5 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.86	2.42	7.44

Recycled Stage 5 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.32	1.63	7.69

(5) **Refills of Swimming Pools.** During Stage 5, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.

(6) **New Plant Bill Adjustments.** During Stage 5, any person installing new landscaping, a new plant variance will only be granted for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

(G) **Water Shortage Stage 6 –** Water Shortage Stage 6 constitutes a consumer demand reduction of over 50%. Shortage response actions listed under this stage include:

(1) **Modification of Potable Water Budgets.** During Water Shortage Stage 6 (“Stage 6”), Single Family Residential, Multi-Family Residential, and Irrigation customers using potable water will have their outdoor water budgets reduced by 100% to meet reduced water supplies.

(a) all Single-Family Residential and Multi-Family Residential customers shall have their indoor water budgets reduced from 55 gallons per capita per day to 40 gallons per capita per day;

(2) **Modification of Recycled Water Budgets.** During Stage 6, all Recycled customers will have their outdoor water budgets reduced by 30% to meet reduced recycled water supplies.

(3) **Mandatory Rules Governing Customer Water Budgets.** During Stage 6, all customers shall be prohibited from using water in excess of their modified water budgets. All outdoor irrigation with potable water shall be prohibited within the District’s service area.

(4) **Penalties.** During Stage 6, any customer who willfully uses water in excess of his or her modified water budget will be subject to a Conservation Penalty. The Conservation Penalty for Single Family Residential and Multi-Family Residential customers will equal the difference between the current Tier 5 and Tier 2 rates. The Conservation Penalty for Commercial, Irrigation, and Recycled water customers will equal the difference between the current Tier 4 and Tier 1 water rates. Stage 6 penalties for 2021 are listed in the table below for illustrative purposes. The penalty would be based on the current rate in place at time the water shortage stage is implemented.

(a) Such penalty shall be in addition to the water service fees the District charges for the water delivered.

Single Family/Multi-Family Stage 6 Conservation Penalty
Tier 5 Water Rate - Tier 2 Water Rate = Conservation Penalty

Calendar Year	Tier 5 Water Rate (a)	Tier 2 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.86	2.42	7.44

Commercial and Irrigation Stage 6 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.86	2.42	7.44

Recycled Stage 6 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2021	9.32	1.63	7.69

(5) **Refills of Swimming Pools.** During Stage 6, no customer shall refill a swimming pool.

(6) **Plant Bill Adjustments.** During Stage 6, no customer shall install new landscaping.

8. Protocols for Communication

Notice and Publication. Upon declaration of a water shortage, the District will inform all relevant stakeholders, such as customers, the public, interested parties, and local, regional, and state governments, of the effective date of the water shortage response actions associated with the relevant stage according to the communication protocols identified in the District’s WSCP.

9. Violations and Remedies

(A) **Misdemeanor Violations.** It shall be unlawful for any person to willfully violate the provisions of this Section 5.N. A violation of any of these provisions is a misdemeanor in accordance with California Water Code Section 377.

(B) **Other Remedies.** In addition to any other remedies provided in this Section 5.N or available under applicable law, the District may alternatively seek injunctive relief in the Superior Court or take enforcement action, including discontinuing or appropriately limiting water service to any customer, for violations of this Section 5.N. All remedies provided herein shall be cumulative and not exclusive.

10. Notice and Collection of Penalties

(A) **Notice and Due Process.** As set forth in Section 5.N.8, upon the declaration of a water shortage stage and publication of the notice required herein, due and proper notice shall be deemed to have been given each and every person supplied water within the District of the Rules governing the applicable water shortage stage.

(B) **Collection of Penalties.** Any penalty imposed pursuant to the Rules of any applicable water shortage stage set forth in this Section 5.N. may be collected on a customer’s water bill. Any penalty shall be applicable to water used in violation of the Rules during the first complete billing cycle after the declaration of the applicable water shortage stage.

(C) **Notice of Violation.** The receipt of a water bill with any applicable penalties shall serve as notice of violation of the District’s Rules.

11. Appeal Procedures

(A) **Appeal Request.** Any person (an “Appellant”) who wishes to appeal the imposition of an administrative penalty imposed by the District pursuant to this Section 5.N. shall comply with the following procedures:

(B) **Appeal Request Form.** An Appeal Request form shall be submitted to the Conservation Department.

(1) Appeal Request forms may be obtained at the District’s Main Office or downloaded from the District’s website at www.MNWD.com.

(2) An Appeal Request form shall be received by the District no later than thirty calendar days from the date that the Appellant’s water bill for the four-week period in which the penalty or penalties were imposed is due.

(C) **Additional Documentation.** Additional documentation may be requested at the discretion of the District. Such documentation may include, but is not limited to, school records, driver’s licenses, business licenses, lease agreements.

(D) **Site Survey.** After an Appeal Request form has been received, a site survey may be required by District staff to verify the irrigated square footage of the property where the water was delivered. The site survey will be at no charge to the person and will require the person who submitted the Appeal Request form to be present.

(E) **District Response.** A response to an Appeal Request shall be provided by the District within thirty calendar days from receipt of the Appeal Request form.

(F) **Review of Denial of Appeal Request.** If an Appeal Request is denied, the Appeal Request form may be resubmitted by the Appellant for review by the District’s Assistant General Manager. The Decision by the District’s Assistant General Manager shall be final.

12. Hardship Waiver

(A) **Undue and Disproportionate Hardship.** If, due to unique circumstances, a specific requirement of the WSCP would result in undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to water users generally or to similar property of classes of water users, then the person may apply for a waiver to the requirements as provided in this section.

(B) **Written Finding.** The waiver may be granted or conditionally granted only upon a written finding of the existence of facts demonstrating an undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to water users generally or to similar property or classes of water use due to specific and unique circumstances of the user or the user’s property.

(C) **Application and Documentation.** Application for a waiver must be on a form prescribed by the District. The application must be accompanied by photographs, maps, drawings, and/or other information, including a written statement of the applicant.

(D) **Required Findings for Waiver.** An application for a waiver will be denied unless the District's General Manager finds, based on the information provided in the application supporting documents, or such additional information as may be requested, and on water use information for the property as shown by the records of the District, all of the following:

(1) That the waiver does not constitute a grant of special privilege inconsistent with the limitations upon other residents and businesses;

(2) That because of special circumstances applicable to the property or its use, the strict application of the WSCP would have a disproportionate impact on the property of use that exceeds the impacts to residents and businesses generally;

(3) That the authorizing of such waiver will not be of substantial detriment to adjacent properties, and will not materially affect the ability of the District to effectuate the purpose of the WSCP and will not be detrimental to the public interest; and

(4) That the condition or situation of the subject property of the intended use of the property for which the waiver is sought is not common, recurrent or general in nature.

(E) **Approval Authority.** The District's General Manager or designee must act upon any completed application no later than ten (10) days after submittal and may approve, conditionally approve, or deny the waiver. The applicant requesting the waiver must be promptly notified in writing of any action taken. Unless specified otherwise at the time a waiver is approved, the waiver will apply to the subject property during the period of the mandatory water supply shortage condition. The decision of the District's General Manager will be final.

Section 4. Conflicting Provisions

If provisions of Section 5.N. are in conflict with each other, other provisions of the Article IV, any other resolution or ordinance of the District, or any State law or regulation, the more restrictive provisions shall apply.

Section 5. Severability

If any provision, section, subsection, sentence, clause or phrase of this Ordinance, or the application of same to any person or set of circumstances, is for any reason held to be unconstitutional, void or invalid, the validity of the remaining portions of this Ordinance shall not be affected, it being the intent of the Board of Directors in adopting this Ordinance that no portions, provisions, or regulations contained herein shall become inoperative, or fail by reason of the

provisions, or regulations contained herein shall become inoperative, or fail by reason of the unconstitutionality of any other provision hereof, and all provisions of this Ordinance are declared to be severable for that purpose.

Section 6. Exemption from California Environmental Quality Act

The District finds that this chapter and actions taken hereafter pursuant to this chapter are exempt from the provisions of the California Environmental Quality Act (CEQA) of 1970 as specific actions necessary to prevent or mitigate an emergency pursuant to Section 15307 of the CEQA Guidelines.

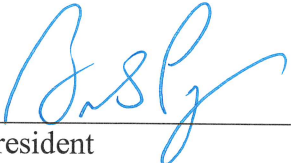
Section 7. Effective

This Ordinance shall be effective immediately upon adoption. The Secretary of the Board is hereby directed to publish this Ordinance in accordance with Water Code Section 376.


APPROVED, ADOPTED, and SIGNED this 13th day of May, 2021.

PASSED AND ADOPTED at a regular meeting of the Board of Directors of Moulton Niguel Water District held on May 13, 2021 by the following vote:

Duane Cave:	AYE
Richard Fiore:	AYE
Donald Froelich:	AYE
William Moorhead:	AYE
Brian Probolsky:	AYE
Diane Rifkin:	AYE
Sherry Wanninger:	AYE



 President
 MOULTON NIGUEL WATER DISTRICT
 and the Board of Directors thereof



 Secretary
 MOULTON NIGUEL WATER DISTRICT
 and the Board of Directors thereof

EXHIBIT A
WATER SHORTAGE CONTINGENCY PLAN

[see attached]



Water Shortage Contingency Plan

2021

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Chapter 1 Introduction

Moulton Niguel Water District (District or MNWD) relies on imported water and locally produced recycled water to meet customer demands. Imported water is purchased from Metropolitan Water District of Southern California (MWD). More frequent and longer-lasting dry periods, regulatory constraints, and seismic risks can result in water delivery system outages that increase stress on water supply reliability. As a result, the District must be prepared to take reasonable actions to balance water demands during a water shortage.

Recent legislative changes to the California Water Code (CWC) introduced a new Section 10632, which requires every urban water supplier prepare and adopt a Water Shortage Contingency Plan (WSCP) as part of its Urban Water Management Plan (UWMP). While an element of the UWMP, the WSCP is a stand-alone document that can be separately amended. In 2018, two long-term conservation bills, Senate Bill (SB) 606 and Assembly Bill (AB) 1668, were signed into law by Governor Jerry Brown. The two bills amended portions of the CWC including Section 10632, which mandates a WSCP with certain required elements. The WSCP is a guide for the District's intended actions during a water shortage.

A water shortage is the lack of sufficient available water resources to meet the demands of water usage within the District, either for a short-term or long-term duration. This WSCP is a detailed proposal for use in the event of drought, water supply reductions, failure of a water distribution system, other emergencies, or regulatory statutes, rules, regulations, or policies reducing water supplies by state and federal agencies with jurisdiction over the District. As the District is responsible for serving its customers with reliable, economical, high-quality water and recycled water services, the District is committed to managing available water supply during normal conditions as well as water shortage conditions such as during droughts or water system emergencies. Due to the possibility of increasing water supply strain caused by more frequent and extreme droughts, the District must be prepared for potential constraints on its local and imported water supply. This WSCP is meant to improve preparedness for droughts and other impacts on water supplies by describing the process used to address varying degrees of water shortages.

Section 1.1 Background

In February 2015, the District Board of Directors adopted Ordinance 15-01 laying the foundation for actions during times of a water shortage or emergency. Pursuant to State law, the District was required to adopt a WSCP to address specific "stages" of action to be undertaken in response to water supply shortages. A plan generally included within each stage specified levels of reduction in the use of water that are appropriate for a water agency's service area. Recognizing that water is its most vital resource, the District adopted the WSCP in February 2015, with five water shortage stages and mandates to enable the District to respond to potential shortages, including up to a 50 percent reduction in water supply. In each stage specific practices were identified to reduce water use to preserve the District's water supplies and protect public health and safety. During the most recent drought of 2015, Ordinance 15-01 served as an effective planning tool in reducing water demands and use.

Prior to 2015, the District's Water Conservation Program was contained within the District's Rules and Regulations that had been updated in 2008 as a mechanism to reduce demand under the 2009 to 2010 drought conditions. The 2015 WSCP was revised to utilize the District's Water Budget Based Rate Structure to implement varying stages of restrictions using pricing signals to encourage water use efficiency and conservation. The 2021 WSCP and its implementation Ordinance No. 21-03, Ordinance of the MNWD Adopting the Water Shortage Contingency Plan and Prescribing Water Conservation Rules and Regulations (Ordinance No. 21-03) is a mechanism by which the Board of Directors may implement varying stages of restrictions on water usage resulting from conditions under which normal water usage levels cannot be met. This is achieved by adjusting water allocation parameters to respond to varying levels of water supply conditions. Using the District's Water Budget Based Rate Structure to adjust water allocation parameters empowers customers to personalize decisions on how best to use their individualized water budget. The 2015 WSCP was presented in the form of an ordinance (15-01) to give the District the ability to issue penalties if a customer was in violation of an implemented water shortage stage. The 2021 WSCP is being updated in accordance with CWC Section 10632(a) to include the required WSCP elements and contains six water shortage stages that provide an increasing scale of water use restrictions. Ordinance No. 21-03 prescribes water conservation rules and regulations to enable the District to enforce its shortage response actions specified in Chapter 4 herein.

Section 1.2 Organization of this Document

The WSCP covers the following required elements as set forth by CWC Section 10632:

- **Chapter 1** – Provides an introduction of the WSCP and organization of this document.
- **Chapter 2** – Provides a summary of the water supply analysis and water reliability findings from the 2020 UWMP.
- **Chapter 3** – Provides a description of procedures to conduct and approve the Annual Supply and Demand Assessment.
- **Chapter 4** – Provides an explanation of the WSCP's six standard water shortage levels corresponding to ranges of up to 10, 20, 30, 40, 50, and more than 50 percent shortages.
- **Chapter 5** – Provides a description of the WSCP's shortage response actions that align with the defined shortage levels.
- **Chapter 6** – Identifies the District's communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding any current or predicted shortages and any resulting shortage response actions.
- **Chapter 7** – Identifies the compliance and enforcement measures the District will implement to achieve a reduction in water use.
- **Chapter 8** – Provides a description of the legal authorities that enable the District to implement and enforce its shortage response actions.
- **Chapter 9** – Provides a description of the financial consequences of and responses for each supply shortage stage.
- **Chapter 10** – Identifies how the District will monitor and report water use to ensure the shortage response actions are being achieved.

- **Chapter 11** – Identifies reevaluation and improvement procedures for evaluating the functionality of the WSCP and describes the process to adopt, submit, and amend the WSCP.
- **Chapter 12** – Identifies and defines special water features.
- **Chapter 13** – Identifies the plan, adoption and submittal process for the WSCP.

Chapter 2 Water Supply Reliability

Section 2.1 Water Supply Reliability Analysis

This section summarizes key components related to water system reliability conducted pursuant to CWC Section 10635. The District continues to prioritize water reliability and developing projects or programs to meet customer demands as identified in its 2020 Long Range Water Reliability Plan. The 2020 Long Range Water Reliability Plan is the District's long-term plan to assure adequate water supplies for its customers. However, during periods of extreme drought or emergencies, water shortages may occur from time to time that will require implementation of programs that temporarily reduce water use. The purpose of this WSCP is to provide direction on specific actions to be taken by District staff and customers in response to severe water supply shortage conditions. This WSCP describes the conditions which constitute a water shortage and provides actions for managing water supply and demands during a declared water shortage. Whatever the magnitude of shortfall the District may experience, the WSCP has the following goals:

- Conserve the District's water supply for the greatest public benefit;
- Mitigate the effects of a water supply shortage on public health and safety, economic activity, and customer lifestyle; and
- Utilize the individualized water budgets to encourage available water supplies to be used for the most essential purposes for the duration of the water shortage.

Section 2.1.1 Water Reliability Threats

Critical to the WSCP is understanding how reliability threats could impact the District and its ability to meet the needs of its customers. Imported water supplies are susceptible to system and supply reliability disruptions. System reliability is the ability to meet customer demands during unplanned emergency outages (e.g., seismic events, facility failures, and other catastrophic events) of key facilities. Supply reliability is the ability to meet customer demands during hydrologic variability (e.g., drought and high temperatures) and long-term changes in available imported water supply. Both system and supply reliability disruptions impact the District's ability to serve its water customers. (MNWD, 2021)

Deliveries of imported supplies are dependent on an extensive network of facilities used to acquire, treat, pump, store, and convey imported supplies to the District. Water systems are vulnerable to seismic events (as well as other unplanned facility failures and catastrophes) that could result in varying degrees of water supply disruptions for periods of days, weeks, or months. Given the presence of several major earthquake fault lines in proximity to MWD facilities, earthquakes have a high potential for resulting in an infrastructure outage that could disrupt service to and within the District. System reliability disruptions for the District can be caused by outages of key water facilities, such as MWD's Robert B. Diemer Water Treatment Plant (Diemer WTP) located north of Yorba Linda which delivers water to the District, as well as conveyance and distribution pipelines, such as the East Orange County Feeder No. 2 (EOCF2), or Allen McCollough Pipeline (AMP).

Supply reliability disruptions can be caused by droughts, environmental regulations resulting in restrictions in water exports from the Sacramento-San Joaquin River Delta (Delta), seismic risks to levees in the Delta that protect it from seawater intrusion, and long-term climate variability. Of the many factors affecting supply reliability, the factor with the greatest degree of variability and with the largest

impact on supplies is climate variability and associated effects on hydrology. Climate variability adds a layer of uncertainty in estimating the future availability of imported water. While different climate change models show differing effects, potential changes could include more precipitation falling in the form of rain rather than snow and earlier snowmelt. Earlier snowmelt would result in more runoff occurring in the winter rather than spread out over winter and spring, which in turns impacts supply availability during late spring and summer. **Figure 2-1** depicts some of the potential reliability disruptions to the District service area. (MNWD, 2021)

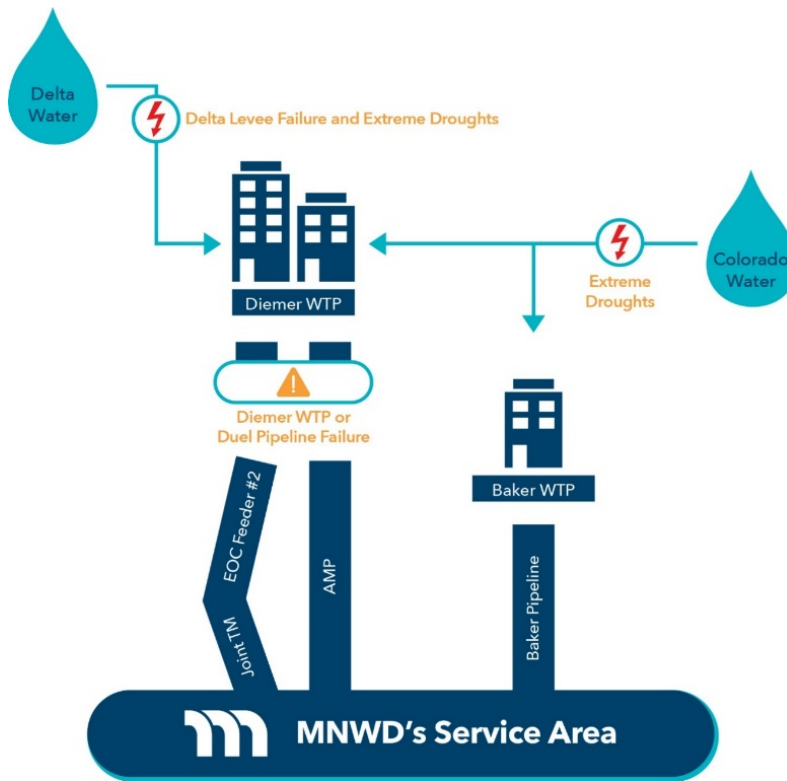


Figure 2-1. Water Delivery Supply and System Risks Representation

Section 2.1.2 Reductions in Water Supply

A water shortage occurs when water supply is insufficient to meet water demands. Reductions in water usage may be necessary to respond to any significant impacts that may reduce the available water supply to the District, including but not limited to shortages arising from the following specific circumstances or events:

- (1) MWD and/or the Municipal Water District of Orange County (MWDOC), the District's wholesale water supplier, has determined that a drought, water shortage, or water shortage emergency exists or has implemented or taken other actions requiring a reduction in water demand;
- (2) MWD Water Supply Allocation Plan implementation or other actions resulting in a reduction in water supply;

- (3) The State has determined that a drought, water shortage, or water shortage emergency exists;
- (4) The State has implemented restrictions on the use of water or reduced or restricted the delivery of wholesale water to the District;
- (5) Regional or statewide importation or local distribution systems or facility(ies) have failed or have been shut down (e.g., a main break, reservoir, pipeline, canal, or other distribution or conveyance system failure);
- (6) Alternative water supplies are limited or unavailable; and,
- (7) Any other natural disaster that impacts the availability of water supply to the District.

Section 2.2 Water Service Reliability

CWC Section 10632(a)(1) directs the WSCP to include an “analysis of water supply reliability conducted pursuant to CWC Section 10635,” which requires an assessment of the reliability of its water service to customers in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years as well as a drought risk assessment. The water service reliability and drought risk assessment are contained within the UWMP, Chapter 7 and are incorporated herein (MNWD, 2021). A summary of the results is included herein. Because the District has relied on imported water supplies (in addition to recycled water) to meet its demands, the reliability levels during all hydrologic year types presented in Chapter 7 of the District’s UWMP reflect MWD’s determination of its ability to reliably meet the demands of its member agencies. Notably, the MWD 2020 UWMP determines that MWD can meet the current and projected full service demands of its member agencies under all three hydrologic conditions through 2045 by developing and implementing water resources programs and activities through its Integrated Resources Plan preferred resource mix (MWD, 2021). This mix includes conservation; local resources such as recycled water and groundwater recovery; Colorado River supplies and transfers; SWP supplies and transfers; in-region surface reservoir storage; in-region groundwater storage; and out-of-region banking, treatment, conveyance, and infrastructure improvements. In addition, MWDOC’s assumptions are equally important to the District. As presented in MWDOC’s 2020 UWMP, MWDOC has determined that it is able to meet water demands during all hydrologic year types through 2045 (MWDOC, 2021). Similar to MWD, the reliability levels from MWDOC are due to its diversified supplies, comprehensive management, and conservation efforts working with the member agencies.

As detailed in Chapter 7, Sections 7.2 and 7.3 of the District’s UWMP (MNWD, 2021), the District can meet customers’ demands in all hydrologic year types through 2045, even with a potential increase in dry year demands. The reliable supplies reflect not only regional projects and comprehensive water supply planning by MWD and MWDOC, but also the forward-thinking planning and efforts the District has undertaken to develop its recycled water supplies and conservation programs, thus greatly reducing reliance on imported supplies.

Chapter 3 Annual Water Supply and Demand Assessment Procedures

Section 3.1 Annual Supply and Demand Assessment

Pursuant to CWC Section 10632(a)(2), the District must include in its WSCP the procedures used for conducting an annual Water Supply and Demand Assessment (Annual Assessment). This chapter describes:

(A) the written decision-making process that the District will use each year to determine its water supply reliability, and

(B) the key data inputs and assessment methodology used to evaluate the District's water supply reliability, including:

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

(ii) current year available supply, considering hydrological and regulatory conditions in the current year and one dry year;

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

The Annual Assessment is a determination of the near-term outlook for supplies and demands and how a perceived shortage may relate to WSCP shortage stage response actions in the current calendar year. This determination is based on information available to the District at the time of the analysis. CWC Section 10632(a)(2)(B)(ii) requires the Annual Assessment to determine "current year available supply, considering hydrological and regulatory conditions in the current year and one dry year." Starting in 2022, the District shall conduct an annual water supply and demand assessment pursuant to CWC Section 10632(a) prior to July 1 of each year.

Section 3.1.1 Data and Methodologies

Section 3.1.1.1 Sources of Supply

The District's current water needs are met by a combination of imported potable water and recycled water. Recycled water supply is locally sourced. The District is an urban retail water provider dependent on imported supplies of potable water via MWD through its member agency, MWDOC, a wholesale importer of water from MWD. MWD's principal sources of water supplies are the State Water Project and the Colorado River. MWD receives water delivered from the State Water Project under State Water Contract provisions, including contracted supplies, use of carryover storage in San Luis Reservoir, and

surplus supplies. MWD holds rights to a basic apportionment of Colorado River water and has priority rights to an additional amount depending on availability of surplus supplies. Water management programs supplement these Colorado River supplies. To secure additional supplies, MWD has groundwater banking partnerships and water transfer and storage arrangements within and outside its service area. Refer to Chapter 6 of the District's UWMP, incorporated herein, for additional details on the District's water supply sources. The District regularly coordinates with MWDOC and MWD regarding supply projections and potential shortages as part of its overall planning efforts. The annual evaluation process is conducted in steps to determine if a regional demand reduction is needed, and if so, at what level.

Section 3.1.1.2 Supply

On an annual basis, the District performs an evaluation of its imported water supply. The District conducts an analysis based on the MWD Water Surplus and Drought Management update and MWDOC Water Supply Condition Update report to review supply and demand conditions and evaluate projected water supply availability and estimated demand for the following year based on the current hydrologic conditions. To determine imported water supplies available to the District on an annual basis, the District coordinates with MWDOC and MWD regarding projected supplies. MWD water supplies available to MWDOC vary based on hydrologic conditions of that year and the corresponding State Water Project Table A Allocations, and Colorado River Drought Contingency Operations. MWD and MWDOC undertake an analysis to determine whether water supplies will be deficient relative to estimated regional water demands for the year. MWD then evaluates whether the amount of water in storage will be sufficient to meet regional demands. The District reviews the monthly MWD Water Surplus and Drought Management update which provides a preliminary accounting of water supply, demand, and storage conditions. The District also reviews the monthly MWDOC Water Supply Condition Update report that tracks climate conditions and anticipated water supplies available to the region. Final supply projections are typically available by June of each year. Should MWD or MWDOC identify a potential regional supply shortage and implement their respective Water Supply Allocation Plans (WSAP), the District will also implement water conservation and water shortage response measures, as deemed necessary by the Board of Directors. Absent implementation of the MWD WSAP or MWDOC WSAP, no supply shortages for the year would be anticipated.

In addition, supply conditions that may be considered include, but are not limited to:

- (1) District water supply conditions and storage levels;
- (2) Statewide water supply conditions;
- (3) MWD storage levels;
- (4) Local water supply and demand conditions;
- (5) Actions by surrounding wholesale and retail water agencies; and
- (6) Any other conditions the General Manager believes will adversely affect the District's available water supply.

Section 3.1.1.3 Infrastructure Considerations

The Annual Assessment will consider any infrastructure issues that may pertain to near-term water supply reliability, including repairs and construction that may temporarily constrain capabilities, as well as any new projects that may add to system capacity, both at the local and regional level. In addition, the District coordinates with MWDOC and MWD to identify MWD shutdowns that may impact supply reliability and allow the District to plan accordingly. In the event the District anticipates that an infrastructure issue is likely to impede the District's capability to distribute water during the current year, then the issue would be documented, and the determination of water reliability in the Annual Assessment would be adjusted accordingly.

Section 3.1.1.4 Other Factors

Water quality is of paramount importance to water supply reliability. Every year, the District conducts approximately 12,000 water quality tests that are independently analyzed at state-of-the-art laboratories. District staff work diligently to ensure that our drinking water complies with the science-based water quality standards set by the Environmental Protection Agency and the State Water Resources Control Board. For the Annual Assessment, any known issues related to water quality will be considered for their potential effects on water supply reliability.

Section 3.1.1.5 Unconstrained Demand

For the purpose of the Annual Assessment and WSCP, CWC Section 10632(a)(2)(B)(i) directs the District to use current year "unconstrained demand" when assessing water supply reliability. The WSCP and Annual Assessment define unconstrained demand as expected water use in the upcoming year, based on recent water use, and before any projected shortage response actions that may be taken under the WSCP. Unconstrained demand is distinguished from observed demand, which may be constrained by preceding, ongoing, or future actions, such as emergency supply allocations during a multi-year drought. WSCP shortage response actions to constrain demand are inherently extraordinary; routine activities such as ongoing conservation programs and regular operational adjustments are not considered as constraints on demands.

The District will forecast unconstrained demands based on evaluating trends using a 3-year moving average of annual demand and adding a 5 percent contingency to be conservative in water needs for the following year. The District will adjust its near-term demand forecast for the Annual Assessment to account for extraordinary demand management measures that the District may have already put into effect for the current year. Extraordinary demand management measures may include intensified communication and public outreach, and water budget reductions to its customers through implementation of the District's WSCP. Non-extraordinary water savings from regular conservation and community outreach activities are considered part of the District's normal demands and are not counted again for assessments of unconstrained demand.

Section 3.1.1.6 Evaluation Criteria

Because shortages are based on the difference between expected supplies and unconstrained demand under assumed current year and dry year conditions, the locally applicable evaluation criteria to be used in the Annual Assessment for determining a shortage include the following:

- Estimation of available supplies for current year and dry year scenarios (as described in Section 3.1.1.2).
- Estimation of unconstrained demands for current year and dry year scenarios (as described in Section 3.1.1.5).

Demands are then compared to projected imported supplies to determine if a shortage is projected. These criteria findings will also be given additional context and influenced by infrastructure considerations and other factors discussed above which will differ from year to year. Should a supply gap be projected, the water shortage stage would be based on the severity of the supply gap. If a regional shortage exists, the next action is to determine the appropriate shortage response level and actions for the District. District staff will present a completed Annual Assessment determination for approval by the District's General Manager. Upon approval, District staff will then formally submit the Annual Assessment to the California Department of Water Resources by July 1. The Annual Assessment Report will document any anticipated shortage, any triggered shortage response actions, associated compliance and enforcement actions, and communication actions.

Section 3.2 Decision-Making Process

This section describes the decision-making process the District will use each year to determine and report to the State its water supply reliability. The results from this process will also determine how the District declares water shortage levels and associated response actions.

The District's decision-making process begins with an assessments of its water demand and the availability of imported supplies from MWD to determine if supplies are sufficient to meet demands. The District also includes a review of local and regional infrastructure issues to determine possible limitations to supply availability. If water supplies are sufficient to meet forecasted demands, no water shortage stages would be triggered.

In the event that demands cannot be met with available water supplies and MWD is in allocation, the District will evaluate the severity of the allocation and the resulting regional supply shortage level. The District would analyze how much supply is available to its customers and would assess a shortage level based on expected supply shortages and enter the appropriate corresponding shortage level, as outline in Section 3.3, Declaration of Water Shortages.

Section 3.3 Declaration of Water Shortages

The implementation of any given stage of the WSCP requires an action by the District's Board of Directors. Based on the results of the Annual Assessment, and if deemed necessary, the General Manager will present recommended conservation measures for the Board of Directors to consider during periods of a water shortage based on the best information available at the time. Recommendations are provided on the implementation and/or termination of water shortage stages. The declaration of any water shortage stage will be through the adoption of a resolution of the Board of Directors only after a public hearing at which customers have an opportunity to be heard to protest the declaration and to present their respective needs to the Board of Directors in accordance with CWC Sections 350-359. Notice of the time and place of the public hearing shall be published pursuant to

Section 6061 of the Government Code at least seven days prior to the date of the public hearing in a newspaper printed, published, and circulated within the area in which the water supply is distributed, or if there is no such newspaper, in any newspaper printed, published, and circulated in Orange County (CWC Section 351).

The water shortage stage designated becomes effective as determined by the Board of Directors and specified in the resolution. After adopting the resolution, the declaration of the Board of Directors of the water shortage emergency shall be made by public announcement on the District's website and shall be published a minimum of one time in a newspaper of general circulation. As water supply conditions either deteriorate or improve, the General Manager will return to the Board of Directors to recommend, as appropriate, revising the appropriate water shortage stage of response. The General Manager may recommend transitioning to the next higher stage if the reduction efforts at the initial stage do not achieve the needed result or conversely to a lower stage if smaller demand reductions are determined to be needed. A water shortage ends when supplies improve to the point where the water system can support normal water demand. The WSCP stage in effect at the time must be officially rescinded by the Board by way of a resolution and public notice is given that the water shortage is over.

Section 3.3.1 Determination of Immediate Emergency

In case of an immediate emergency if the Board of Directors cannot meet in time to act to protect the public interest, the General Manager has the authority to implement such provisions of this WSCP and Ordinance 21-03. The provisions shall be implemented upon the General Manager's written determination that the District cannot supply adequate water to meet the ordinary demands of water consumers and that such implementation is necessary to protect the public health and safety.

- (1) The implementation of any such provisions shall take effect immediately upon making a public announcement of the immediate emergency and publication of such immediate emergency on the District's website.
- (2) Such written determination shall be delivered to the Board of Directors and considered at a general or special meeting for review, revocation, or ratification. Such meeting shall be held upon the earliest date that a quorum of the Board of Directors is available.
- (3) At the Board of Directors meeting, the General Manager shall update the Board of Directors on the severity and length of the immediate emergency.
- (4) During an immediate emergency, the District may specify temporary restrictions on the use of potable and recycled water. Any person who willfully fails to comply with those temporary restrictions may be subject to an administrative penalty of \$500 per offense and have his or her water meter locked by the District.

The District has invested in several regional projects to support system reliability in the event of an earthquake or power outage, including the Baker Water Treatment Plant and Upper Chiquita Reservoir. Prior to these investments, the District was at less than 7 days of system reliability in the event of a Diemer Water Treatment Plant outage. Building these infrastructure improvements for system reliability

more than quadrupled the average number of days of system reliability to 31. With active demand management programs and the system reliability improvements, the District is at over 31 days of average day system reliability as of March 2021 based on the previous 12 months of water demand.

Chapter 4 Six Standard Water Shortage Stages

Section 4.1 Stages

CWC Section 10632(a)(3)(A) identifies 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 from the normal levels of supply availability. Each of the shortage levels represent an ever-increasing gap between normally available supplies and normally expected customer water use. The overall concept is that water shortages of different magnitudes require different measures to overcome the deficiency. This section establishes the stages of escalating response to short-term and long-term water shortages.

The District’s WSCP includes six stages; each stage is associated with a water conservation target and applies to both long-term supply shortages and catastrophic interruptions of water supplies. **Table 4-1** describes the various stages and corresponding shortage levels. Stage 1 results in voluntary reductions while Stages 2 through 6 result in required actions. The District will implement the appropriate stage based on assessed water supply and demand conditions. It shall not be necessary to implement any water shortage stage prior to another; the water shortage stages may be implemented in any reasonable order as determined by the Board. Higher stages will be implemented if additional demand reductions are required to address increasing water supply shortages. Each stage consists of specific requirements, prohibitions, penalties, and/or rate structure modifications to encourage the appropriate level of conservation.

Table 4-1: WSCP Level and Corresponding Shortage Level

WSCP Stage	Percent Supply Reduction	Customer Action Type
1	≤10%	Voluntary
2	10 – 20%	Mandatory
3	20 – 30%	Mandatory
4	30 – 40%	Mandatory
5	40 – 50%	Mandatory
6	≥50%	Mandatory

Chapter 5 Shortage Response Actions

This section describes the six-stage approach and overall strategy for dealing with water shortages and presents the recommended menu of actions for reducing water demand during a declared water shortage, including shortage response actions that align with defined shortage levels. Each stage includes a set of demand reduction measures that become progressively more stringent as the shortage condition escalates. This WSCP strives to balance available supplies in times of shortage as much as possible through reductions in outdoor water use. At each stage, public health and sanitation usage is afforded the highest priority by cutting back on indoor water use the least. **Table 5-1** provides a summary of the water shortage stages and the response actions implemented in each stage to reduce demand to meet supply levels.

Section 5.1 Response Actions

Shortage response actions included in this WSCP are a combination of locally appropriate prohibitions on end use, consumption reduction methods, supply augmentation, and operational change measures. Each of these actions are further described in the following sections. To determine the additional specific actions that should be taken at each level, the District will evaluate conditions specific to the timing, supply availability, and cost, along with other pertinent variables at the time a WSCP stage is implemented. Numerous variables can influence the supply reduction levels during a water supply shortage. These variables include, but are not limited to, State Water Project allocation, conditions on the Colorado River, MWD storage supplies, local storage, local demands, and season. The recommended actions to reduce water use are presented below. It is meant to inform the public and decision-makers about the types of measures the District would implement under various water shortage stages but should not be construed as limiting other possible options. Specific circumstances will vary with each shortage and decisions about the most appropriate response would be based on the water supply and demand conditions at the time and the judgment of the General Manager. These measures are intended as a list of probable measures for advance preparation purposes rather than a set of measures to be strictly followed, recognizing that as supply and demand change over time, the ultimate decision of actions to address the shortage may also change. Depending on the situation, the Board may not implement each of the identified actions in a response level but select only those that are appropriate. In addition, the Board may adopt additional actions not listed below. It is important to recognize that flexibility in selecting the most appropriate stage may be needed.

Section 5.1.1 Demand Reduction

This section presents the locally appropriate actions for reducing demand during a declared water shortage. The District always requires Water Conservation Best Management Practices (BMPs) (or permanent water waste prohibitions) which are listed in Section 5.1.4 Permanent Water Conservation Requirements – Prohibition Against Waste and Section 5.1.5 Other Water Conservation Measures Available for Implementation. The WSCP response actions are considered in addition to these mandatory Water Conservation BMPs.

The focus of this plan is primarily on measures that reduce demand. Each stage includes a set of demand reduction measures that become progressively more stringent as the shortage condition escalates. This WSCP strives to balance available supplies as much as possible through:

- **Public Education Campaigns:** The District would implement a multi-channel outreach and education campaign to encourage customers to take action to reduce water use.
- **Expanded Outreach for Water Efficiency Programs:** Water efficiency programs provide customers with the means and guidance to lower their water usage. Customer-friendly programs, rebates and incentives, direct installation options and strong support services drive stronger response rates.
- **Conservation Penalties:** During Stages 2 through 6, any customer who uses water in excess of his or her calculated water budget shall be in violation of the Ordinance No. 21-03 and shall pay a Conservation Penalty Fee for each hundred cubic foot (HCF), or portion thereof, of water used in excess of a customer's water budget, as detailed in each stage. The Conservation Penalty Fee shall be in addition to the volumetric charge the District collects for the potable water or recycled water delivered.
- **Water Budget Reductions:** If increased stages must be implemented, the District will incrementally decrease the amount of water in a customer's water budget.

At each stage, the District would initiate an increasingly focused public education campaign that calls for actions to reduce water waste and provides the tools necessary to participate in the District's water efficiency programs. Beginning at Stage 2, the WSCP rate policies would incrementally reduce the allocation of water in the "upper" tiers of the District's water budget-based rate structure (refer to UWMP Section 9.1.3, Conservation Pricing for additional details on the water budget-based rate structure). The reductions in water use focus on reductions in overbudget outdoor water use first. At each stage, public health and sanitation usage is afforded the highest priority by cutting back on reducing indoor water use only at the last Stage 6, if needed. This approach results in customers more quickly incurring higher tier rates if they do not reduce their consumption in accordance with the WSCP stage. Any customer who uses water in excess of the calculated water budget shall be in violation of the rules and regulations established by the District's Ordinance No. 21-03 and shall pay an administrative penalty for water used in excess of a customer's water budget. A summary of the tier allocation changes in each stage and for each customer class is summarized in **Table 5-1**. A complete list of all actions in each stage is summarized below.

The WSCP mirrors the District's integrated 2015 drought response strategy, which received accolades from the SWRCB as a best practice in the industry in rate design and as is included as a case study by the California Department of Water Resources (DWR) in the appendices of the 2020 UWMP Guidebook. A key component of the drought response strategy was public education and outreach. With the 2012 to 2017 drought in California, Governor Brown's declared state of emergency, and SWRCB mandatory reductions in water use, the District developed a comprehensive public education and outreach strategy to affect reductions in water use. A multi-pronged approach was used to reach as many customers as possible using a variety of messaging platforms and targeting methods. In the 2015 UWMP, the District's

direct communication efforts were plotted alongside a comparison of calendar year 2014 to calendar year 2015 total water production. The 2015 UWMP illustrated the relationship between rates, outreach, and customer understanding to overall water demand reduction. However, it is important to note that direct conclusions should not be drawn but rather the understanding that there is a correlation between customers choosing to use water efficiently and when rate structure changes were paired with outreach and education. Hence, it is difficult to estimate the exact amount of demand reductions that could be expected for each action separately and rather all actions work together to produce the necessary reductions along with regional influences on demand reductions.

Section 5.1.1.1 Stage 1

Water Shortage Stage 1 constitutes a consumer demand reduction of up to 10%. Shortage response actions listed under this stage include:

- **Voluntary Reductions.** During Water Shortage Stage 1 (“Stage 1”), the District’s conservation efforts will be focused on voluntary reductions in potable and recycled water use. Potable and recycled water customers may reduce demand by following the District’s BMPs.
- **Refills of Swimming Pools.** Any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.
- **Mandatory Rules Governing Potable Water Use.** During Stage 1, recycled water customers shall be prohibited from using potable water for outdoor irrigation.

Section 5.1.1.2 Stage 2

Water Shortage Stage 2 constitutes a consumer demand reduction of up to 20%. Shortage response actions listed under this stage include:

- **Mandatory Rules Governing Customer Water Budgets.** During Water Shortage Stage 2 (“Stage 2”), all water customers, both potable and recycled, are prohibited from using water in excess of their calculated water budget.
- **Penalties.** During Stage 2, a conservation penalty will be applied to all billing units of water used in excess of 125% of the customer’s monthly water budget. The conservation penalty for residential and multi-family customers equals the difference between Tier 5 and Tier 3 rates, and for commercial, potable irrigation, and recycled customers, the conservation penalty equals the difference between Tier 4 and Tier 2, as detailed in Chapter 7, Table 7-1. The penalty would be based on the current rate in place at time of the water shortage stage implemented. Such penalty shall be in addition to the water service fees the District charges for the water delivered to the customer.
- **Refills of Swimming Pools.** During Stage 2, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of their calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.
- **New Plant Bill Adjustments.** During Stage 2, any person installing new landscaping, a new plant variance will only be granted for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the

South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

Section 5.1.1.3 Stage 3

Water Shortage Stage 3 constitutes a consumer demand reduction of up to 30%. Shortage response actions listed under this stage include:

- **Mandatory Rules Governing Customer Water Budgets.** During Water Shortage Stage 3 (“Stage 3”), all water customers, both potable and recycled, shall be prohibited from using water in excess of their individually calculated water budgets.
- **Penalties.** During Stage 3, a conservation penalty will be applied to all billing units of water used in excess of 100% of the customer’s monthly water budget. The conservation penalty for residential and multi-family customers will equal the difference between the Tier 5 and Tier 2 water rates. The conservation penalty for commercial, irrigation, and recycled customers will equal the difference between the Tier 4 and Tier 1 water rates, as detailed in Chapter 7, Table 7-1. The penalty would be based on the current rate in place at time of the water shortage stage implemented. Such penalty shall be in addition to the water service fees the District charges for the water delivered to the customer.
- **Refills of Swimming Pools.** During Stage 3, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.
- **New Plant Bill Adjustments.** During Stage 3, any person installing new landscaping, a new plant variance will only be granted for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

Section 5.1.1.4 Stage 4

Water Shortage Stage 4 constitutes a consumer demand reduction of up to 40%. Shortage response actions listed under this stage include:

- **Modification of Potable Water Budgets.** During Water Shortage Stage 4 (“Stage 4”), single family residential, multi-family residential, and potable irrigation customers shall have their outdoor water budgets reduced by 40% due to reduced water supplies.
- **Modification of Recycled Water Budgets.** During Stage 4, recycled water customers shall have their outdoor water budgets reduced by 10% due to reduced recycled water supplies.
- **Mandatory Rules Governing Customer Water Budgets.** During a Stage 4, all water customers, both potable and recycled, shall be prohibited from using water in excess of their individually calculated water budgets.
- **Penalties.** During Stage 4, any customer who willfully uses water in excess of his or her modified water budget will be subject to a conservation penalty. The conservation penalty for residential and multi-family customers will equal the difference between the current Tier 5 and Tier 2 rates. The conservation penalty for commercial, irrigation, and recycled water customers

will equal the difference between the current Tier 4 and Tier 1 water rates, as detailed in Chapter 7, Table 7-1. Such penalty shall be in addition to the water service fees the District charges for the water delivered to the customer.

- **Refills of Swimming Pools.** During Stage 4, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.
- **New Plant Bill Adjustments.** During Stage 4, any person installing new landscaping, a new plant variance will only be granted for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

Section 5.1.1.5 Stage 5

Water Shortage Stage 5 constitutes a consumer demand reduction of up to 50%. Shortage response actions listed under this stage include:

- **Modification of Potable Water Budgets.** During Water Shortage Stage 5 (“Stage 5”), single family residential, multi-family residential, and irrigation customers using potable water will have their outdoor water budgets reduced by 70% to meet reduced water supplies.
- **Modification of Recycled Water Budgets.** All recycled water customers shall have their outdoor water budgets reduced by 20% due to reduced recycled water supplies.
- **Mandatory Rules Governing Customer Water Budgets.** During Stage 5, all water customers shall be prohibited from using water in excess of their modified water budgets.
- **Penalties.** During Stage 5, any customer who willfully uses water in excess of his or her modified water budget will be subject to a conservation penalty. The conservation penalty for residential and multi-family customers will equal the difference between Tier 5 and Tier 2 water rates. The conservation penalty for commercial, irrigation, and recycled water customers will equal the difference between the current Tier 4 and Tier 1 water rates, as detailed in Chapter 7, Table 7-1. Such penalty shall be in addition to the water service fees the District charges for the water delivered.
- **Refills of Swimming Pools.** During Stage 5, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.
- **New Plant Bill Adjustments.** During Stage 5, any person installing new landscaping, a new plant variance will only be granted for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

Section 5.1.1.6 Stage 6

Water Shortage Stage 6 constitutes a consumer demand reduction of over 50%. Shortage response actions listed under this stage include:

- **Modification of Potable Water Budgets.** During Water Shortage Stage 6 (“Stage 6”), single family residential, multi-family residential, and irrigation customers using potable water will have their outdoor water budgets reduced by 100% to meet reduced water supplies.
 - All single-family residential and multi-family residential customers shall have their indoor water budgets reduced from 55 gallons per capita per day to 40 gallons per capita per day;
- **Modification of Recycled Water Budgets.** During Stage 6, all recycled customers will have their outdoor water budgets reduced by 30% to meet reduced recycled water supplies.
- **Mandatory Rules Governing Customer Water Budgets.** During Stage 6, all customers shall be prohibited from using water in excess of their modified water budgets. All outdoor irrigation with potable water shall be prohibited within the District’s service area.
- **Penalties.** During Stage 6, any customer who willfully uses water in excess of his or her modified water budget will be subject to a conservation penalty. The conservation penalty for single family residential and multi-family residential customers will equal the difference between the current Tier 5 and Tier 2 rates. The conservation penalty for commercial, irrigation, and recycled water customers will equal the difference between the current Tier 4 and Tier 1 water rates, as detailed in Chapter 7, Table 7-1. Such penalty shall be in addition to the water service fees the District charges for the water delivered.
- **Refills of Swimming Pools.** During Stage 6, no customer shall refill a swimming pool.
- **Plant Bill Adjustments.** During Stage 6, no customer shall install new landscaping.

Table 5-1: WSCP Response Actions by Stage

Water Shortage Stage – Shortage Percentage	Shortage Response Actions	Estimated Maximum Demand Reduction	Response Action Type
Stage 1 – Demand Reduction of up to 10%	Request for voluntary reductions in potable water use through implementation of Conservation Best Management Practices ¹	2,308 Acre-feet	Voluntary
	No bill adjustments for swimming pool refills ¹		Mandatory
	Recycled water customers may not use potable water for outdoor use ¹		Mandatory
Stage 2 – Demand Reduction up to 20%	Customers requested to stay within water budget ¹	4,617 Acre-feet	Mandatory
	Conservation Penalty will be applied to all billing units of water used in excess of 125% of the customer’s monthly water budget		Mandatory
	New plant bill adjustment only granted for newly installed California friendly vegetation ¹		Mandatory
Stage 3 – Demand Reduction up to 30%	Conservation Penalty will be applied to all billing units of water used in excess of 100% of the customer’s monthly water budget	6,925 Acre-feet	Mandatory
Stage 4 – Demand Reduction up to 40%	Single-Family Residential, Multi-Family Residential, and Potable Irrigation customers shall have their outdoor water budgets reduced by 40%	9,233 Acre-feet	Mandatory
	Recycled water customers shall have their outdoor water budgets reduced by 10%		Mandatory
	Conservation Penalty will be applied to all billing units of water used in excess of modified monthly water budget		Mandatory
Stage 5 – Demand Reduction up to 50%	Single-Family Residential, Multi-Family Residential, and Potable Irrigation customers shall have their outdoor water budgets reduced by 70%	11,542 Acre-feet	Mandatory

Water Shortage Stage – Shortage Percentage	Shortage Response Actions	Estimated Maximum Demand Reduction	Response Action Type
	Recycled water customers shall have their outdoor water budgets reduced by 20%		Mandatory
	Conservation Penalty will be applied to all billing units of water used in excess of modified monthly water budget		Mandatory
	Emergency Supply Augmentation, as available		Operational
Stage 6 – Demand Reduction ≤ 50%	Single-Family Residential, Multi-Family Residential, and Potable Irrigation customers shall have their outdoor water budgets reduced by 100%	13,850 Acre-feet	Mandatory
	Single-Family Residential and Multi-Family Residential customers shall have their indoor water budgets reduced from 55 gallons per capita per day to 40 gallons per capita per day		Mandatory
	Recycled water customers shall have their outdoor water budgets reduced by 30%		Mandatory
	Conservation Penalty will be applied to all billing units of water used in excess of modified monthly water budget		Mandatory
	No customer shall refill a swimming pool		Mandatory
	No customer shall install new landscaping		Mandatory
	Emergency Supply Augmentation, as available		Operational
	Notes: ¹ Response action applies to subsequent stages.		

Section 5.1.2 Supply Augmentation

The District has two main options for supply augmentation during emergency situations and during droughts, the emergency services agreement and additional MWD supply purchases, both of which are detailed below. The District is currently working on other emergency and drought supply options, as detailed in the UWMP Chapter 6, Future Supply Options, incorporated herein.

Section 5.1.2.1 Emergency Service Agreement

The District currently has an Emergency Service Agreement with Irvine Ranch Water District (IRWD) and Orange County Water District (OCWD). In 2006, multiple South Orange County (SOC) water agencies entered into a 25-year agreement with IRWD and OCWD to receive water from the IRWD system with subsequent conveyance into the distribution system serving SOC. The program was developed to deal with emergency water system outages or planned shutdown scenarios in which imported supplies normally delivered into SOC are curtailed, eliminated, or unavailable for up to 30 days. The initial term of the Emergency Services Agreement expires in 2031. The Emergency Services Agreement and subsequent operating agreement calls for IRWD to provide up to 30 CFS to SOC water agencies during emergency events (MWDOC, 2019). As part of that operating agreement, the District can be supplied up to 15.6 CFS for 30 days (MNWD, 2015) from IRWD. The maximum incident volume IRWD will supply is 1,768 AF (MNWD, 2015).

Under the agreement, IRWD and the participating agencies jointly constructed various projects to transfer water to the Aufdenkamp Transmission Main and the Joint Transmission Main. Water delivered through the interconnection is MWD water or locally produced water exchanged for MWD water. The option is not designed to address droughts, but only to be used during emergency conditions when MWD facilities are disrupted due to seismic events or unplanned outages. Recent conversations involving MWDOC and SOC agencies indicates an interest in exploring with IRWD the possibilities of providing more flow than the existing agreement provides for, and/or extending the agreement past the current expiration year of 2031. The amount of water IRWD can make available to SOC water agencies during emergencies is diminishing over time as water demands within IRWD increase. MWDOC and IRWD are currently studying an expansion of the current program.

The District is also exploring options for developing a second interconnection to the OCWD groundwater basin with either the City of Santa Ana, City of Tustin, or City of Orange. The new interconnection would operate similarly to the existing IRWD interconnection and only be utilized under emergency conditions when MWD facilities are not providing treated imported water.

Section 5.1.2.2 MWD Additional Supply Purchases

Purchasing additional supply from MWD could be used to fill any gaps between projected water demands and existing local supplies during droughts. Water can be purchased from MWDOC/MWD above a member agency's annual allocation amount but is charged in addition to MWD's standard rates for water service. Each member agency has a predetermined amount of water that can be purchased at the lower Tier 1 supply rate. Purchases more than this limit will be made at the higher Tier 2 supply rate. The Tier 2 supply rate is charged on MWD water sales that exceed a member agency's Tier 1 maximum. During periods of extreme water supply shortages, MWD utilizes its WSAP to allocate a specific reduced

level of MWD supplies as determined by the MWD Board. If MWD member agencies need and purchase water above their allocation amount, substantial allocation surcharges are imposed. Allocation surcharges are only assessed to the extent that an agency's total annual usage exceeds its total annual allocation. The allocation surcharge structure is a two-tier structure that provides a lower level of allocation surcharge for minor overuse of allocations and a higher level of allocation surcharge for major overuse of allocations. Water use between 100 percent and 115 percent of WSAP supply allocations is currently charged with the allocation surcharge of \$1,480 per acre-foot. Water use greater than 115 percent of WSAP supply allocations is currently charged at two times the allocation surcharge or \$2,960 per acre-foot. However, these allocation surcharges are not static and are subject to increase in the future as the WSAP is implemented. Tier 2 water from MWD is often considered to be the marginal cost of imported water, since it reflects the costs for MWD in securing higher-cost water to meet demands in excess of its baseline demands, and thus is used to compare other local investments against. The Tier 2 supply rate encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local supply resources and implement water efficiency and conservation programs.

Section 5.1.3 Operational Changes

During times of water shortage, it is imperative that the District also review its own operational consumptive uses of water in order to find short term water saving opportunities.

- **Recycled Water for Non-Domestic Uses.** Beginning at Stage 2, all water used for construction must be recycled water. The District will coordinate with developers/contractors to identify available recycled water connection points or determine if the construction of a new recycled water connection point is feasible and cost-effective.
- **Prohibition of Irrigation with Potable Water.** During Stage 6, if determined necessary for compliance, the District may turn off and lock potable dedicated irrigation meters to ensure no water is used during this stage.
- **Water System Pressure Management.** The District may reduce the system pressure in various zones to reduce system leakages and losses as well as decreasing the flow through customer connections. Should this occur, the District will continue to monitor system pressure through its supervisory control and data acquisition (SCADA) network to ensure adequate fire protection flow.
- **Retail Water Meters.** The District may adjust the criteria used for retail meter calibration, repair, and replacement that would result in an increase of meter repair and replacements. This would result in a decrease to apparent water loss and thus increased awareness of customer water use.
- **Water Loss Audits.** The District may adjust the frequency and scope of water loss audits to learn how much water is being lost in the system so that operation improvements and maintenance can be prioritized and targeted to maximize water efficiency.

Section 5.1.4 Permanent Water Conservation Requirements - Prohibition Against Waste

The District implements water conservation BMPs to conserve water, prevent the waste or unreasonable use or unreasonable method of use of water, and preserve the District's water supplies. The following water conservation BMPs shall be in effect at all times as prescribed by the Board and shall be permanent. Violations of this Section constitute waste and an unreasonable use of water in violation of Ordinance No. 21-03.

- A. Installation of Water Conservation Devices.** No water shall be provided by the District for internal or external use to any residential, commercial, industrial, agricultural, recreational, governmental, or public building or structure of any kind which is constructed or altered and in which either internal or external irrigation or domestic water piping or water fixtures are to be installed, extended, or altered in any way, including, but not limited to, any plumbing, water piping, or water fixtures for which a construction permit is required to be obtained from the County of Orange or its successor, or for which District approval of plans and service applications are required, unless the new, extended, or altered plumbing, water piping, or other water using facilities conform to the requirements and standards of the District's Rules and Regulations.
- B. Standards for Water Conservation Devices.** The required water conservation devices and standards of the District are those set forth in Exhibit "F" to the District's Rules and Regulations. Nothing provided shall be deemed to relieve any person from compliance with the plumbing code of the County of Orange or any other state or local plumbing or building requirements.
- C. Limits on Watering Hours.** Watering or irrigating any lawn, landscape, or other vegetated area with potable water may be prohibited between the hours of 9:00 a.m. and 5:00 p.m. Pacific time on any day, except by use of a hand-held bucket or similar container reasonably used to convey water for irrigation purposes, a hand-held hose equipped with a fully functioning, positive self-closing shut-off nozzle or device may be used during the otherwise restricted period. If necessary, and for very short periods of time for the express purpose of adjusting or repairing an irrigation system, one may operate an irrigation system during the otherwise restricted period.
- D. No Watering During Rain.** Watering or irrigating any outdoor landscapes with potable water during and up to forty-eight (48) hours after one quarter inch ($\frac{1}{4}$ ") rainfall within a twenty-four (24) hour period is prohibited.
- E. Plant Low-Water Demand Plants and Trees.** When installing new or renovated landscaping, it is recommended that all customers utilize only low-water demand trees and plants. New turf should only be installed for functional purposes. Functional turf is defined as turf used for athletic or high traffic areas.
- F. No Excessive Water Flow or Runoff.** No person shall cause or allow watering or irrigating any lawn, landscape, or other vegetated area in a manner that causes or allows excessive runoff of potable or recycled water onto an adjoining sidewalk,

driveway, street, alley, gutter or ditch, parking lots, structures, non-irrigated areas, or off the property.

- G. 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 an a fully functioning, positive self-closing shut-off device or a low-volume, high-pressure cleaning machine equipped to recycle any water used.
- H. Obligation to Fix Leaks, Breaks or Malfunctions.** Excessive use, loss or escape of potable or recycled water through breaks, leaks or other malfunctions in the water user’s plumbing, irrigation, or distribution systems for any period of time after such escape of water should have reasonably been discovered and corrected and in no event more than five (5) days of receiving notice from the District, is prohibited.
- I. Re-circulating Water Required for Decorative Water Fountains and Decorative Water Features.** Operating a decorative water fountain or other decorative water feature that does not use re-circulated water is prohibited.
- J. Limits on Washing Vehicles.** Using potable 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, a hand-held hose equipped with an a fully functioning, positive self-closing automatic water shut-off nozzle or a low volume power washer with a fully functioning, positive self-closing shut-off nozzle. This paragraph does not apply to commercial car washes or the washing of vehicle regulations where the health, safety, and welfare of the public is contingent upon frequent vehicle cleaning, such as garbage trucks and vehicles used to transport food and perishables.
- K. Drinking Water Served Upon Request Only.** Eating or drinking establishments, including but not limited to a restaurant, hotel, café, cafeteria, bar, club, or other public place where food or drinks are sold, served, or offered for sale, should only provide drinking water to persons when expressly requested.
- L. Commercial Lodging Establishments Should Provide Option to Not Launder Linens Daily.** Hotels, motels, and other commercial lodging establishments should provide customers the option of not having towels and linens laundered daily. Commercial lodging establishments should prominently display notice of this option in each bathroom using clear and easily understood language.
- M. Installation of Single Pass Cooling Systems.** Single pass cooling systems shall not be installed in buildings requesting new potable water service.
- N. Ceased Installation of Non-Recirculating Water Systems in Commercial Car Washes and Laundry Systems.** Non-recirculating water systems in commercial car washes and laundry systems shall not be installed.

- O. Restaurants Required to Use Water Conserving Dish Wash Spray Valves.** Food preparation establishments, such as restaurants or cafés, shall not use non-water conserving dish wash spray valves.
- P. Swimming Pools and Spa Covers.** Property owners who have a swimming pool or a spa are encouraged to cover the facilities to minimize water loss due to evaporation.
- Q. Water Waste and Unreasonable Water Use Prohibited.** The waste or unreasonable use or unreasonable method of use of water by any person shall be prohibited at all times.
- R. Recycled Water Use Required if Available:** After the District has provided to the user an analysis demonstrating that Recycled Water is available, cost effective, and safe for the intended use, and the user has been given a reasonable time to make the conversion to recycled water, the use of potable water is prohibited unless otherwise granted exemption by the General Manager or their designee.
- S. Water Recycling – New Service:** Prior to the connection of any new service, the District will determine whether recycled water is available and safe for the intended use to supply all or some of the water needed by the user. If available, and safe for the intended use, recycled water must be used.

Section 5.1.5 Other Water Conservation Measures Available for Implementation

The following water conservation measures may be implemented at any water shortage stage, in addition to, or supplementary to, the shortage response actions set out in Table 5-1 and Sections 5.1.1, 5.1.3 and 5.1.4. The Board may implement any or none of the following measures by resolution at the time of a shortage declaration.

- (1) Large Landscape Areas – Rain Sensors:** Large landscape areas, such as parks, cemeteries, golf courses, school grounds, and playing fields, that use landscape irrigation systems to water or irrigate, must use landscape irrigation systems with rain sensors that automatically shut off such systems during periods of rain or irrigation timers which automatically use information such as evapotranspiration sensors to set an efficient water use schedule.
- (2) Recycled Water for Construction Purposes:** Recycled or non-potable water must be used for construction purposes when available, feasible, and safe as deemed by the District.
- (3) Water Conserving Plumbing Standards – Change in Service:** Upon the establishment of new water service or a new customer of record for an existing service, all existing plumbing fixtures (including but not limited to toilets, showerheads, and faucets) must be retrofitted exclusively with water-conserving plumbing fixtures. The water use standards permitted will be the stricter of those current standards approved by the California Energy Commission, County of Orange, or the City in which the property is located.
- (4) Irrigated Parkways:** The use of potable water to irrigate ornamental turf on public street parkways or verges is prohibited.
- (5) Irrigated Medians:** The use of potable water to irrigate ornamental turf on public street medians is prohibited.

- (6) Other Measures:** Other measures as may be required by the State or deemed necessary by the Board.

Section 5.2 Emergency Response Plan

A catastrophic interruption may lead to a proclamation of a water shortage and could be any event (either natural or human induced) that causes a water shortage severe enough to classify as a Stage 4 to 6 water supply shortage conditions. To prepare for catastrophic events, the District has prepared an Emergency Response Plan (ERP) in accordance with America's Water Infrastructure Act (AWIA). AWIA Section 2013 requires community (drinking) water systems serving more than 3,300 people to develop or update risk assessments and ERPs. The District's ERP is considered a confidential document and summarized herein. The District's ERP addresses a variety of potential emergency situations directly affecting the District's system. The ERP establishes Incident Specific Response Procedures (ISRP's) for different emergency conditions which outline the steps staff will take to respond to, evaluate, and mitigate the emergency. ISRP's were developed for a variety of water supply interruptions, including, but not limited to power outages; water contamination; earthquakes; flooding; wildfire; loss of water supply; chemical spills; and terrorist events. The District's ERP provides a framework for an organized response to an emergency. The primary objectives of the ERP are to maintain the functionality of the water distribution system, assess the system and if necessary, make rapid repair to any damage, and prevent any further damage. The ERP includes procedures to utilize existing agency resources as well as processes to request support through Water Emergency Response Organization of Orange County (WEROC) (described below), and mutual aid partners via CalWARN. The ERP is designed to align with strategic plans to mitigate the impacts of identified hazards and threats and improve system resilience. These plans include:

- 2020 Moulton Niguel Water System Risk and Resilience Assessment
- 2019 Orange County Regional Water and Wastewater Hazard Mitigation Plan
- Annex K, 2019 Orange County Regional Water and Wastewater Multi-Jurisdictional Hazard Mitigation Plan

In late 2019 through early 2020, a probability-based Risk and Resilience Assessment was conducted for MNWD in accordance with AWIA and the American National Standards Institute (ANSI)/American Water Works Association (AWWA) J100 Standard using the Program to Assist Risk & Resilience Examination software tool. MNWD identified critical assets, which are defined as those assets that if lost would limit or prevent the accomplishment of the agency's mission and the natural and malevolent threats that those assets could potentially face. MNWD also participated the [Orange County Water and Wastewater Multi-Jurisdictional Hazard Mitigation Plan](#) (HMP) dated August 2019, described further below (MWDOC 2019).

Section 5.3 Seismic Risk Assessment and Mitigation Plan

Given the great distances that imported supplies travel to reach Orange County, the region is vulnerable to interruptions along hundreds of miles aqueducts, pipelines, and other facilities associated with delivering supplies to the region. The District is a participant (Member Agency [MA]) in the Orange

County Water and Wastewater Multi-Jurisdictional HMP. Hazard mitigation plans form the foundation for a community's long-term strategy to identify vulnerability to natural and man-made hazards. The plans also aim to reduce disaster losses by breaking the cycle of disaster damage, reconstruction, and repetitive damage. According to the federal Disaster Mitigation Act of 2000, State and local governments are required to develop hazard mitigation plans and update them every five years as a condition for receiving certain types of non-emergency disaster assistance. The Risk Assessment in the HMP summarizes the hazards and risks that pose a threat to Orange County, including seismic risk. The seismic risk to the District is summarized in Section 5.3.2. The primary HMP treats the entire County as the planning area and identifies which MAs are subject to a profiled hazard. [The Annex](#) was prepared to provide additional information specific to MNWD with a focus on the risk assessment and mitigation strategy (MNWD, 2019). The Annex identifies the mitigation actions, including the priority, hazard addressed, risk, timeframe, and potential funding sources. Both documents are available online: <https://www.mwdoc.com/your-water/emergency-management/emergency-management-resources/>.

Section 5.3.1 Water Emergency Response Organization of Orange County (WEROC)

In 1983, the Orange County water community identified a need to develop a plan on how agencies would respond effectively to disasters impacting the regional water distribution system. The collective efforts of these agencies resulted in the formation of WEROC to coordinate emergency response on behalf of all Orange County water and wastewater agencies, develop an emergency plan to respond to disasters, and conduct disaster training exercises for the Orange County water community. WEROC was established with the creation of an indemnification agreement between its member agencies to protect each other against civil liabilities and to facilitate the exchange of resources. WEROC is unique in its ability to provide a single point of contact for representation of all water and wastewater utilities in Orange County during a disaster. This representation is to the county, state, and federal disaster coordination agencies. Within the Orange County Operational Area, WEROC is the recognized contact for emergency disaster response for the water community.

Two dedicated WEROC Emergency Operations Centers (EOCs) are located within Orange County. Both sites are maintained in a state of readiness if they will be activated following a major emergency disaster. WEROC EOCs are staffed by trained volunteer personnel from the water community. WEROC's Emergency Radio Communication System consists of two mountain-top radio repeaters and several control stations. WEROC is a flexible and dynamic program that continues to make improvements to its emergency preparedness plan, emergency response facilities, and its training program to address new issues as they surface. During a disaster, WEROC will work cooperatively with MWD through their Member Agency Response System to facilitate the flow of information and requests for mutual aid within MWD's 5,100 square mile service area. WEROC also provides updated information to MWD's EOC at Eagle Rock.

Section 5.3.2 Seismic Risk

For the District, the primary system reliability risks are seismic events. Within Southern California, there are several known active faults with varying levels of activity that can generate significant earthquakes and cause widespread damage to infrastructure. The risk of earthquake damage to infrastructure from

these active faults is manifested through different seismic hazards, including seismically induced ground shaking, seismically induced ground failure, and surface fault displacement.

In 2015, the United States Geologic Survey (USGS) released the Uniform California Earthquake Rupture Forecast Version 3 (UCERF3), which provides a forecast for the likelihood of rupture for earthquake faults within California. Southern San Andreas Fault was identified as having the highest likelihood (19 percent) of a magnitude 6.7 earthquake or greater in the next 30 years. UCERF3 further states that there is a 93 percent chance of a magnitude 6.7 or greater earthquake occurring on one of the faults within Southern California within the next 30 years, and a 36 percent chance of a magnitude 7.5 or greater earthquake occurring within the next 30 years (MWD, 2018). Earthquakes that have occurred within or near Southern California since 1900 include five strong earthquake events (magnitude 6.0 – 6.9) and three major earthquake events (magnitude 7.0 - 7.9) (MWD, 2020). In 2019, two significant earthquakes events occurred in the region. On July 4, 2019, a magnitude 6.4 earthquake occurred near Ridgecrest, approximately 122 miles north/northeast of Los Angeles. Then on July 5th, a magnitude 7.1 earthquake occurred in the same vicinity (MWD, 2020). While these earthquakes did not cause damage to the MWD service area, they are a reminder that earthquake risk is always present, and that the region must take steps to prepare and respond.

Several major earthquake fault lines intersect with the Diemer WTP and treated imported pipelines that convey water to MNWD. Diemer WTP can be impacted by a seismic event from the Whittier Fault, while regional pipelines (EOCF2 and AMP) can both be impacted during seismic events from the Puente Hills Fault and the Peralta Hills Fault. The San Joaquin Hills fault can also impact the EOCF2 but treated water may be available to be delivered through the AMP to supply water to MNWD. In general, pipelines are more resilient and flexible than water treatment plants, so they can tolerate higher ground accelerations (MNWD, 2015). The Baker WTP is located further away from the active fault lines and is less susceptible to earthquake damage compared to Diemer WTP. The Baker WTP was constructed to provide backup capacity in the event of a Diemer WTP outage. The HMP and Annex document the mitigation strategies for the District relating to seismic events and are incorporated by reference herein.

Section 5.4 Shortage Response Action Effectiveness

As previously stated, this WSCP strives to balance available supplies as much as possible through information education campaigns, reductions in water use and associated conservation penalties, and promotion of water efficiency rebates.

The District's water budget-based rate structure consists of five tiers for residential customers, which comprise the majority of the District's customers; the first two tiers make up the base allocation, while the remaining three tiers are comprised of usage in excess of the base allocation and are subject to conservation charges. The advantage of the water budget-based rate structure is the ability for the District to define efficient consumption for each individual and assign increasing disincentives for wasteful use above the base allocation. The water budget-based rate structure creates a pricing incentive to stay within the individually determined efficient water budget with relatively high rates

steadily increasing into the upper tiers. This sends the signal to customers that everyone has less water to use and pushes customers into the higher tiers to provide disincentive for noncompliance.

The conservation penalty is imposed on a volumetric basis and is in addition to volumetric consumption charges. The specific water budget modifications and conservation penalty amounts will depend on the stage of water shortage, customer class, and amount of inefficient water use. Unlike traditional water rate structures wherein users are billed at either a uniform rate or specific rate tiers common to all users, water budget-based rate structures employ a scientific and policy-based methodology to determine a reasonable amount of water needed for each water user within a water system for indoor and outdoor usage. Developing water budgets within an agency provides customers with valuable information on a reasonable amount of usage for their household, as well as their usage trends. Rates based on water budgets send a price signal to water users that is directly tied to their usage efficiency, as tiers based on water budgets generally increase in cost as users approach or exceed their budgeted allotment.

The usage trends and data derived from water budgets are also very useful in analyzing District's plans including the WSCP that may affect District customers. The WSCP methodology used is to lower outdoor usage in the WSCP stages with the logic that outdoor usage has more elastic demand, hence, on the margin, customers are more willing to reduce outdoor use first. Elasticity of demand refers to the degree to which demand responds to a change in another economic factor, such as price. In the more extreme upper WSCP stages, the indoor allocation would be reduced to provide incentive for further demand reduction. The District had great success in linking the water budget-based rate structure to its WSCP to utilize the water budget rate structure to send drought messaging in 2012-2017. Further, the funds generated by the conservation penalty are tracked separately from the General Fund revenue and contribute to the Water Use Efficiency Fund that funds the District's water supply reliability and water efficiency and conservation programs.

The ability of a water agency to target a specific end use and, through policy, reduce usage is highly dependent on the current efficiency of the agency's customers. For instance, further reductions for customers who already are at the theoretical limits of outdoor irrigation efficiency would essentially require those customers to kill their landscapes to meet further water use reductions. In addition, a water agency in aggregate can be highly efficient in end uses and still have a small contingent of wasteful users. For instance, in a water budget-based rate structure, the wasteful users pay high water rates, which then fund conservation programs that allow customers to switch to cutting edge low water use technology and native landscapes. A 2016 study by Mukherjee et al. found that the urgency of decreasing water demand in California requires effective pricing mechanisms, and cited MNWD as an example of an agency which has effectively established conservation-based water rates while complying with Proposition 218 requirements. A 2019 study by the Environmental Finance Center at the University of North Carolina at Chapel Hill found that rate structures adopted by California water agencies during the recent drought influenced price signals, and that both rates themselves and elements of the rate structure were necessary to create price signals that incentivize conservation (MWDOC, 2020).

In 2008, DWR selected MWDOC for an Urban Drought Assistance Grant and corresponding study to estimate savings in household water consumption which can be attributed to adoption of water budget-based rate structure by MWDOC member agencies under the DWR grant study. The District participated in this study given the conversion to the water budget-based rate structure. The Water Budget Evaluation Study Five Year Monitoring Report was completed in 2020 to fulfil the five-year reporting requirement of the agency's 2008 Urban Drought Assistance Grant agreement with DWR. The study concluded a 1% increase in water price was associated with a decrease in water demand of 2.4% for MNWD's residential customers (MWDOC, 2020). The study also concluded that simply communicating information to households about their water usage and efficiency relative to a reasonable, science-based budgeted allocation can result in savings.

Based on the price elasticity identified in the MWDOC study, the District undertook an analysis to determine how much demand reduction could be expected through implementation of the conservation penalties in each of the WSCP stages. Each stage assumes a reduction in water usage for residential and potable irrigation accounts focusing first on outdoor water use reductions, though it should be noted that there is uncertainty in predicting the actual water reductions in other customer classes and other types of water use that will likely occur during each water shortage stage. It is assumed that the amount of reduction would vary by customer since a customer's ability and willingness to reduce water usage depends on the use of the water and their characteristics that can influence their use, the policies being applied to that customer class, and ultimately the price signal they receive. The analysis assumed that not all the water usage targeted by the WSCP rate policies was eliminated; rather that some of the targeted water usage would shift to the next higher tier, increasing the price signal a customer would receive through their bill but not necessarily a signal strong enough to encourage major change. Similarly, the analysis would expect for there to be some customers who typically do not use their entire budget so adjusting budget parameters for those customers would not cause a change in their total bill even though their budget was reduced. Past data derived from water budgets and customer consumption trends show that a majority of MNWD customers stay within their water budgets. To summarize, the analysis follows a robust methodology by incorporating demand response to price signal from past studies, customer characteristics and historical usage data of MNWD customers controlling for relevant factors that would determine demand reductions in WSCP stages.

Chapter 6 Communication Protocols

The District conducts communications and outreach regarding water supplies and water use efficiency as an ongoing activity during normal supply conditions. However, clear and effective communications between the District and its stakeholders become even more important if supply conditions become abnormal and the District needs to activate its Ordinance No. 21-03. Communication during a water shortage is critical to relay information to employees, other government agencies, customers, the public, the media, and others about potential risks to our water supply, and how the District is responding to those risks. Public outreach programs can help increase awareness of water shortages, while customer services and water efficiency programs can encourage customers to actively participate in demand reducing strategies. Primarily, the District relies on robust information sharing and the generation of awareness related to water shortage conditions and the conservation measures that exist for the relevant stage. Effective communication is essential to the success of the implementation of the WSCP and its implementing Ordinance No. 21-03 in achieving the desired water use reductions. A strong communication plan will educate customers on the water supply situation. All stakeholders need to be adequately informed about water supply conditions, understand the need to use water wisely, and know what actions they are being requested or required to take to mitigate the shortage. Prior to a formal declaration of a water shortage, the District will provide stakeholders with as much advance notice as possible. In addition, the more severe the shortage, the more robust public information campaign will be needed. The public communications strategy will be consistent with the District's Crisis Communication Plan.

Section 6.1 Crisis Communication Plan

The District created a Crisis Communication Plan (MNWD, 2021) that provides an approach to assist in effectively managing and communicating during an emergency or crisis, including during a water shortage stage. The Crisis Communication Plan outlines the District's guidelines and instructions for communicating during an emergency or crisis. The District aims to provide crisis related information in a timely and accurate manner to enhance understanding of a water supply conditions, build trust and credibility, encourage constructive dialogue, and provide guidance on appropriate protective actions. Good communication procedures outlined in the Crisis Communication Plan will guide staff on when and how to communicate (e.g., who is responsible for notifying the crisis communication team and outside agencies, and what information should be relayed), who should be notified, and what platform to deliver messages (e.g., various communication channels). The Crisis Communication Plan includes the various channels the District will utilize to convey critical messages regarding water shortage allocations and voluntary and mandatory actions. Use of all forms of media may be employed, which could include public service announcements on radio and cable television, social media as well as earned media, and advertisements in local newspapers. The Crisis Communication Plan will be used to distribute information to the District's stakeholders following the adoption of the resolution declaring the applicable water shortage stage. Key attributes of the Crisis Communication Plan are summarized in this chapter.

Section 6.2 Notice and Publication

Within five (5) days of the adoption of the resolution declaring the applicable water shortage stage, the District shall make a public announcement of the applicable water shortage stage. Such declaration and notice shall provide the conditions under which each water shortage stage is to be initiated or terminated and the conservation response measures to be implemented in accordance with the applicable water shortage stage. As detailed in the Crisis Communication Plan, the District shall notify the customers, elected officials, and other key stakeholders regarding the water shortage condition, actions to be taken, goals customers are intended to achieve, and how these actions and goals will be implemented. In addition, the public at large will be informed of the situation and actions the District will be taking. Communications may occur through any of the communication methods identified in the Crisis Communication Plan, including but not limited to billing inserts, special mailings, e-mail, social media, roadway signage, newsletters, and education programs. Literature appropriate to the emergency or drought circumstance will be provided regarding the water shortage condition, conservation methods, and water-savings devices. The District’s website, www.mnwd.com, will be the central location for messaging and customer communications.

Section 6.3 Communication Guidelines

Table 6-1 provides the recommended communication protocols to help guide customer campaigns during implementation of a water shortage stage. It is meant primarily to help inform the public and decision-makers about the types of measures the District would take under various water shortage stages and to aid in communications with customers but should not be construed as limiting other possible options. Specific circumstances will vary with each shortage and decisions about the most appropriate response should be based on the water supply and demand conditions at the time. These actions are thus intended as a list of probable measures for advance preparation purposes rather than a set script to be strictly followed, recognizing that as supply and demand change over time, or as a shortage evolves, the ultimate choice of options and actions to best address the shortage may also change. It is also important to recognize that flexibility in selecting the most appropriate stage may be needed.

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 Stages 1 through 6. In addition, outreach messaging will reflect emergency conditions and the need to focus on health and public safety.

Table 6-1: Communication Guideline

Stage	Communication Protocols	Suggested Customer Demand Reduction Actions
1	<ul style="list-style-type: none"> • Initiate public information campaign; produce and distribute fact-based informational materials; • Announce water supply conditions and emphasize ways to conserve immediately; • Include increased conservation messages on website and in standard outreach efforts; and • Enhance promotion of ongoing water efficiency programs targeted advertising. 	<ul style="list-style-type: none"> • Voluntary water conservation requested of all customers; • Adhere to water waste prohibitions; • Water budget notifications; and • Promote water efficiency programs.
2	<ul style="list-style-type: none"> • Intensify public information campaign conveying mandatory water-use restrictions, supply conditions and ways to save water; • Provide regular supply condition updates to customers; and • Continue promotion of ongoing water efficiency programs programs/tools. 	<ul style="list-style-type: none"> • Encourage customers to stay within water budget; • Encourage regular household meter reading by customers in the Portal; • Encourage household fix a leak; and • Intensify promotion of water efficiency programs.
3	<ul style="list-style-type: none"> • Expand campaign and messages to raise awareness for more severe water-saving actions/behaviors by customers; • Conduct specialized outreach to reduce discretionary outdoor water use while minimizing landscape damage; and • Establish targeted and focused social media advertising strategies. 	<ul style="list-style-type: none"> • Require customers to stay within budget or pay conservation penalty; and • Promote home water savings programs to help customers identify water savings opportunities.
4	<ul style="list-style-type: none"> • Conduct issue briefings with elected officials and other key civic and business leaders; • Scale up campaign and frequency of messages to reflect water shortage condition; and 	<ul style="list-style-type: none"> • Promote outdoor water rationing for residential customers or pay conservation penalty.

Stage	Communication Protocols	Suggested Customer Demand Reduction Actions
	<ul style="list-style-type: none"> • Increase outreach efforts for high-volume customers. 	
5	<ul style="list-style-type: none"> • Partner with other agencies to expand public information campaign, as available; • Suspend promotion of long-term water use efficiency programs/tools to focus on imminent needs; and • Emphasize work being done by MNWD to alleviate the impacts of such a severe shortage. 	<ul style="list-style-type: none"> • Further reduce residential water allocations; and • Discourage various uses deemed to be non-essential.
6	<ul style="list-style-type: none"> • Update campaign and messages to reflect likely need to focus water use on health/safety needs. 	<ul style="list-style-type: none"> • Prohibit outdoor irrigation; and • Continue all measures initiated in prior stages as appropriate.

Chapter 7 Compliance and Enforcement

Section 7.1 Penalties, Charges, and Other Enforcement of Prohibitions

Measures called for in the stages of the District's WSCP will be primarily enforced through Conservation Penalty fees described in Chapter 5 and educational marketing programs described Chapter 6 and as enforceable by Ordinance No. 21-03. The District utilizes water budget notifications in all stages and because of the District's Advanced Metering Infrastructure Program, the District could quickly identify those customers that repeatedly exceed budget allocations and can target messages to specific customers. The primary financial penalty for excessive use is the ascending tier water rates used by the District, with increasing rates for higher levels of use. Ascending tier rates are in-place during normal and water shortage conditions. The Conservation Penalty Fee would be added to a customer's bill along with the notification of the water use and exceedance of the customer's budget. During Stage 2, any customer who uses water in excess of 125% of his or her calculated budget shall be in violation of Ordinance No. 21-03 and shall pay an administrative penalty ("Conservation Penalty") for each hundred cubic feet (HCF), or portion thereof, of water used in excess of a customer's water budget. During Stages 3 through 6, any customer who uses water in excess of his or her calculated water budget shall be in violation of Ordinance No. 21-03 and shall pay an administrative penalty ("Conservation Penalty") for each hundred cubic feet (HCF), or portion thereof, of water used in excess of a customer's water budget. The Conservation Penalty shall be in addition to the volumetric charge the District collects for the potable water or recycled water delivered. The water demand reductions for each of the stages, the water budget adjustments, and the conservation penalties, that may be imposed are shown in **Table 7-1**. The implementation of any stage of the WSCP is dependent on Board of Directors action, contemplating the District's water supply conditions and demand expectations.

The District's appeal procedures are identified in Ordinance No. 21-03.

Table 7-1: Conservation Penalty by Stage

Stage	Excess Water Use Restriction	Modified Water Budget	Conservation Penalty for Residential and Multifamily	Conservation Penalty for Commercial, Irrigation & Recycled
Stage 1	None	N/A	None	None
Stage 2	125% of water budget	N/A	Tier 5 – Tier 3 water rates	Tier 4 – Tier 2 water rates
Stage 3	100% of water budget	N/A	Tier 5 – Tier 2 water rates	Tier 4 – Tier 1 water rates
Stage 4	100% of modified water budget	Outdoor water budget reduced by 40% for residential and irrigation; outdoor water budget reduced by 10% for recycled	Tier 5 – Tier 2 water rates	Tier 4 – Tier 1 water rates
Stage 5	100% of modified water budget	Outdoor water budget reduced by 70% for residential and irrigation; outdoor water budget reduced by 20% for recycled	Tier 5 – Tier 2 water rates	Tier 4 – Tier 1 water rates
Stage 6	100% of modified water budget	Outdoor water budget reduced by 100% for residential and irrigation; outdoor water budget reduced by 30% for recycled; Residential indoor water budget reduced to 40 gallons per person	Tier 5 – Tier 2 water rates	Tier 4 – Tier 1 water rates

Chapter 8 Legal Authorities

The District has the legal authority to implement and enforce its WSCP. California Constitution Article X, Section 2 and CWC 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 CWC 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. (Wat. Code Sections 350-359, 375-378.0.) If necessary, the District shall declare a water shortage emergency in accordance with CWC 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: CWC 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 authority to set prices to encourage water conservation.

With regard to water delivered for other than agricultural uses, the ordinance or resolution may specifically require the installation of water-saving devices that are designed to reduce water consumption. The ordinance or resolution may also encourage water conservation through rate structure design.

Pursuant to these authorities, the District is adopting Ordinance No. 21-03, which prohibits waste and imposes water conservation requirements, including six stages of water shortage conditions and conservation requirements in each stage. The stages are consistent with CWC Section 10632(a)(3) and include the declaration of a water shortage emergency as appropriate in compliance with CWC Section 350.

The General Manager is authorized and directed to implement the provisions of the WSCP, as enabled by the District's Ordinance No. 21-03, an Ordinance of the Moulton Niguel Water District Adopting the Water Shortage Contingency Plan and Prescribing Water Conservation Rules and Regulations (Ordinance No. 21-03), as provided for herein. The Ordinance amends and replaces the District's Rules and Regulations regarding Water Conservation and empowers the District to implement and enforce its shortage response actions identified herein. The District shall coordinate with its service area cities that receive water supply services, for the possible proclamation of a local emergency under California Government Code, California Emergency Services Act (Article 2, Section 8558).

Chapter 9 Financial Consequences of WSCP

There are three major financial impacts that will occur as a result of each supply shortage stage. During each subsequent stage:

- Certain District operating costs will increase as it spends more on outreach efforts, water efficiency rebate programs, enforcement of State-mandated restrictions on customers, and additional reporting to the State;
- District water sales revenues will decrease as water conservation is realized; and
- Expenses from imported water purchases will decrease as water conservation is realized.

The financial impacts of each stage will depend on the actual reductions in water and recycled water consumption, the subsequent decreases in water purchase costs, and the increases to the Water Use Efficiency program operating costs. All these elements were estimated based on best available data and reasonable forecasting assumptions, as described below.

Section 9.1 Changes in Operating Budget

The following describes the assumed changes in operating budget with each water shortage stage.

Section 9.1.1 Imported Water Costs

The District purchases treated water and untreated water from MWD via wholesale purchases through MWDOC. This assessment assumed that MNWD's imported water costs would decrease by the amount of water conserved multiplied by the cost of imported water, \$1,104 per acre-foot (AF). The total water purchases from FY 2019-2020 were used for purposes of forecasting future water purchase costs. The avoided costs of purchased water for each stage are summarized in **Table 9-1**, based on the predicted water conservation percentages shown in Table 9-1. During drought events, MWDOC may charge drought surcharges if MNWD does not achieve target reductions for the given water shortage stage. If MWDOC imposes such drought surcharge rates, this analysis assumes that those costs will be passed through directly to MNWD customers. Given the uncertainty of those costs (how much they would be and whether they would even be incurred), their impact was not modeled as part of this assessment. The cost of recycled water supply remains largely the same to MNWD, regardless of whether customers purchase the water. As such, changes in recycled water consumption were assumed to have a negligible impact on the District's operating expenses.

Section 9.2 Summary of Financial Impacts

The financial impact of each water shortage stage was assessed to ensure that the shortage stage policies would not cause dramatic changes to the District's General Fund balance because of decreased water sales. To project the change in rate revenues, the tier definitions and assumed levels of conservation for each water shortage stage were applied to customer water use patterns from FY 2019-2020. In other words, the calculated change in rate revenues considered the reduction in total water usage as well as the shift in water usage towards higher tiers. The analysis used domestic and recycled water rates for 2021.

These reductions in rate revenues were coupled with the changes in MNWD operating costs because of reduced water sales. Table 9-1 summarizes the impact to the District’s General Fund. It is important to note that impacts to the District’s Water Efficiency Fund have been omitted from Table 9-1. Consistent with recommendations in the UWMP guidebook, longer term demand reductions associated with infrastructure improvements or installation of water-efficient appliances and fixtures have not been factored into the savings calculations. Any rate or penalty revenue that the District collects in excess of the marginal supply cost of water is separately maintained in the District’s Water Efficiency Fund and is applied towards rebates and other water efficiency programs. As such, including the water use efficiency program costs along with additional penalty and rate revenue associated with newly out of budget usage would skew the presentment of realistic financial impacts to the District for each of the stages. The District’s experience responding to mandated demand reductions in 2015 corroborates this approach as the District’s financial position improved during that time despite significant reductions in demand and historic levels of rebate participation and water use efficiency outreach costs.

Table 9-1: Predicted Change in Revenue

Stage	Percent Supply Reduction	Change in General Fund Rate Revenue	Savings from Reduced Water Purchases	Change in General Fund Balance
1	≤10%	(\$969,591)	\$1,224,398	\$254,807
2	10 – 20%	(\$2,085,080)	\$2,448,795	\$363,715
3	20 – 30%	(\$4,432,775)	\$4,897,590	\$464,815
4	30 – 40%	(\$6,649,163)	\$7,346,385	\$697,222
5	40 – 50%	(\$8,865,551)	\$9,795,180	\$929,629
6	≥50%	(\$11,081,938)	\$12,243,975	\$1,162,037

As previously mentioned, the actual financial impact of each water shortage stage will depend on variables that MNWD has little or no control over. Preliminary sensitivity analysis indicates that variations in the amount of water conservation by customers may result in significant swings in net revenue, though the impact to the District’s financial position would be limited.

If customers do not conserve as much as planned, there will be an increase in net revenues and vice versa. This dynamic is driven by the fact that customers will largely be paying top-tier rates for any water that they do not otherwise conserve. That top-tier water is more expensive than MNWD’s marginal cost of purchased water; therefore, the net revenue would increase. If customers conserve less than forecasted, net revenue will increase, and the Water Efficiency Fund reserves will increase. In this circumstance, the District’s first course of action would be to increase water use efficiency program expenditures to achieve more water use reductions.

The rate design is such that decreases in water usage above the individual budget only impact the District’s Water Efficiency Fund. The marginal cost of water is used as a point to delineate revenue that goes to the Water Efficiency Fund versus that used to pay for imported water through the District’s

General Fund. If customers use less water in the higher tiers, less money is needed for conservation and water reliability projects. Hence, the clear nexus in design provides a mechanism to mitigate risk from changes in water use. Reduced water usage within the individually calculated water budget increases net revenues due to the price to the customer being lower than the cost of imported water. To achieve this, the District allocated property tax revenue it receives to provide incentive for increasingly efficient water usage.

MNWD's drought penalty policies have been structured to minimize the financial impact of the water shortage stages to both customers and the District, while also achieving the water conservation goals set by the District's WSCP. If actual water conservation falls short of the target reductions for a given stage, the District intends to use the increase in net revenues to increase conservation efforts such as outreach and rebate funding, or otherwise offset future rate increases. Conversely, if actual water conservation exceeds the target reductions, MNWD has established reserves that will enable the District to temporarily withstand the revenue shortfall which would only be in the Water Efficiency Fund and would not be needed with customers meeting efficiency goals. These policies will help MNWD to maintain financial stability and promote necessary water conservation during implementation of a water shortage stage.

Chapter 10 Monitoring and Reporting

Section 10.1 District’s Advanced Metering Infrastructure

Water use in the District’s service area is 100 percent metered. The District upgraded its meter technology as part of its “Advanced Metering Infrastructure” program. These upgraded smart meters help the District improve operations and enable all customers and the District to monitor hourly water usage. The Advanced Metering Infrastructure system provides a concise method for monitoring the effectiveness and efficiency of the WSCP measures. The ability for the District and our customers to view daily insights and get proactive notifications can help ensure that customers have the information they need to stay within their water budget.

During a water shortage stage, a monthly production forecast and water budget are developed for each customer class. Depending on the shortage stage, actual production and demands are monitored monthly to verify that the budgeted goals are being met. The status would be reported to the General Manager. If the trend in consumption is such that demands are exceeding water budgets greater than anticipated, the General Manager and Board of Directors are notified so that corrective action (such as increased public education campaigns and customer notifications) can be taken.

Section 10.2 State Water Board Monthly Reporting

On May 9, 2016, the Governor issued Executive Order B-37-16 to make water conservation a way of life in California and directed the State Water Resources Control Board to establish permanent reporting and data collection by urban water suppliers. On April 21, 2020, the State Water Resources Control Board adopted Resolution No. 2020-0009, which requires monthly urban water conservation reporting. The Urban Water Supplier Reporting tool is used for monthly reporting. The monthly reporting required by the State Water Resources Control Board will be used for reporting purposes of this WSCP, when a stage is implemented.

Chapter 11 **WSCP Refinement Procedures**

Section 11.1 Plan Review and Update

Reevaluation and improvement procedures are used to ensure water shortage responses are adequate and appropriate mitigation strategies are implemented as needed. The District will periodically evaluate the elements of the WSCP and update as necessary to ensure conformance with CWC requirements. The WSCP will be reviewed at least every five years as part of the UWMP update process, but the frequency of the re-evaluation could increase based on lessons learned, new statutory requirements, continued local supply development, and other factors as determined by the District. The District may also amend the WSCP to address factors that would have a significant effect on conservation planning.

Chapter 12 Special Water Feature Distinction

CWC Section 10632(b) requires the District to 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.

For purposes of this WSCP, a swimming pool or pool means any structure intended for swimming or recreational bathing that contains water over 18 inches deep. "Swimming pool" includes in-ground and above-ground structures and includes, but is not limited to, hot tubs, spas, portable spas, and nonportable wading pools. A decorative water feature is considered artificially supplied with water and could include fountains, ponds, and waterfalls. Decorative water features are designed for visual appreciation, not for public play and interaction. As such, a decorative water feature may use or be able to use recycled or recirculated water, whereas pools and spas must use potable water for health and safety considerations.

Chapter 5, Section 5.1.4 identifies Permanent Water Conservation Requirements that includes water conservation BMPs that have been established to conserve water, prevent the waste or unreasonable use or unreasonable method of use of water, and preserve the District's water supplies. BMP I requires re-circulating water for decorative water fountains and decorative water features. The BMP prohibits the operation of a decorative water fountain or other decorative water feature that does not use re-circulated water. BMP P encourages property owners who have a swimming pool or a spa to cover the facilities to minimize water loss due to evaporation.

Chapter 13 Plan Adoption, Submittal, and Availability

The District provided notice of the availability of the Draft 2020 UWMP (including the WSCP) and notice of the public hearing to consider adoption of both plans in accordance with CWC Sections 10621(b) and 10642. The public review draft of the WSCP was posted on the District's website, <https://www.mnwd.com/reports-publications/>. The notice of availability of the WSCP was sent to service area cities and County, as well as neighboring water agencies. The District held a Board workshop for the Draft WSCP on April 14, 2021 to provide an opportunity for early input on the WSCP. Newspaper notices of the public availability of the Draft Ordinance and WSCP and notification for the public hearing was published in the Orange County Register on April 24, 2021 and May 1, 2021, as required by the CWC. The District held a public hearing on May 13, 2021 to solicit public comments and then adopt the WSCP. In fulfillment of CWC Sections 10632(c) and 10645(a) and (b), the District's Final WSCP was posted on the District's website, <https://www.mnwd.com/reports-publications/>, following the adoption by the District's Board of Directors. The District shall make its WSCP available to its customers and the cities and county within which it provides water supplies no later than 30 days after adoption in conformance with CWC section 10632(c). The District will also submit a copy to DWR. If revised, the District shall submit a copy of the WSCP to DWR within 30 days of adoption.

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