



2020 Urban Water Management Plan

North Tahoe Public Utility District

Tahoe Vista, California
June 1, 2021



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Acronyms and Abbreviations

Act	California Urban Water Management Planning Act
AWWA	American Water Works Association
Basin	Tahoe Valley – Tahoe North Groundwater Basin
CWC	California Water Code
CY	calendar year
DMM	Demand Management Measure
DWR	Department of Water Resources
ERP	Emergency Response Plan
GPCD	gallons per capita per day
kWh	kilowatt-hours
kWh/AF	kilowatt-hours per acre feet
MG	million gallons
NTPUD	North Tahoe Public Utility District
PWS	Public Water System
RUWMP	Regional Urban Water Management Plan
SB	Senate Bill
TCPUD	Tahoe City Public Utility District
TRPA	Tahoe Regional Planning Agency
TTSA	Tahoe-Truckee Sanitation Agency
UWMP	Urban Water Management Plan
WSCP	Water Shortage Contingency Plan

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1 Introduction and Overview

1.1 Background and Purpose

As an urban water supplier with more than 3,000 connections, the North Tahoe Public Utility District (NTPUD or District) shall prepare Urban Water Management Plans (UWMP) as required per the California Urban Water Management Planning Act (Act). The District had 3,948 connections in 2020 and is therefore classified as an urban water supplier.

The UWMP is intended to provide a framework for long-term water planning and inform the public of a supplier's plans for long-term resource planning that ensures adequate water supplies for existing and future demands.

1.2 Urban Water Management Planning and the California Water Code

California Water Code (CWC), Sections 10608 and 10610 through 10657, provide the formal regulations detailing information required to be contained within an urban water suppliers UWMP.

The urban water supplier, through the UWMP, is required to assess the reliability of its water sources over a 20-year planning horizon, and report its progress on 20 percent reduction in per-capita urban water consumption by the year 2020, as required in the Water Conservation Bill of 2009 Senate Bill (SB) X7-7.

The UWMPs must be prepared every 5 years and submitted to the Department of Water Resources (DWR) for review.

1.2.1 Changes to the California Urban Water Management Planning Act

For each cycle of the UWMP Act, the California Legislature has amended the original UWMP Act to include additional requirements and considerations. For the 2010 UWMP cycle, the CWC was amended to include mandated compliance to reduce per capita water demands by 20 percent by 2020 (20 x 2020), with an interim reduction target in 2015. The Water Conservation Act of 2009, enacted on November 10, 2009, required all water suppliers to further increase water use efficiency. The legislation also required that every urban water supplier included in its UWMP provide a status update regarding their ability to meet the 2015 target and plans for additional conservation necessary to meet the 2020 target.

Significant amendments to the UWMP Act in preparation of the 2020 UWMP include the following:

- 2020 UWMP submittal date changed to July 1, 2021.
- The multiyear dry year water reliability planning was modified to include a period equivalent to a drought lasting at least 5 years.

- Assessment of seismic risk to water system facilities or reference to recent multi-hazard mitigation plans.
- Specific requirements for a Water Shortage Contingency Plan (WSCP), including preparation and adoption of a standalone document that can be updated more frequently than every 5 years.
- Coordination of groundwater supplies and groundwater sustainability plans.
- Inclusion of a lay description for fundamental sections of the UWMP.

The UWMP Act of 1983, as amended, and the Water Conservation Act of 2009 are included in Appendix A.

1.2.2 Changes since the 2015 Urban Water Management Plan

For the 2020 UWMP, the CWC added additional reporting requirements from the 2015 UWMP, including the following:

- Formally preparing and adopting a WSCP
- Evaluating water reliability over a period of 5 consecutive dry years
- Preparation of a Drought Risk Assessment
- Addressing seismic risks
- Reporting energy intensity.

1.3 Urban Water Management Plans in Relation to Other Planning Efforts

Other planning and/or operating documents reviewed, incorporated, and/or considered in the preparation of this 2020 UWMP include:

- Emergency Response Plan (NTPUD 2005)

1.4 UWMP Organization

This UWMP follows the organization outlined in the DWR “UWMP Guidebook 2020,” dated March 2021. Each section of this UWMP has the applicable **CWC section verbiage** inserted at the beginning of the section, followed by the District’s response addressing and/or otherwise providing information as required, thereby demonstrating compliance.

This 2020 UWMP was formatted to meet current requirements established by the DWR. New requirements for the 2020 UWMP also include requirements addressing several changes made to the CWC, assessments of dry-year water reliability, drought risk, seismic risk, water shortage contingency planning, and groundwater supplies coordination. To improve the quality of UWMP reviews, the DWR has developed a UWMP checklist for use by DWR staff in their review of 2020 UWMPs. To expedite the DWR review and ensure completeness of the District’s plan, this checklist has been completed and is included as Appendix B.

1.5 UWMPs and Grant or Loan Eligibility

CWC 10608.56

(a) On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

(c) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per capita reductions. The supplier may request grant or loan funds to achieve the per capita reductions to the extent the request is consistent with the eligibility requirements applicable to the water funds.

(e) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.

(f) The department shall not deny eligibility to an urban retail water supplier or agricultural water supplier in compliance with the requirements of this part and Part 2.8 (commencing with Section 10800), that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the requirements of this part or Part 2.8 (commencing with Section 10800).

CCR Section 596.1(b)(2)

“disadvantaged community” means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.

For the District to be eligible for any water management grant or loan administered by the DWR, the District must have a current UWMP on file that has been determined by DWR to address the requirements of the CWC. A current UWMP must also be maintained by the District throughout the term of any grant or loan administered by the DWR.

1.6 Executive Summary

The District has prepared this 2020 UWMP in accordance and compliance with the UWMP Act. The District’s 2020 UWMP serves as the long-term planning document that will help to ensure a reliable water supply for the region. This Executive Summary satisfies the requirement of CWC Section 10630.5 to include a simple lay description of information necessary to provide a general understanding of the plan, including a description of the District’s reliable water supply, challenges ahead, and strategies for managing reliability risks.

1.6.1 Background

NTPUD is an urban water supplier with more than 3,000 connections responsible for delivering potable water to customers in its service area. The District's UWMP is intended to provide a framework for long-term water planning and inform the public of a supplier's plans for long-term resource planning that ensures adequate water suppliers for existing and future demands.

Significant amendments to the UWMP Act, in preparation of the 2020 UWMP, include modifications to multi-year dry year water reliability planning drought periods; addition of seismic risk assessments or reference to recent multi-hazard mitigation plans; specific requirements for the preparation and adoption of a WSCP; coordination of groundwater supplies and Groundwater Sustainability Plans; and inclusion of a lay description for fundamental sections of the UWMP, satisfied by this Executive Summary.

For the 2020 UWMP, the Water Code has added additional reporting requirements from the 2015 UWMP, including formally preparing and adopting a WSCP; evaluating water reliability over a period of five consecutive dry years; preparation of a Drought Risk Assessment (DRA); addressing seismic risks; and reporting energy intensity.

1.6.2 Plan Preparation

The District is a retail water agency and does not receive water from a wholesaler. The District provides water to its customers through three public water systems – Tahoe Main, Carnelian Woods, and Dollar Cove. While preparing the 2020 UWMP, the District coordinated its effort with several agencies and municipalities to accurately reflect future planning for their service area. The agencies and municipalities with which the District coordinated development of this UWMP include Tahoe City Public Utility District, Incline Village General Improvement District, Agate Bay Water Company, Fulton Water Company, Tahoe Truckee Unified School District, North Tahoe Business Association, Tahoe Sierra Integrated Regional Water Management Group, Tahoe Water Suppliers Association, and Placer County.

1.6.3 System Description

The Tahoe Basin (in which NTPUD District boundaries are fully contained) is a weekend, vacation, and seasonal destination in both summer and winter. As such, the number of persons within the service area is highly variable at any given time. The basin's population fluctuates significantly due to the inherent dynamics of a vacation destination and resort community. Consistent with the inherent dynamics associated with resort and second home communities, connections remain (and are added consistent with growth) regardless of full-time population fluctuations. Potential development is limited as the basin is essentially built out. The Tahoe Regional Planning Agency's approach to proposed developments allows some controlled growth and economy without impacting the sensitive environment of the Tahoe Basin.

The District owns, operates, and maintains three separate and geographically distinct water systems known as Main, Carnelian, and Dollar Cove. Service connections in the District's water service area have steadily increased from 3,340 connections in 1990 to 3,948 connections in 2020. Given the inherent challenges with determining the full-time

population of the service area, population is estimated using the last census year as a starting date (2010) and assuming population growth at a consistent rate as that of past District connections growth rate. Although the District provides sewer service to all customers within the District's boundaries, it only provides a portion of these customers with water service. These non-District water customers within District boundaries are served by privately-owned water providers.

The District is in a high alpine forested lake basin ecosystem above 6,000 feet in elevation. Winters are typically cold with periods of snow; summers are mild and temperate. Spring snowmelt is the primary source of water supply recharge for the region's surface and groundwater sources.

1.6.4 System Water Use

The District categorizes water demands by single family residential, multifamily residential, commercial, industrial, institutional, irrigation, agricultural, and unaccounted water. In 2020, total water demand in the District's service area was 381 million gallons (MG). Average water use is approximately 35-40% for single family, 12-15% for multifamily, 15% for commercial, 3% for irrigation, 27-35% for system losses (unaccounted water), and less than 1% for industrial, institutional, and agricultural uses.

By 2045, the District's total water demands are projected to reach 410 MG. This projection accounts for lower income residential demands and assumes increased demands in single family residential, multifamily residential, and commercial use remain constant with projected population growth rates. The District's efforts to track and reduce system losses have been effective and will continue to work towards reduction in unaccounted for water.

1.6.5 Senate Bill X7-7 Baselines and Targets

The Water Conservation Act of 2009 (also referred to as SB X7-7) required urban retail water suppliers to develop urban water use targets to help reduce per capita water use by 20 percent by the year 2020. For the 2020 UWMP, the District is required to compare 2020 per capita water use with the SB X7-7 per capita water use baseline developed for the 2010 UWMP and water use targets that were recalculated in the 2015 UWMP.

The 5-year period of 2006 through 2010 was used for the 5-year baseline gallons per capita per day (GPCD) determination used to establish the minimum water use reduction requirements for 2020. The District's 2020 per capita water use of 215 GPCD is within their 2020 target of 237 GPCD.

1.6.6 System Supplies

NTPUD purchases water from Tahoe City Public Utility District (TCPUD) for the District's Dollar Cove Water system, which draws from two groundwater wells within TCPUD's boundaries. Additionally, NTPUD owns and operates the Carnelian Well and the Park Well. The Carnelian Well is the sole source for the Carnelian Woods Water System. The Park Well is a backup source for the Tahoe Main system, which relies on a surface water source as its primary supply. Stormwater is not being intentionally diverted for groundwater recharge, or any other beneficial source water use, by NTPUD.

The District produces groundwater from the Tahoe Valley – Tahoe North Groundwater Basin. In 2014, the State of California passed the Sustainable Groundwater Management Act, which recognizes the importance of groundwater to California's overall water supplies and addresses undesirable results caused by over-reliance on groundwater. The Department of Water Resources designated the Tahoe Valley – Tahoe North Groundwater Basin as a very low priority basin, and therefore not required to form a Groundwater Sustainability Agency or develop a Groundwater Sustainability Plan.

NTPUD's primary source for its Tahoe Main System is Lake Tahoe. This is the only surface water diversion the District draws from, and this is the only system served by this source. The District does not have any current or planned water exchange or transfer arrangements. The District does maintain emergency interconnections with adjacent water systems (not owned or operated by NTPUD) if a need to engage were to occur. NTPUD does not use, nor does it plan to use, wastewater or recycled water as a supply within the planning horizon of the UWMP.

In 2020, the District's net utility energy intensity was approximately 2,533 kilowatt-hours of energy used per MG of water. This energy intensity represents data from the District from 2020 for groundwater, surface water, local treatment, and distribution.

1.6.7 Water Supply Reliability Assessment

The 2020 UWMP presents the District's water reliability assessments from 2025 through 2045. Consistent with the requirements of the Act, each assessment compares total projected water supply available to NTPUD over the next 25 years in five-year increments based on three water supply condition scenarios: average/normal water year, single dry water year, and multiple dry water year.

The District does not currently have, nor anticipate in the future, constraints on water sources for any of its systems. While reliability is anticipated to vary by supply, local groundwater and surface water supplies are assumed to remain consistent and reliable, even in drought conditions. To assess water service reliability during drought events, the Act requires each urban water supplier to prepare single and multiple dry-year demand and supply projections and comparisons in 5-year increments. For NTPUD's water supply reliability assessment, the normal water year is based on available supplies in 2006, the single dry year is the year with the lowest precipitation (2013), and the multiple dry-year period is the lowest average runoff for a consecutive 5-year period (2011 through 2015).

Forecasted normal water year projections for the District's service area show that the District anticipates having adequate water supplies to meet projected demands through 2045. For the single and multiple dry-year scenarios, supplies were calculated based on evaluating the availability of each supply. For groundwater and surface water, it is assumed that supplies would be reliable and available at normal levels in both a single dry year and multiple dry years. In each scenario, supplies and demands would be equal with no surplus or deficit. While the District does not show a deficit of supplies during an extended drought (i.e., multiple dry-year scenario), it is assumed the District would implement demand management and conservation measures in response to extended drought conditions.

The Act requires a water supplier to include in its 2020 UWMP a DRA. The District's DRA assesses a projected drought over the next five-year period from 2021-2025. Near-term drought reliability of the sources of supply utilized by the District depends on the drought impact and stress on each supply. In a prolonged drought, rainfall and runoff into local reservoirs would decrease, but the overall supply sourced from local reservoirs is not anticipated to be constrained during drought periods. Similarly, the District groundwater supply is not anticipated to be constrained during drought periods. The District's DRA shows adequate water supplies for all demand conditions over the course of the 5-year drought risk assessment period and has determined that actions under the WSCP would not be necessary. Seismic impacts to the District's water supply and the District's response actions are included in the District's Emergency Response Plan and the current Risk and Resiliency Analysis.

1.6.8 Water Shortage Contingency Plan

The WSCP presents the District's contingency plan to address drought planning, water shortage response levels and actions, and management of water allocations during a declared water emergency. The WSCP has been prepared as a separate plan that can be updated and adopted independent of the UWMP cycle. The District will assess on an annual basis projected water demands and supplies to determine if adequate supplies are available for each current year and one dry year.

The WSCP describes the District's stages of action to define a total of six water shortage levels. These water shortage levels specify water shortage response actions that the District can implement in response to shortages in water supply, as expressed by percentages. Increasing stages correspond with increasing levels of required water conservation, use, and restrictions as formally declared by the Board at a publicly noticed meeting. Each increasing stage level also includes all conservation measures, use requirements, and restrictions of all previously declared lower level stages. Shortage response actions included in the WSCP are a mix of prohibitions on end use, consumption reduction methods, supply augmentation, and operational change measures.

To ensure a maintained supply in the event of a catastrophic supply interruption, the District has several elements that provide redundancy, support, and/or alternatives to engage as applicable in the event they are needed. These include standby generators to maintain operations of the District's water stations, emergency interconnection capabilities with adjacent water systems, a mutual aid agreement to shift resources among agencies if needed, and an Emergency Response Plan that identifies the District's emergency planning, organization, and response policies.

1.6.9 Demand Management Measures

The District recognizes water conservation as a priority in its water use planning to manage water demand. The long-term goal of the District's water use efficiency program is to achieve and maintain water conservation goals for various use categories that are reasonable for that category.

NTPUD's water conservation programs and demand management measures include water waste prevention ordinances; metering; conservation pricing through a tiered water rate structure; public education and outreach; and programs to assess and manage distribution system real loss.

2 Plan Preparation

2.1 Basis for Plan Preparation

CWC 10617

“Urban water supplier” means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems...

CWC 10620(b)

Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

CWC 10621

(a) Each urban water supplier shall update its plan at least once every five years on or before July 1, in years ending in six and one, incorporating updated and new information from the five years preceding each update.

(f) Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.

The District is an urban water supplier and provided water service to 3,948 connections in 2020.

2.1.1 Public Water Systems

CWC 10644(a)(2)

The plan, or amendments to the plan, submitted to the department ... shall include any standardized forms, tables, or displays specified by the department.

CWC 10608.52

(a) The department, in consultation with the board, the California Bay-Delta Authority or its successor agency, the State Department of Public Health, and the Public Utilities Commission, shall develop a single standardized water use reporting form to meet the water use information needs of each agency, including the needs of urban water suppliers that elect to determine and report progress toward achieving targets on a regional basis as provided in subdivision (a) of Section 10608.28.

(b) At a minimum, the form shall be developed to accommodate information sufficient to assess an urban water supplier’s compliance with conservation targets pursuant to Section 10608.24... The form shall accommodate reporting by urban water suppliers on an individual or regional basis as provided in subdivision (a) of Section 10608.28.

California Health and Safety Code 116275

(h) “Public Water System” means a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more

service connections or regularly serves at least 25 individuals daily at least 60 days out of the year.

2.1.2 Agencies Serving Multiple Service Areas/Public Water Systems

The District is a retail water agency, as defined by the CWC and provides water to its customers through three public water systems, listed in Table 2-1.

Table 2-1. Public Water Systems

Public Water System Number	Public Water System Name	Number of Municipal Connections 2020	Volume of Water Supplied 2020
31-10001	Tahoe Main	3,390	332
31-10023	Carnelian Woods	283	23
31-10036	Dollar Cove	275	26
TOTAL		3,948	381

2.2 Regional Planning

The District is not part of a Regional Alliance relative to UWMPs.

2.3 Individual or Regional Planning and Compliance

The District has chosen to prepare an individual UWMP, as noted in Table 2-2.

Table 2-2. Plan Identification

Select Only One	Type of Plan	Name of RUWMP or Regional Alliance if applicable
X	Individual UWMP	
	Water Supplier is also a member of an RUWMP	
	Water Supplier is also a member of a Regional Alliance	
	RUWMP	

Note:

RUWMP = Regional Urban Water Management Plan

2.3.1 Regional UWMP

CWC 10620(d)(1)

An urban water supplier may satisfy the requirements of this part by participation in area wide, regional, watershed, or basinwide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation, efficient water use, and improved local drought resilience.

N/A: The District has chosen to prepare an individual UWMP.



2.3.2 Regional Alliance

N/A: NTPUD is not part of a Regional Alliance relative to UWMPs.

2.4 Fiscal or Calendar Year and Units of Measure

CWC 1608.20(a)(1)

Urban retail water suppliers...may determine the targets on a fiscal year or calendar year basis.

2.4.1 Fiscal or Calendar Year

NTPUD is using a **Calendar Year (CY)** for its reporting within this UWMP.

2.4.2 Reporting Complete 2020 Data

Water use and planning data for the entire calendar year is provided herein.

2.4.3 Units of Measure

All applicable data in this UWMP is reported in MG, as noted in Table 2-3.

Table 2-3. Supplier Identification

Type of Supplier (Select One or Both)	
	Supplier is a wholesaler
✓	Supplier is a retailer
Fiscal or Calendar Year (Select One)	
✓	UWMP tables are in calendar years
	UWMP tables are in fiscal years
Unit of Measurement used in UWMP	
Unit	MG

2.4.4 Coordination and Outreach

CWC 10631(h)

An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (f). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (f).

2.4.5 Wholesale and Retail Coordination

The NTPUD does not receive water (either purchased or otherwise) from a wholesaler as defined by CWC 10608.12 (r).

2.4.6 Coordination with Other Agencies and the Community

CWC 10620(d)(3)

Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.

CWC 10635(b)

The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

CWC 10642

Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan...

While preparing the 2020 UWMP, the District coordinated its effort with several agencies and municipalities to accurately reflect future planning for their service area. UWMP outreach included:

- Letter to Agencies (Appendix C):
 - Tahoe City Public Utility District (4/8/21)
 - Incline Village General Improvement District (4/8/21)
 - Agate Bay Water Company (4/8/21)
 - Fulton Water Company (4/8/21)
 - Tahoe Truckee Unified School District (4/8/21)
 - North Tahoe Business Association (4/8/21)
 - Tahoe Sierra Integrated Regional Water Management Group (4/8/21)
 - Tahoe Water Suppliers Association (4/8/21)
- Draft 2020 UWMP available for Review
 - PDF on District website (4/23/21)
- Local Newspaper Notice of Public Hearing (Appendix C)
 - Notice #1 (4/23/21)
 - Notice #2 (4/30/21)
- Public Hearing (Appendix D)
 - NTPUD Board meeting (5/11/21)

2.4.7 Notice to Cities and Counties

CWC 10621(b)

Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days before the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

UWMP Outreach includes:

- Letter to Cities/Counties (Appendix C):
 - Placer County (4/8/21)
- Draft 2020 UWMP available for Review
 - PDF on District website (4/23/21)
- Local Newspaper Notice of Public Hearing (Appendix C)
 - Notice #1 (5/21/21)
 - Notice #2 (5/28/21)
- Public Hearing and Adoption (Appendix D)
 - NTPUD Board meeting (5/11/21 and 6/8/21)

3 System Description

3.1 General Description

CWC 10631(a)

Describe the service area of the supplier...

The NTPUD is a California Special District established in 1948 to provide sewer service to the North Shore of Lake Tahoe. Water service was added to the District's responsibilities in 1967. Although the District provides sewer service to all customers within the District's boundaries, it only provides a portion of these customers with water service. These non-District water customers within District boundaries are served by privately-owned water providers.

The Tahoe Basin (in which NTPUD District boundaries are fully contained) is a weekend, vacation, and seasonal destination in both summer and winter. As such, the number of persons within the service area (i.e., capita) is highly variable at any given time. Variations not only occur depending on the time of year (weekends, holidays, etc.), but also on the condition of the season itself (low snow years bring fewer skiers and vice-versa). Potential development (i.e., growth) is limited as the basin is essentially built out. The Tahoe Regional Planning Agency (TRPA), a bi-state regulatory and planning agency, is the overall regulator regarding land controls and high-level planning. Due to current protection regulations and lack of available land for development, any significant proposed developments are expected to be infill low-impact redevelopment of existing properties, allowing higher densities. This approach allows some controlled growth and economy without impacting the sensitive environment of the Tahoe Basin.

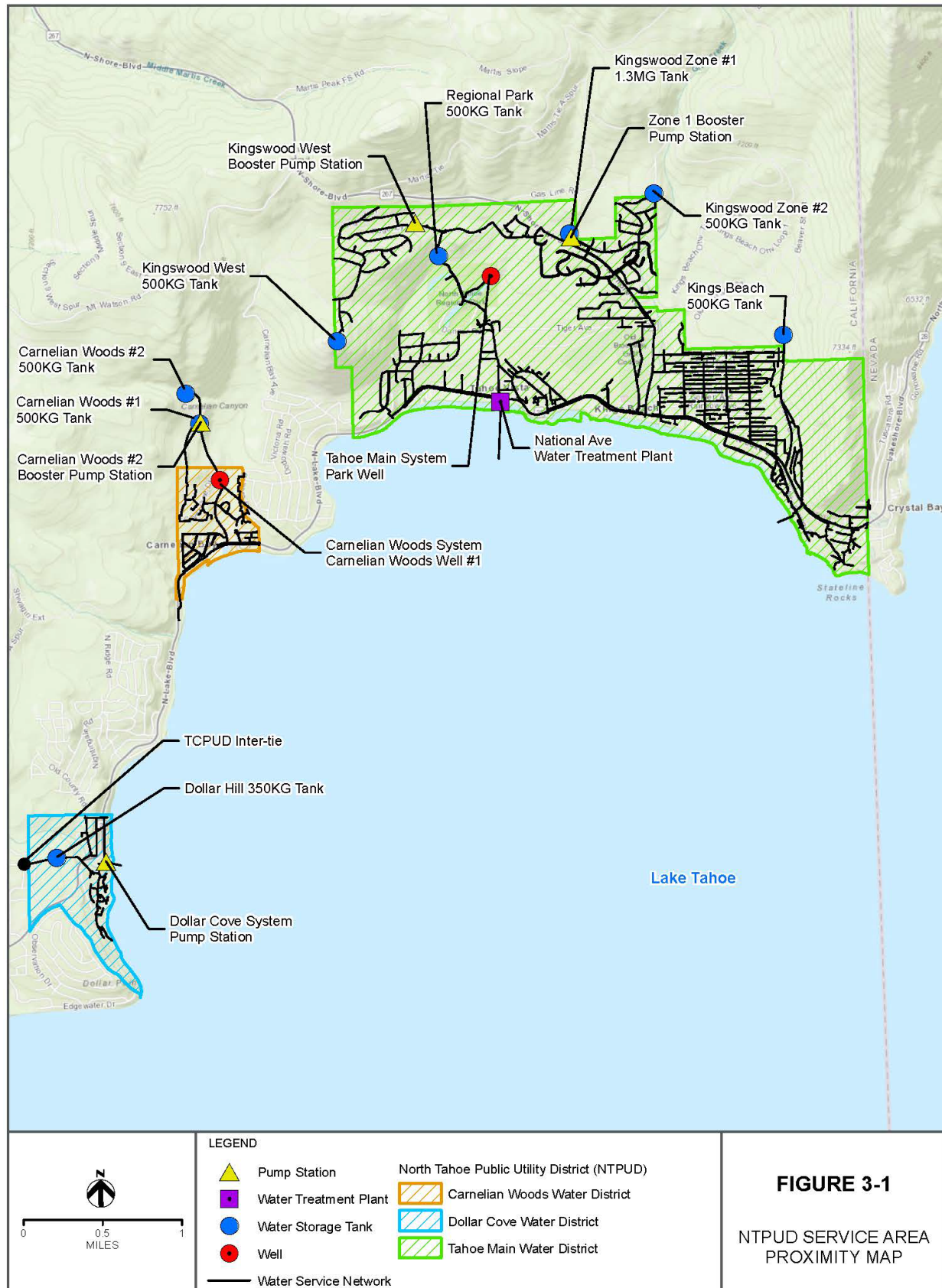
3.2 Service Area Boundary Maps

The District owns, operates, and maintains three separate and geographically distinct water systems known as Main, Carnelian, and Dollar Cove, as shown in Figure 3-1.

The Main System serves the communities of Kings Beach and Tahoe Vista and receives its water from Lake Tahoe and a well located in the North Tahoe Regional Park. The water pumped from Lake Tahoe is treated at the National Avenue Water Treatment Plant, using both chlorine and ultraviolet disinfection processes. It provides approximately 95 percent of the water produced by the District. The Carnelian System serves the community of Carnelian Bay and receives its water from a well.

The Dollar Cove System serves the community of Dollar Cove and purchases its water from the Tahoe City Public Utility District, Public Water System (PWS) Identification Number 31-10036. The water received from the TCPUD is a well blend. The Dollar Cove System also has a lake intake, which is no longer in use.

Figure 3-1. Service Area Boundaries



3.3 Service Area Climate

CWC 10631(a)

Describe the service area of the supplier, including... climate...

The District is in a high alpine forested lake basin ecosystem above 6,000 feet in elevation (Lake Tahoe surface elevation is approximately 6,225 feet). Winters are typically cold with periods of snow; summers are mild and temperate. Spring snowmelt is the primary source of water supply recharge for the region's surface and groundwater sources. Table 3-1 provides weather and climate information as summarized from the National Centers for Environmental Information, Station 048758 (Tahoe City, California).

Table 3-1. Monthly Average Climate Information (Years: 1903–2020)

Month	Precipitation (inches)	Snowfall (inches)	Temperature (Fahrenheit)
January	5.79	44	29
February	5.34	39	30
March	4.27	35	33
April	2.14	15	39
May	1.24	4	46
June	0.65	0	54
July	0.25	0	61
August	0.30	0	61
September	0.59	0	55
October	1.80	3	45
November	3.53	15	36
December	5.51	34	30

3.4 Service Area Population and Demographics

CWC 10631(a)

Describe the service area of the supplier, including current and projected population ...The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.

Population statistics within the Lake Tahoe Basin have historically been, currently are, and will be in the foreseeable future, a variable quantification. As noted in Section 3.1, the basin's population fluctuates significantly due to the inherent dynamics of a vacation destination and resort community. Although this is the case, as additionally noted in Section 3.1, the Tahoe Basin is essentially built out, which limits growth potential. This build-out, however, includes roughly half (this varies depending on the neighborhood) of the residential housing stock (i.e., service connections) held as second homes. Increased variability in the occupancy times in these second homes has been observed in the past due to an increased use of internet-based rental-by-owner platforms.

TRPA's Threshold Evaluation process from 2000 estimated approximately 0.4 percent annual growth. As the primary regulatory and planning agency for the region, this agency is best positioned to estimate this value. Although this was estimated, permanent population has decreased some since 2000. For purposes of infrastructure and demand planning however, TRPA estimates the visitation to the basin to nearly quadruple the full-time resident population at times. Likewise, from the perspective of the water providers, the numbers of connections will only increase over time versus fluctuation consistent with full-time population. Consistent with the inherent dynamics associated with resort and second home communities, connections remain (and are added consistent with growth) regardless of full-time population fluctuations.

The DWR population web-based tool was utilized by uploading .kml files, which reflect the District's water service areas and calculating persons per connection based on DWR population data and total service connections for census years 1990, 2000, and 2010. Census data for 2020 is not available at this time; the 2020 population was estimated using 2010 census population and projecting at the same rate of growth as service connections. Table 3-2 summarizes the results for each decade from 1990 through 2020 and presents the estimated District population for 2020.

Table 3-2. Population vs. Connections

Year	Population	Connections	Persons per Connection
1990	3,397	3,340	1.02
2000	5,046	3,524	1.43
2010	4,601	3,872	1.19
2015	4,141	3,883	1.07
2020	4,161	3,948	1.05

Notes:

DWR population tool used to estimate total population

Total connections are based on District customer records.

The census populations between 2000 and 2010 decreased; however, the DWR population tool continued the decreasing trend in its calculations for persons per connections and estimated populations in the following 2015 and 2020 analysis. While populations tend to fluctuate over time, the continued increase in service connections within the District implies that there is growth within the service area since 2010. The District recognizes that the primary measuring tool used to determine 20 X 2020 water reduction compliance is based on relative past, current, and future consumptions (i.e., demands) and the population served. Any visitation demand fluctuations are part of past overall demands, and likewise will be part of future overall demands. Therefore, the demand for this population sub-group should not affect the relative compliance calculations. Although this is the case, it is noted transient and second home visitors are inherently more difficult to reach via District public outreach conservation information and are a more variable quantification to predict from year to year.

As shown in Table 3-2, above, service connections have steadily increased over the years (from 1990 to 2020) at an average annual rate of 0.57 percent. To better estimate

population as it correlates to growth in service connections and water use, the 2020 population is estimated using the last census year as a starting date (2010) and assuming population growth at a consistent rate as that of past District connections growth rate (0.57 percent). Table 3-3 provides population estimates for 2020 and projections through 2045.

Table 3-3. Population – Current and Projected

Population Served	2020	2025	2030	2035	2040	2045 (opt)
	4,869	5,008	5,150	5,297	5,448	5,604

Notes: Population projection assumes average annual growth in connections of 0.57% (1990-2020), starting from 2010 census population.

The estimated 2020 population of 4,869 people results in a 2020 persons per connection of 1.23, which is in line with 2010 census estimates and is a reasonable assumption giving the transient and second home nature of the overall District community. The increase in connections to second homeowner dwelling unit complexes (higher density redevelopment complexes per TRPA's approved growth allowances) assuredly increases the seasonal occupancy rates, which should be accounted for in demand factors. The District will continue to monitor full-time population and may choose to amend their UWMP with 2020 census data when it becomes available.

Within the District service area, Caucasian (69 percent) and Hispanic/Latino (28 percent) ethnicities account for approximately 97 percent of the population. The median household income within the Tahoe Basin ranges from \$38,026 in Kings Beach to \$69,865 in Tahoe Vista. At least 95 percent of Kings Beach residents are employed outside of Kings Beach; over 80 percent of Tahoe City residents travel to other areas for work.

3.5 Land Uses within Service Area

The District provides water service to approximately 2,600 acres. Current land use categories are presented in Table 3-4.

Table 3-4. Existing District Land Use

Land Use	Acres
Residential	707
Commercial	525
Industrial	18
Institutional	23
Conservation	2
Parks	133
ROW	152
Vacant	1,043
Total	2,603

Development within the Tahoe Region is limited under the growth control system implemented by TRPA, the Bi-State Compact and Regional Plan. The system is designed to achieve and maintain the Tahoe Region's development standards and improvement programs, which include designation of vacant areas for new residential development, as well as allocations for non-residential development based on Commercial Floor Area and Tourist Accommodation Units.

Of the 1,043 acres designated as vacant land in Table 3-4, approximately 120 acres within Carnelian Bay, Tahoe Vista, Kings Beach and Dollar Cove are considered to be buildable as residential parcels. Kings Beach has a Tourist Accommodation Unit allocation of 24 units, and Carnelian Bay and Kings Beach have a total Commercial Floor Area allocation of 22,066 square feet.

4 System Water Use

CWC 10631(d)(1)

For an urban retail water supplier, quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following: single-family residential; multifamily; commercial; industrial; institutional and governmental; landscape; sales to other agencies; saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof; agricultural; distribution system water loss. The water use projections shall be in the same five-year increments described in subdivision (a).

4.1 Water Use by Sector

The District categorizes water demands by single family residential, multifamily residential, commercial, industrial, institutional, irrigation, agricultural, and unaccounted water. The District's water uses by sector have generally tracked as follows:

- Single family residential: 35-40 percent
- Multifamily residential: 12-15 percent
- Commercial: 15 percent
- Industrial: 0 percent
- Institutional: 0 percent
- Irrigation: 3 percent
- Agricultural: 0 percent
- Unaccounted: 27-35 percent

These basic values provide a good picture of demand sectors, and the opportunities the District has for conservation. Actual 2020 water deliveries by water use sector are provided in Table 4-1. The District's historical water use for 2016-2019 is as follows:

- 2016 – 375 MG
- 2017 – 396 MG
- 2018 – 389 MG
- 2019 – 361 MG

As discussed in Sections 3.1 and 3.4, the District's service area is essentially built out with growth limited to higher density redevelopment infill. This infill includes allowing mixed-use. The District is sensitive to separately metering connections by individual owner. As such, if a single, mixed-use building houses separate owners, these separate ownerships will be separately metered. In this manner, the residential vs. commercial demands may be maintained separately.

Table 4-1. Demands for Potable and Non-Potable Water – Actual

Use Type	2020 Actual		
	Additional Description (as needed)	Level of Treatment When Delivered	Volume
Single Family		Drinking Water	174
Multi-Family		Drinking Water	55
Commercial		Drinking Water	57
Landscape		Drinking Water	20
Other Potable		Drinking Water	1
Losses	Unaccounted Water	Drinking Water	75
TOTAL			381

Notes:

Other potable use includes fire.

Table 4-2 and Table 4-3 assume increased demands in single family residential, multifamily residential, and commercial use remain constant with projected growth rates per Table 3-3.

Table 4-2. Use for Potable and Non-Potable Water – Projected

Use Type	Additional Description (as needed)	Projected Water Use Report to the Extent that Records are Available				
		2025	2030	2035	2040	2045 (opt)
Single Family		179	184	189	194	200
Multi-Family		57	58	60	62	63
Commercial		58	60	62	63	65
Landscape		20	21	21	22	23
Other Potable		1	1	1	1	1
Losses		64	62	60	58	58
Total		379	386	393	400	410

Notes:

In the irrigation sector, demands have held constant. Irrigation is limited to a short growing season. The District does not anticipate increased sector demands based on current area planning, and the current irrigation meters are enjoyed by their users. More importantly, as a Demand Management Measure (DMM), the District has proactively approached the primary high consumption users in this irrigation sector many times over the years promoting conservation. This effort has produced limited results. This knowledge and experience are reflected in the projection numbers.

Of note is the District's unaccounted for water. The District has been actively engaged in system auditing to lessen this amount in the past. Leak detection devices are well

implemented, and the District is now reviewing meter accuracy as a potential source of this relatively high number. Unaccounted for water was estimated as 27 percent of the District's demand in the 2015 UWMP and has reduced to 20 percent in 2020. The District continues to work towards reduction in unaccounted for water and is aiming for a 15 percent reduction in year 2025, and another 10 percent by year 2040.

Table 4-3. Total Gross Water Use (Potable and Non-Potable)

	2020	2025	2030	2035	2040	2045 (opt)
Potable Water, Raw, Other Non-potable	381	379	386	393	400	410
Recycled Water Demand	0	0	0	0	0	0
Total Water Use	381	379	386	393	400	410

Notes:

4.2 Distribution System Water Losses

The District has completed the American Water Works Association (AWWA) Water Audit (per Guidebook Appendix L), populated AWWA software, and is currently going through the TAP 4-wave program per SB-555. Table 4-4 reflects water losses as found per the AWWA platform.

Table 4-4. 12 Month Water Loss Audit Reporting

Reporting Period Start Date (mm/yyyy)	Volume of Water Loss*
01/2016	89
01/2017	92
01/2018	77
01/2019	81
01/2020	75

Source: AWWA Water Audits for Tahoe Main, Carnelian, and Dollar Cove

* Taken from the field "Water Losses" (a combination of apparent losses and real losses) from the AWWA worksheet.

Note: 2020 water loss calculated as total production less total consumption, pending validated audit results.

4.3 Estimating Future Water Savings

As a DMM (Section 9), the District has many Water Ordinances in place aimed at conservation. Additionally, state codes (enforced via county approvals) require installation and retrofit of water-conserving plumbing fixtures. These include, but not limited to:

- NTPUD Ordinance, Section 2.2.1: Pressure Relief Valves or Pressure Reducing Valves

- NTPUD, Section 5.2.4: Excess Water Use
- NTPUD Ordinance, Entire Section 8: Water Conservation Requirements
- California 2019 Plumbing Code, Section 401.3: Water-Conserving Fixtures and Fittings

Although these are in place (requiring water saving fixtures), the opportunities for implementation are very limited due to the service area characteristics as noted in Section 3.1. While there may be some minor demand reductions captured with retrofits or other measures, the exercise of estimating these projections was not performed.

4.4 Water Use for Lower Income Households

CWC 10631.1(a)

The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.

Demands for lower income households have been accounted for.

Table 4-5. Inclusion in Water Use Projection

	Yes/No
Are Future Water Savings Included in Projections?	No
Are Lower Income Residential Demands Included In Projections?	Yes

Notes:

4.5 Climate Change Considerations

CWC 10631(b)(1)

For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.

Climate variability is expected to affect both demands and supplies across the District service area over the UWMP planning horizon. While climate change impacts can be expected, the extent to which the hydroclimatic changes will affect water resources is uncertain. As droughts in California increase in frequency and intensity due to climate change, water suppliers will need to implement stronger demand management strategies, including conservation mandates, to combat potential shortages. In addition to water supply availability due to drought, water management strategies resulting from climate change are also a concern.

5 Senate Bill X7-7 Baselines and Targets

CW 10608.20(a)

(1) Each urban retail water supplier shall develop urban water use targets and an interim urban water use target by July 1, 2011.

(2) It is the intent of the Legislature that the urban water use targets described in paragraph (1) cumulatively result in a 20-percent reduction from the baseline daily per capita water use by December 31, 2020.

This section presents the methods and results of calculating the District's baseline water use and targets for 2015 and 2020 as required by SBX7-7. A description of compliance with the 2020 target is also provided. The District has completed the DWR-required SBX7-7 tables to confirm compliance; those tables are included in Appendix B.

SB X7-7 required water agencies to reduce 2010 per capita water use by 20 percent by the year 2020, which is commonly referred to within the water industry as 20 x 2020. In the 2010 UWMP, the District developed a per capita water use baseline, and established water use targets for 2015 and 2020. For the 2020 UWMP, the District is required to compare 2020 per capita water use with targets calculated in the 2010 and 2015 UWMP.

5.1 Baseline Periods and Calculations

The District did not have any recycled water deliveries in the year 2008. The District utilized the 10-year period of 2001 through 2010.

The 5-year period of 2006 through 2010 was used for the 5-year baseline GPCD determination used to establish the minimum water use reduction requirements for 2020.

The District did not update the selected target method (when compared to the 2010 and 2015 UWMP) and continues to use Method 1: 80 percent of 10-year baseline GPCD.

As the District was fully metered in 1984 (prior to baseline years), and this BMP 1.3 is therefore not available for use, the District expected Target Method 4 would present itself as being an applicable approach as it factors in meter savings (or zero if there aren't any). The District went through the process of data collection, analysis, and calculations per SB X7-7 Provisional Method 4 Target Calculator spreadsheets. Based on population of required fields, the computed calculation of the 2020 target equaled the exact value as that found using Method 1. As such, and for the sake of simplicity in not requiring additional supporting documents, the District has chosen Method 1.

The baseline periods and per capita water use calculations are presented in Table 5-1.

Table 5-1. Baseline and Target Summary

Baseline Period	Start Year	End Year	Average Baseline*	Confirmed 2020 Target*
10-15 Year	2001	2010	296	237
5 Year	2006	2010	301	

Note

*All values are in GPCD

5.2 Service Area Population

The District utilized the DWR population tool for its population calculations used in the SB X7-7 baseline and target calculations. The DWR population estimate for 2020 showed a decline in population since 2015, which is inconsistent with the District's understanding of population growth trends for the area. As described in Section 3.4, the District's service area population for 2020 was instead estimated assuming consistent population growth since 2010 (last census year with available population data) using the District's rate of growth of service connections.

5.3 2020 Compliance Daily Per Capita Water Use

5.3.1 Meeting the 2020 Target

The District's 2020 average per capita water use is 215 GPCD and within their 2020 target of 237 GPCD (Table 5-2).

Table 5-2. 2020 Compliance

Actual 2020*	Total Adjustments*	Adjusted 2020*	2020 Confirmed Target GPCD	Did Supplier Achieve Targeted Reduction for 2020? Y/N
215	0	215	237	Yes

Note:

*All values are in GPCD

5.4 Regional Alliance

The District did not participate in a Regional Alliance. This section does not apply.

6 System Supplies

CWC 10631

(b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a), providing supporting and related information...

6.1 Purchased or Imported Water

NTPUD purchases water from Tahoe City Public Utility District (TCPUD) for the District's Dollar Cove Water system (PWS # 31-10036). This system's source is two groundwater wells within TCPUD's boundaries, which were developed through a joint development agreement (1992) between the two districts. In May of 1997 an interconnection to TCPUD's infrastructure was placed into operation, providing NTPUD a connection to this source. Prior to this date this system's source was Lake Tahoe's surface water via a shoreline pumphouse as the headworks of this system. This pumphouse (and source) were taken offline in May of 1997 due to Lake Tahoe water level issues and the overall aged pumping system condition's lack of reliability.

6.2 Groundwater

CWC 10631(b)(4)

If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information: the current version of any groundwater management plan adopted by the urban water supplier, a description of any groundwater basin or basins from which the urban water supplier pumps groundwater, a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years, and a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years.

The District has two groundwater wells utilized for source water: the Carnelian Well and the Park Well. The Carnelian Well is the sole source for the Carnelian Woods Water System (PWS No. 31-10023). The Park Well is a backup source for the Tahoe Main System, which relies on a surface water source as its primary supply. Table 6-1 shows groundwater volume pumped from each well for the period from 2016 to 2020.

Table 6-1. Groundwater Volume Pumped

Groundwater Type	Location or Basin Name	2016	2017	2018	2019	2020
Fractured Rock	Carnelian Well	23.5	25.9	23.7	24.4	23.3
Fractured Rock	Park Well	6.1	45.5	9.2	26.9	20.2
Total		29.6	71.4	32.9	51.3	43.5

6.2.1 Basin Description

The two District wells are located within the Kings Beach/Tahoe Vista Aquifer and draw from fractured rock.

Groundwater recharge in the Tahoe Basin is primarily from infiltration of snow and precipitation into the soil, faults and fractures in bedrock, and decomposed granite that overlies much of the bedrock, and into unconsolidated basin-fill deposits. Groundwater is recharged over the entire extent of the flow path, except where the land surface is impermeable or where the groundwater table coincides with land surface. Stream flow also recharges groundwater when the water table altitude is lower than the water surface altitude of the stream.

6.2.2 Groundwater Management

Supply management of the groundwater consists of consistent long-term monitoring of both static and drawdown (during pumping) levels. The NTPUD does not have a groundwater management plan as a separate document. Site selection and development of the Carnelian Well currently yields a sustained reliable source capacity of 230 gallons per minute, which greatly exceeds the demands of this small system. The Park Well only serves in a backup role to the main system's surface water source and is therefore only operated under operational shutdowns of the surface water plant and scheduled preventative maintenance activities. See Section 6.2.4 for pumping and historic level monitoring information.

Groundwater quality monitoring is performed as required and/or requested by the State Water Resources Control Board – Division of Drinking Water. All monitoring results are reported annually in the District's Consumer Confidence Report

The District produces groundwater from the Tahoe Valley – Tahoe North Groundwater Basin (Basin) identified in the State of California DWR Bulletin 118 as Basin Number 6-005.03. In 2014, the State of California passed the Sustainable Groundwater Management Act, which recognizes the importance of groundwater to California's overall water supplies and addresses undesirable results caused by over-reliance on groundwater. DWR designated the Basin as a very low priority basin, and therefore not required to form a Groundwater Sustainability Agency or develop a Groundwater Sustainability Plan. The Sustainable Groundwater Management Act 2019 Basin Prioritization Results rank the Basin's Priority Points = 0.0 and Overall Priority = Very Low. The Basin is not subject to any adjudicated limitations.

6.2.3 Overdraft Conditions

The groundwater basin the District draws from has not been identified as an overdrafted basin by DWR.

6.2.4 Historical Groundwater Pumping

Levels at both District wells (Carnelian and Park) have remained stable. As discussed in the beginning of this section, the Park Well only serves in a backup role and is therefore operated sporadically and at different rates of withdrawal.

6.3 Surface Water

NTPUD's primary source for its Tahoe Main System (PWS No. 31-10001) is Lake Tahoe. This is the only surface water diversion the District draws from, and this is the only system served by this source. Rights to this surface water diversion are solidified through multiple permits and licenses on file with the DWR. The District files annual usage reports with the DWR on each right.

6.4 Stormwater

Stormwater is not being intentionally diverted for groundwater recharge, or any other beneficial source water use, by NTPUD. Current permitting regulations (Tahoe basin-wide) require all properties (public and private) to capture and infiltrate stormwater runoff on-site up to the theoretical 20-year, 1-hour storm event (equaling rainfall depth of 1 inch). This regulation aids in groundwater recharge and likewise minimizes suspended solids (and other pollutants) from entering the surface waters via runoff.

6.5 Wastewater and Recycled Water

CWC 10633

The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier.

NTPUD does not use, nor does it plan to use, wastewater or recycled water as a supply within the planning horizon of the UWMP.

The regional wastewater treatment plant is owned and operated by Tahoe-Truckee Sanitation Agency (TTSA). TTSA's Water Reclamation Plant serves the sewer collection and conveyance districts of Alpine Springs County Water District, NTPUD, Squaw Valley Public Service District, TCPUD, and Truckee Sanitary District. TTSA's plant treats raw wastewater meeting and exceeds the stringent discharge limitations required for the high alpine setting of the service area.

TTSA receives NTPUD raw wastewater via gravity lines 20 miles downstream from the District's discharge location at the District's western service area boundary (Lake Tahoe's Dollar Point). Sewer is conveyed from the top of Dollar Point, along the Northshore to Tahoe, and down the Truckee River canyon to the plant.

The use (and potential use during the current planning level horizon) of wastewater or recycled water as a supply within the District's service area (Lake Tahoe Basin) is highly unlikely due to legal, physical, and practical limitations.

Legal

- Porter-Cologne Act (1969) – Mandates all sewage (treated and untreated alike) to be exported from the Lake Tahoe Basin. The Act's primary purpose is to protect the pristine qualities of the Lake Tahoe waters. Passage of the bill enabled the influx of both federal and state monies to fully fund the design and construction of the existing sewer export system the local Districts (NTPUD and TCPUD) own and operate today.

- Truckee-Carson-Pyramid Lake Water Rights Settlement Act (1990) – Prohibits the reduction in return flow of treated wastewater to the Truckee River without the acquisition of pre-existing water rights or an offset, returning Truckee River basin groundwater to the river or its tributaries.
- TRPA Code of Ordinance (2013) – Section 60.1.3 C – Prohibits the discharge of wastewater (treated and untreated alike) within the Tahoe basin.

Physical and Practical:

- Location of treatment plant – Located approximately 20 miles downstream from District service area. Although a shorter routing exists (12+ miles) it is through a sensitive valley and over a 1000+ foot vertical mountain pass. The infrastructure required is not cost effective.
- Quantity of available high-quality water – The massive volume and reliable source of high-quality water from the waters of Lake Tahoe overshadow any discussions relating to the need for importing recycled water.

6.5.1 Recycled Water Coordination

NTPUD does not use, nor does it plan to use, recycled water as a supply within the planning horizon of the UWMP.

6.5.2 Wastewater Collection, Treatment, and Disposal

NTPUD provides wastewater collection, conveyance, and export for approximately 5,300 connections. All the District's water customers (3,948 connections) are included in these sewer connections. The remaining water connections are served by private water providers.

The District's sewer infrastructure includes approximately 75 miles of gravity line, 7 miles of force main, 1,720 manholes, 4 high capacity export pump stations, and 14 local collection small pump stations. District boundaries are entirely on the Northshore of Lake Tahoe, running from the California/Nevada state line (east) to the top of Dollar Point (west). All wastewater collected in the District is conveyed to TTSA, as described in Section 6.5. The District's average 2020 discharge to TTSA (for all sewer connections) was 0.69 million gallons per day, equating to a total 2020 discharge of 250.4 million gallons (Table 6-2).

Table 6-2. Wastewater Collected Within Service Area in 2020

Wastewater Collection			Recipient of Collected Wastewater			
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated?	Volume of Wastewater Collected from UWMP Service Area 2020	Name of Wastewater Treatment Agency Receiving Collected Wastewater	Treatment Plant Name	Is WWTP Located Within UWMP Area?	Is WWTP Operation Contracted to a Third Party? (optional)
NTPUD	Metered	250.4	Tahoe-Truckee Sanitation Agency	TTSA Water Reclamation Plant	No	No
Total Wastewater Collected from Service Area in 2020		250.4				

Notes:

Percentage of 2020 service area covered by wastewater collection system (optional): [100]

Percentage of 2020 service area population covered by wastewater collections system (optional): [100]

Disposal of wastewater is not performed within the District's service area.

6.5.3 Recycled Water System

The District does not use, nor does it plan to use, recycled water as a supply within the planning horizon of the UWMP.

6.6 Desalinated Water Opportunities

CWC 10621(g)

Describe the opportunities for development of desalinated water...

There are no opportunities for desalination of water sources as a long-term supply.

6.7 Exchanges or Transfers

CWC 10631(c)

Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

The District does not have any current or planned water exchange or transfer arrangements. The District does maintain emergency interconnections with adjacent water systems (not owned or operated by NTPUD) if a need to engage were to occur.

6.8 Future Water Projects

The District does not currently have any plans or need for development of an additional water supply source.

6.9 Summary of Existing and Planned Water Sources

The District's four water sources are summarized in Table 6-3.

Table 6-3. Water Supplies – Actual

Water Supply	Additional Detail on Water Supply	2020		
		Actual Volume	Water Quality	Total Right or Safe Yield (optional)
Purchased or Imported Water	Dollar Cove	26	Drinking Water	
Groundwater (not desalinated)	Carnelian Well	23	Drinking Water	
Groundwater (not desalinated)	Park Well	20	Drinking Water	
Surface water (not desalinated)	National Avenue Water Treatment Plant	312	Other Non-Potable Water	
Total		381		

Source: 2020 Production

Water supply source use projections are provided in Table 6-4. The projected water supply figures were calculated by first determining the 2020 sector use percentage for each source, then projecting out each sector increase (or decrease) as described in Section 4.1 for each source.

Table 6-4. Water Supplies – Projected

Water Supply	Additional Detail on Water Supply	Projected Water Supply Report To the Extent Practicable									
		2025		2030		2035		2040		2045 (opt)	
		Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)
Purchased or Imported Water	Dollar Cove	25		26		26		27		28	
Groundwater (not desalinated)	Carnelian Well	23		24		24		24		25	
Groundwater (not desalinated)	Park Well	20		20		21		21		22	
Surface water (not desalinated)	National Avenue Water Treatment Plant	310		316		322		328		336	
Total		379		386		393		400		410	

6.10 Energy Intensity

CWC 10631.2(a)

In addition to the requirements of Section 10631, an urban water management plan shall include any of the following information that the urban water supplier can readily obtain: an estimate of the amount of energy used to extract or divert water supplies, an estimate of the amount of energy used to convey water supplies to the water treatment plants or distribution systems, an estimate of the amount of energy used to treat water supplies, an estimate of the amount of energy used to distribute water supplies through its distribution systems, an estimate of the amount of energy used for treated water supplies in comparison to the amount used for nontreated water supplies, an estimate of the amount of energy used to place water into or withdraw from storage, any other energy-related information the urban water supplier deems appropriate.

The Energy Intensity Analysis presented in this 2020 UWMP is reported in terms of kilowatt-hours (kWh) of energy used per million gallons of water (kWh/MG), and is included in Table 6-5. The information in Table 6-5 represents data from the District from 2020 for groundwater, surface water, local treatment, and distribution.

Table 6-5. Recommended Energy Intensity – Water Supply Process Approach

Enter Start Date for Reporting Period	12/10/2019	Urban Water Supplier Operational Control							
End Date	12/10/2020								
		Water Management Process						Non-Consequential Hydropower (if applicable)	
		Extract and Divert	Place into Storage	Conveyance	Treatment	Distribution	Total Utility	Hydropower	Net Utility
Volume of Water Entering Process (MG)		69			312	381	381		381
Energy Consumed (kWh)		112,701			717,939	134,552	965,192		965,192
Energy Intensity (kWh/AF)		1,633			2,301	353	2,533		2,533

7 Water Supply Reliability and Drought Risk Assessment

CWC 10635(a)

Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

The reliability assessment required by the UWMP Act requires urban water suppliers to compare the total projected water use with the expected water supply over the 20-year planning period in 5-year increments. This section assesses the overall reliability of future supplies regardless of drought or emergency conditions.

7.1 Constraints on Water Sources

The District does not currently have, nor anticipate in the future, constraints on water sources for any of its systems, including changes in supply due to climate change. The primary source for the Tahoe Main system (PWS No. 31-10001) is the surface water of Lake Tahoe. Lake Tahoe is a highly protected high alpine lake ensuring ample amounts of high-quality fresh water for years into the future. The District's two other systems (PWS Nos. 31-10023 and 31-10036), served by groundwater wells, have a relatively small amount of connections and source wells with proven capacity.

7.2 Reliability by Type of Year

The water supply available to the District is defined based on three water supply condition scenarios: normal water year, single dry water year, and multiple dry water years. The District reviewed precipitation data to determine the appropriate water years and the years selected for this analysis are presented in Table 7-1. While reliability is anticipated to vary by supply, local groundwater and surface water supplies are assumed to remain consistent and reliable, even in drought conditions.

Table 7-1. Basis of Water Year Data (Reliability Assessment)

Year Type	Base Year*	Volume Available	% of Average Supply
Average Year	2006	444,872	100
Single-Dry Year	2013	444,872	100
Consecutive Dry Years 1st Year	2011	444,872	100

Table 7-1. Basis of Water Year Data (Reliability Assessment)

Year Type	Base Year*	Volume Available	% of Average Supply
Consecutive Dry Years 2nd Year	2012	444,872	100
Consecutive Dry Years 3rd Year	2013	444,872	100
Consecutive Dry Years 4th Year	2014	444,872	100
Consecutive Dry Years 5th Year	2015	444,872	100

7.3 Supply and Demand Assessment

To assess water service reliability during drought events, the UWMP Act requires each urban water supplier to prepare single and multiple dry-year demand and supply projections and comparisons in 5-year increments. As shown above in Table 7-1, the normal water year is based on available supplies in 2006, the single dry year is the year with the lowest precipitation (2013), and the multiple dry-year period is the lowest average runoff for a consecutive 5-year period (2011 through 2015).

Table 7-2 shows the forecasted normal water year projections for the District's service area. The projections show that the District anticipates having adequate water supplies to meet projected demands through 2045.

Table 7-2. Normal Year Supply and Demand Comparison

	2025	2030	2035	2040	2045 (Opt)
Supply totals	379	386	393	400	410
Demand totals	379	386	393	400	410
Difference	0	0	0	0	0

For the single dry-year scenario, supplies were calculated based on evaluating the availability of each supply. For groundwater and surface water, it is assumed that supplies would be reliable and available at normal levels in a single dry year.

As shown in Table 7-3, in a single dry water year, supplies and demands would be equal with no surplus or deficit.

Table 7-3. Single Dry Year Supply and Demand Comparison

	2025	2030	2035	2040	2045 (Opt)
Supply totals	379	386	393	400	410
Demand totals	379	386	393	400	410
Difference	0	0	0	0	0

For the multiple dry-year scenario, supplies were also calculated by evaluating the anticipated availability of each supply. For groundwater and surface water, it is assumed that supplies would be reliable and available at normal levels.

While the District does not show a deficit of supplies during an extended drought, it is assumed the District would implement demand management and conservation measures in response to extended drought conditions. Therefore, as shown in Table 7-4, in all years of a multiple dry-year scenario, supplies and demands would be equal with no surplus or deficit.

Table 7-4. Multiple Dry Years Supply and Demand Comparison

		2025	2030	2035	2040	2045 (Opt)
First Year	Supply totals	379	386	393	400	410
	Demand totals	379	386	393	400	410
	Difference	0	0	0	0	0
Second Year	Supply totals	379	386	393	400	410
	Demand totals	379	386	393	400	410
	Difference	0	0	0	0	0
Third Year	Supply totals	379	386	393	400	410
	Demand totals	379	386	393	400	410
	Difference	0	0	0	0	0
Fourth Year	Supply totals	379	386	393	400	410
	Demand totals	379	386	393	400	410
	Difference	0	0	0	0	0
Fifth Year	Supply totals	379	386	393	400	410
	Demand totals	379	386	393	400	410
	Difference	0	0	0	0	0
Sixth Year (Optional)	Supply totals	379	386	393	400	410
	Demand totals	379	386	393	400	410
	Difference	0	0	0	0	0

7.4 Regional Supply Reliability

As described in Section 9, the District is actively involved in many DMM's to influence and promote efficient use of water by our customers to the greatest extent possible. Source reliability for the region is assured via Lake Tahoe as described in Section 6.

7.5 Drought Risk Assessment

CWC 10635(b)

The drought risk assessment shall include a description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment, a determination of the reliability of each source of supply under a variety of water shortage conditions, a comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period, and considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria. This may include a determination that a particular source of water supply is fully reliable under most, if not all, conditions.

CWC 10634

The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

Near-term drought reliability of the sources of supply utilized by the District depends on the drought impact and stress on each supply. The assumed drought availability for each of the District's local supplies is summarized below.

- **Local Surface Supply:** In a prolonged drought, rainfall and runoff into local reservoirs would decrease, but the overall supply sourced from local reservoirs is not anticipated to be constrained during drought periods. Therefore, this source of supply is assumed to be reliable and constant over the course of the 5-year drought risk assessment period.
- **Groundwater:** The District groundwater supply is not anticipated to be constrained during drought periods. Therefore, this source of supply is assumed to be reliable and constant over the course of the 5-year drought risk assessment period.

The Drought Risk Assessment shows adequate water supplies for all demand conditions. No water shortages are anticipated by the District due to reliable water supplies and the Drought Risk Assessment has determined that actions under the WSCP would not be necessary.

Table 7-5. Five-Year Drought Risk Assessment Tables to address CWC Section 10635(b)

Year	Description	Total
2021	Gross Water Use	370
	Total Supplies	370
	Surplus/Shortfall w/o WSCP Action	0
	<i>Planned WSCP Actions (use reduction and supply augmentation)</i>	
	WSCP - supply augmentation benefit	0

Table 7-5. Five-Year Drought Risk Assessment Tables to address CWC Section 10635(b)

Year	Description	Total
	WSCP - use reduction savings benefit	0
	Revised Surplus/(shortfall)	0
2022	Gross Water Use [Use Worksheet]	372
	Total Supplies [Supply Worksheet]	372
	Surplus/Shortfall w/o WSCP Action	0
	<i>Planned WSCP Actions (use reduction and supply augmentation)</i>	
	WSCP - supply augmentation benefit	0
	WSCP - use reduction savings benefit	0
	Revised Surplus/(shortfall)	0
	Resulting % Use Reduction from WSCP action	0
2023	Gross Water Use [Use Worksheet]	375
	Total Supplies [Supply Worksheet]	375
	Surplus/Shortfall w/o WSCP Action	0
	<i>Planned WSCP Actions (use reduction and supply augmentation)</i>	
	WSCP - supply augmentation benefit	0
	WSCP - use reduction savings benefit	0
	Revised Surplus/(shortfall)	0
	Resulting % Use Reduction from WSCP action	0
2024	Gross Water Use [Use Worksheet]	377
	Total Supplies [Supply Worksheet]	377
	Surplus/Shortfall w/o WSCP Action	0
	<i>Planned WSCP Actions (use reduction and supply augmentation)</i>	
	WSCP - supply augmentation benefit	0
	WSCP - use reduction savings benefit	0
	Revised Surplus/(shortfall)	0
	Resulting % Use Reduction from WSCP action	0
2025	Gross Water Use [Use Worksheet]	379
	Total Supplies [Supply Worksheet]	379
	Surplus/Shortfall w/o WSCP Action	0
	<i>Planned WSCP Actions (use reduction and supply augmentation)</i>	
	WSCP - supply augmentation benefit	0
	WSCP - use reduction savings benefit	0

Table 7-5. Five-Year Drought Risk Assessment Tables to address CWC Section 10635(b)

Year	Description	Total
	Revised Surplus/(shortfall)	0
	Resulting % Use Reduction from WSCP action	0

7.6 Seismic Risk Assessment

CWC 10632.5(a)

Beginning January 1, 2020, the plan shall include a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities.

Seismic impacts to the District's water supplies are evaluated on a regional scale, as seismic events along fault systems could limit imported supplies.

The District's actions in response to a seismic event are summarized for each area and reflect actions included in the District's Emergency Response Plan and the current Risk and Resiliency Analysis.

8 Water Shortage Contingency Plan

CWC 10632(a)

Every urban water supplier shall prepare and adopt a water shortage contingency plan as part of its urban water management plan that consists of each of the following elements:

- (1) The analysis of water supply reliability conducted pursuant to Section 10635.*
- (2) The procedures used in conducting an annual water supply and demand assessment...*
- (3) 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...*
- (4) Shortage response actions that align with the defined shortage levels...*
- (5) Communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments...*
- (6) For an urban retail water supplier, customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions as determined pursuant to Section 10632.2.*
- (7) A description of the legal authorities that empower the urban water supplier to implement and enforce its shortage response actions specified in paragraph (4)...*
- (8) A description of the financial consequences of, and responses for, drought conditions...*
- (9) For an urban retail water supplier, monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.*
- (10) Reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the water shortage contingency plan in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.*

The WSCP presents the District's contingency plan to address drought planning, water shortage response levels and actions, and management of water allocations during a declared water emergency. The WSCP will be re-evaluated at least every five years in coordination with the UWMP but could be updated more frequently based on lessons learned, new regulatory requirements, or other factors. The District's WSCP can be found in Appendix E.

8.1 Annual Water Supply and Demand Assessment

The new CWC §10632(a)(2) requires that urban water suppliers conduct an annual water supply and demand assessment (Annual Assessment). This section describes the procedures used to 1) conduct the Annual Assessment, and 2) prepare and submit an Annual Assessment Report to the state. In addition, this chapter outlines key inputs to conduct the Annual Assessment, the decision-making process for determining water

supply reliability, and the ability/flexibility for the District to use shortage response actions not included in the WSCP, as applicable.

The District, in accordance with the provisions of the CWC, will determine if a supply shortage exists and declare any foreseen water shortage level based on the results of the Annual Assessment, which will then be included in the Annual Assessment Report submitted to the state. The evaluation is conducted by the District to determine if a shortage declaration is needed, and at what level. The Annual Assessment Report will document any anticipated shortage, any triggered shortage response actions, associated compliance and enforcement actions, and communication actions. Reasonable alternative actions can be used to address identified water shortages, provided that descriptions of alternative actions are submitted with the Annual Assessment Report.

8.1.1 Decision Making Process

Each year the District will use the following steps to determine, and subsequently report to the state, its water supply reliability.

- District will determine available local supplies and also total available supplies.
- District will review known infrastructure constraints (including water quality conditions limiting local sources).
- District reviews and estimates current and projected water demands.
- District compares supply and demand and makes a determination of the water supply reliability for the current year and one dry year.
- District prepares and submits Annual Assessment Report to the state.

Evaluation criteria for the District's supplies, demands, and water shortage levels will include local groundwater and surface water availability, storage, infrastructure constraints, and recent water demand trends.

8.1.2 Current and Projected Demands

The Annual Assessment will use the District's recent demand data and projections (adjusted by previous year active consumption) which considers demand, weather, population growth, and other influencing factors for the current year and following years.

8.1.3 Available and Projected Water Supply

The District will evaluate the current year available supply and one dry year available supply in its Annual Assessment. The available water supply evaluation will consider hydrological and regulatory conditions. Available supply from each water source will consider local surface water storage and emergency storage allocations, groundwater production from the previous year and potential projected groundwater production.

8.1.4 Infrastructure Constraints

The District's existing water supply infrastructure includes a water treatment plant, pipelines, storage tanks, pump stations, and groundwater wells. The District will evaluate existing water supply and capacities and any constraints for the current year and for one

dry year. Infrastructure constraints may consider supply capabilities in the current year, such as shut-downs due to maintenance, construction impacts, and water quality impacts. Once constraints have been identified, the District will determine whether the total quantified water supply should be adjusted to account for these identified constraints.

8.2 Water Shortage Levels

Per District Water Ordinance, Section 8 (Water Conservation), the District has six stages available to declare depending on conditions (Table 3-1). Stages of water conservation measures, use requirements, and restrictions are described in detail in the Water Ordinance. Increasing stages correspond with increasing levels of required water conservation, use, and restrictions as formally declared by the Board at a publicly noticed meeting. Each increasing stage level also includes all conservation measures, use requirements, and restrictions of all previously declared lower level stages.

The District operates in Water Conservation Stage 1 under normal conditions, unless otherwise directed by the state or as otherwise determined by the District Board of Directors. The District Water Ordinance, Section 8 (Drought Conditions), enables the Board to make such declarations. Customers are required to comply with the most current conservation stage declared by the District, or other government agencies, whichever is more restrictive.

Each step (beginning with Stage 1) implements increased conservation requirements. Reduction goals are summarized in Table 8-1 and described in detail below:

Table 8-1. Water Shortage Levels

Water Shortage Level	Percent Reduction
Stage 1: Standard Operating Condition	10
Stage 2: Drought Watch Condition	20
Stage 3: Board Declared Emergency Action	30
Stage 4: Drought Critical Condition	40
Stage 5: State and Board Declared Extreme Emergency Action	50
Stage 6: State and Board Declared Extreme Emergency Action	> 50

8.3 Shortage Response Actions

Shortage response actions included in this WSCP are a mix of prohibitions on end use, consumption reduction methods, supply augmentation, and operational change measures.

Table 8-2. Restrictions and Prohibitions on End Users – Retail Only

Stage	Restrictions and Prohibitions on End Users*	Additional Explanation or Reference (Optional)	Penalty, Charge, or Other Enforcement?
1	Landscape – Restrict or prohibit runoff from landscape irrigation		Yes
1	Other – Require automatic shut of hoses		Yes
1	Other – Prohibit use of potable water for washing hard surfaces		Yes
1	Water Features - Restrict water use for decorative water features such as fountains		Yes
1	Landscape - Limit landscape irrigation to specific times	Not within 48 hours of precipitation	Yes
1	Landscape – Other landscape restriction or prohibition	Not in public right-of-way	Yes
1	Landscape – Other landscape restriction or prohibition	New construction: Any inconsistent with Building Standards	Yes
1	CII - Restaurants may only serve water on request		Yes
1	CII - Lodging establishment must offer opt out of linen service		Yes
2	Other water feature or swimming pool restriction	No filling or refilling	Yes
2	Other – Customers must repair leaks, breaks, and malfunctions in a timely manner		Yes
2	Other	No FH use	Yes
2	Landscape – Limit landscape irrigation to specific times	Not during hottest part of day	Yes
2	Landscape – Limit landscape irrigation to specific days		Yes
3	Landscape – Prohibit all landscape irrigation		Yes
3	Landscape – Other landscape restriction or prohibition	With hand held only	Yes
3	Other	No new plantings	Yes
3	Other	Rationing	Yes

*These are the only categories that will be accepted by the WUEdata online submittal tool.

Notes:

See Water Ordinance, Chapter 8 (Attachment 8-1).

8.3.1 Stage 1: 10 Percent Reduction Goal

1. The customer shall maintain the private service lateral, from the water service connection, in good repair.
2. Any leak or abnormal use in plumbing and/or irrigation systems, including running toilets, or any leak in any receptacle used to store water for any purpose, shall be

repaired when found; in any case leak shall be repaired within 10 days of District's notice to repair.

3. Irrigation resulting in application of, or runoff onto, sidewalks, walkways, roadways, parking lots, structures, any non-irrigated area, or adjacent properties is prohibited.
4. Any use of water that results in flooding or runoff into gutters, streets or onto adjacent property is prohibited.
5. Automatic shutoff valves or nozzles shall be used whenever a hose is used for cleaning or clearing of vehicles, walkways, patios, tennis courts, decks, driveways, parking areas, or other improved areas, whether paved or unpaved.
6. Automatic shutoff valves or nozzles shall be used whenever water is used in connection with construction activity.
7. Decorative water features that do not recirculate water are prohibited.
8. Written authorization from the District shall be obtained prior to use of any fire hydrant for any purpose other than fire suppression or emergency aid.
9. Water pressure shall not exceed 60 psi within any structure.
10. Irrigation systems shall be winterized and discontinued from operation by November 1st each year.
11. Any new irrigation system installed shall be equipped with rain sensing device halting irrigation during and within 48 hours after measurable precipitation.
12. New non-turf landscaping, including bedding plants and trees, shall be on drip, micro sprinkler, or micro sprayer irrigation systems. Overhead watering shall only be allowed for turf areas.
13. Landscaping may not be irrigated: (1) between the hours of 9:00 AM and 6:00 PM, (2) during, or within 48 hours after, measurable precipitation, and/or (3) when air temperature is less than 40 degrees Fahrenheit.

8.3.2 Stage 2: 20 Percent Reduction Goal

1. Water consumption by each customer, as measured by the District's meter, shall be reduced by 20 percent.
2. No irrigation shall occur on Saturday.
3. Properties with an even number street address may only irrigate on Monday, Wednesday, and Friday.
4. Properties with an odd number street address may only irrigate on Tuesday, Thursday, and Sunday.
5. Irrigation of non-turf areas that exclusively utilizes drip systems, including micro sprinklers and micro sprayers, or a hose with an automatic shutoff nozzle, shall be exempt from designated irrigation days.
6. Water shall not be applied to hard surfaces for any reason, except as required for pavement resurfacing or sealing, or health and safety reasons.
7. No filling or refilling of swimming pools.

8. Water consumption and allowed uses shall be reduced as specifically prescribed for individual customers based on historic: consumption, type of use, time of use, or any other relevant factors.
9. All visitor accommodations/businesses shall wash guest linens only on request and/or after checking out. A placard or notice stating such shall be displayed in each guest room.
10. All public entities shall display informational material, placards, and/or decals, provided by the District, in places visible to all customers.
11. The owner and/or manager of each hotel, motel, restaurant, convention center, and other visitor-serving facility shall display informational water conservation materials, placards, and/or decals, provided by the District, in places visible to all customers.

8.3.3 Stage 3: 30 Percent Reduction Goal

12. Water consumption by each customer, as measured by the District's meter, shall be reduced by 30 percent.
13. No irrigation shall occur on Saturday, Sunday, or Wednesday.
14. Properties with an even number street address may only irrigate on Monday and Thursday.
15. Properties with an odd number street address may only irrigate on Tuesday and Friday.
16. Irrigation of non-turf areas that exclusively utilizes drip systems, including micro sprinklers and micro sprayers, will be allowed only Monday through Friday, and shall be prohibited on Saturdays and Sundays.
17. All food service and drinking establishments shall serve drinking water only on request and shall provide a placard at each table, and/or language on their menu, stating such.
18. Other specific water reduction mandate, and/or use restrictions as defined and designated by the Board when Stage 3 action is declared.

8.3.4 Stage 4: 40 Percent Reduction Goal

19. Water consumption by each customer, as measured by the District's meter, shall be reduced by 40 percent.
20. The use of water for other than domestic and commercial non-irrigation use is prohibited.
21. Irrigation of landscaping of any type is prohibited, except that irrigation of public facilities may be permitted pursuant to review, conditioning, and approval by the District.
22. The application of water to hard surfaces is prohibited.
23. Use of decorative water features is prohibited.

8.3.5 Stage 5: 50 Percent Reduction Goal

Water consumption by each customer, as measured by the District's meter, shall be reduced by 50 percent.

8.3.6 Stage 6: Greater than 50 Percent Reduction Goal

The District may implement mandatory water rationing using rolling outages, or other methods, should the situation require. Affected customers will be notified via public outreach, local media, written notice posted at the property, mail, and/or personal contact.

8.4 Determining Water Shortage Reductions

The District's expected (targeted) savings are provided in Water Ordinance Chapter 8. The District monitors how effective the combination of shortage response actions in each water shortage level is with meters. The District meters both water supplies entering the distribution system, and water consumed by individual customers. The District can compare this meter data with water use in prior months and during non-drought years to determine if it is achieving specific percentage goals for water consumption associated with the drought response levels. If the goals are not being met, the District can implement additional shortage response actions. The District is fully metered and reads all meters monthly.

Table 8-3. Stages of Water Shortage Contingency Plan – Consumption Reduction Methods

Stage	Consumption Reduction Methods by Water Supplier*	Additional Explanation or Reference (Optional)
1	Provide rebates on plumbing fixtures and devices	
1	Provide rebates for landscape irrigation efficiency	
1	Reduce system water loss	
2	Expand public information campaign	
2	Increase water waste patrols	
3	Moratorium or net zero demand increase on new connections	

*These are the only categories that will be accepted by the WUEdata online submittal tool.
Notes:

8.5 Penalties

Once an offense to the above noted water waste restrictions is confirmed, the District utilizes the below stepped system with increasing enforcement actions as required. The customer is given 5 days (with the exception between the 4th and Last Action, which is 2 days) to correct their water waste issue(s) before the District elevates the customer/property to the next step.

- Initial Engagement: Friendly “education based” letter (mailed 1st class) noting violation, potential for fines, and ultimately water will be shut off if not addressed.
- 2nd Action: Warning letter No. 1 (certified mail) with stronger message noting violation and potential for fines.
- 3rd Action: Warning letter No. 2 (certified mail) noting fines have begun (\$100/day).
- 4th Action: Warning letter No. 3 (Federal Express Next Day) noting fines have increased (\$250/day).
- Last Action: Water shut off.

The District’s enforcement and patrols increases consistent with the severity of the water condition(s) and increasing stages of action.

8.6 Revenue and Expenditure Impacts

The District operates on two distinctly separated Water Enterprise accounting platforms. Each is addressed below.

8.6.1 Water Capital Funds

Capital is primarily funded through any grants received and a fixed flat rate line item on customer’s bills, the “Water System Replacement Fees.” As this “System Replacement Fee” is a fixed rate, with a steady revenue stream, any reduction in consumption billing does not affect capital. Capital also receives revenue through connection fees; however, these are typically a minor amount and do not warrant the effort of developing a separate drought-related rate structure.

8.6.2 Water Operations Funds

Annual operations expenses are funded by the customers through their monthly bills. The funds (bills) are primarily comprised of two components: a fixed base rate, and a consumption charge once the customer incurs overages above their monthly allowed (i.e., free of charge) consumption amount (depending on service meter size). The fixed base rate provides the large majority of revenue. This, combined with the rate structure with an allowed volume as part of the base rate, does not translate into the consumption component as being a major part of the water operations revenue stream. The District did notice a reduction in the consumption component revenue during the drought years of 2012 – 2016; however, it was not significant enough to warrant developing a separate drought-related rate structure to compensate for this reduction.

In all cases, the District maintains reserves to provide a buffer, allowing consistent attention to the District’s systems in the event of variable revenue.

8.7 Catastrophic Supply Interruption Planning

The District has a number of elements in place in an effort to ensure a maintained supply. Together these provide: redundancy, support, and/or alternatives to engage as applicable in the event they are needed. These are described below.

8.7.1 Standby Generators

All of the District's water stations (supply sources and booster pumps) that rely on power to operate have either a permanent standby generator or transfer switch and plug for a portable unit.

8.7.2 Emergency Interties

The District has emergency interconnection capabilities with adjacent water systems. In the event of an emergency on either side, these may be activated to move where needed.

8.7.3 Mutual Aid Agreement

Established to formalize abilities to shift resources (Equipment, Personnel, Materials, Supplies, etc.) from one agency to the other as needed in the event of an emergency. A copy is provided in Appendix B.

8.7.4 Emergency Response Plan

The District's Emergency Response Plan (ERP) identifies the District's emergency planning, organization, and response policies. The ERP includes a concept of recovery operations, a hazard analysis, responsibilities, and departmentalized standard operating procedures for emergency response. Because several of the hazards identified in the ERP could result in a catastrophic interruption of water supplies, the ERP provides the actions that the District would implement to minimize the impacts of supply interruption, including emergency interconnections with Tahoe City Public Utility District, Incline Village General Improvement District, Fulton Water Company, and Agate Bay Water Company.

8.8 Legal Authorities

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

8.9 Monitoring and Reporting

The District monitors how effective the combination of shortage response actions in each water shortage level through metered customer demand data. The District's water

supplies are metered prior to entering the distribution system and at individual customer connections. The District will compare meter data with water use in prior months and during non-drought years to determine specific percentage goals for water consumption associated with the drought response levels have been achieved. If the goals are not being met, the District may choose to implement additional shortage response actions.

8.10 WSCP Refinement Procedures

The WSCP will be re-evaluated at least every five years in coordination with the urban water management plan update, but the frequency of the re-evaluations could increase based on the needs of the District. Re-evaluations will be based on lessons learned, new statutory requirements, continued local supply development, or other factors.

8.11 Special Water Feature Distinction

The District evaluated decorative and recreational water features separately from pools or spas. However, the District does not currently serve recycled water for use in recreational or decorative water features.

8.12 Communication Protocol

The District regularly engages in communication and outreach with the public on water supplies, water efficiency, and water conservation. However, effective communication plans are necessary should supply conditions change and the District is required to implement stages of the WSCP.

8.12.1 Strategies for Communication

During normal water supply conditions, the District will continue to promote water conservation tactics and water efficiency programs using standard ongoing communication protocols. When water shortage levels are triggered, the District will increase communication to reduce water use using methods that include measures within the District's conservation program and as outlined in Table 9-1.

Table 8-4. Communication Outline

Demand Reduction Target	Water Shortage Level					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Up to 10%	Up to 20%	Up to 30%	Up to 40%	Up to 50%	Over 50%
District Communications	Update messaging to reflect conditions, district response and needed actions from the public; coordinate with other agencies as appropriate	Update campaign and messaging to generate immediate actions/behaviors by public; coordinate with other agencies as appropriate	Update campaign and messages to raise awareness for more severe water-saving actions/behaviors by public; coordinate with other agencies as appropriate	Update campaign and messages to raise awareness for more severe and higher level water-saving actions/behaviors by public; coordinate with other agencies as appropriate	Update campaign and messages to reflect extreme or emergency condition and likely need to focus water use on health/safety need; coordinate with other agencies as appropriate	Update campaign and messages to reflect extreme or emergency condition and likely need to focus water use on health/safety need; coordinate with other agencies as appropriate
		Include increased conservation messaging on website and in standard outreach efforts.	Update elected officials, other key civic and business leaders of shortage	Conduct specialized outreach to reduce discretionary outdoor water use while minimizing landscape damage.	Promote available water assistance resources for vulnerable populations; specialized outreach to impacted industries	Promote available water assistance resources for vulnerable populations; specialized outreach to impacted industries
	Promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops
		Targeted outreach to high water users	Outreach to key HOA's building managers, landscape companies about restrictions and need for increased conservation	Specialized outreach and assistance to homeowners, landscape professionals, large-scale water users and high water users	Consider alternate emergency homepage	Implement emergency homepage
		Targeted outreach to specific customer classes	Targeted outreach to specific customer classes	Targeted outreach to specific customer classes	Targeted outreach to specific customer classes	Targeted outreach to specific customer classes

8.12.2 Catastrophic Communication

In the event of a natural disaster, infrastructure failure, or other situation that requires regional water use to be quickly prioritized for or limited to essential public health and safety needs, the District will immediately deploy or enhance appropriate communication strategies and tactics from WSCP Levels 1 through 6 as needed. They will consider additional strategies and tactics to reflect the need for urgent, emergency-driven water conservation.

8.13 Plan Adoption, Submittal, and Availability

A public hearing, conducted by the District, was held on May 11, 2021, as a video conference. Members of the public were able to participate via a webinar link or telephone connection to listen and/or view the meeting proceedings and provide public comments and input on the draft WSCP. Following adoption of the WSCP, the District will submit the plan to DWR and, no later than 30 days after filing the WSCP, the District will make the WSCP available to the public.

9 Demand Management Measures

CWC 10631(e)

Provide a description of the supplier's water demand management measures. This description shall include...a narrative description that addresses the nature and extent of each water demand management measure implemented over the past five years. The narrative shall describe the water demand management measures that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.

The District recognizes water conservation as a priority in its water use planning to manage water demand. The long-term goal of the District's water use efficiency program is to achieve and maintain water conservation goals for various use categories that are reasonable for that category.

9.1 Demand Management Measures for Retail Agencies

9.1.1 Water Waste Prevention Ordinance

Since the development of the 2015 UWMP, the District has amended its Water Ordinance to expand the water conservation action stages from three stages to six stages. Increasing stages correspond with increasing levels of required water conservation, use, and restrictions as formally declared by the Board at a publicly noticed meeting. The District operated in Water Conservation Stage 1 under normal (non-drought) conditions. Each increasing stage level also includes all conservation measures, use requirements, and restrictions of all previously declared lower level stages.

Customers must meet the most current conservation stage declared by the District, or other government agencies, whichever is more restrictive.

9.1.2 Metering

The District implemented installation and accomplished fully metering all connections in 1984. During the mid- to late-1980s, there was a sharp decline in water use. This decrease was attributed to the installation of water meters, capital improvements, and improved operating and maintenance practices. All District water accounts are currently metered, including all residential, commercial, irrigation, and fire services.

- **Meter Replacement:** The District is implementing a flow test program on the small residential meters and from that will determine a future residential meter replacement program. All larger meters (from 1.5-inch to 6-inch) have been replaced in the last 10 years. The 1.5-inch and 2-inch meters have been replaced with ultrasonic meters, and 3-inch to 6-inch meters have been replaced with compound meters. These upgrades will help the District capture the low and high flows previously lost.
- **Zone Meters:** System 3110036 (Dollar Cove) has two zone meters (one is a compound) that segregate this system into three zones: Old County, Chinquapin, and Lake Forest. System 3110023 (Carnelian Bay) does not have any zone meters. System 3110001 (Tahoe Main) has two zone meters that separate the

Marina/Estates areas. There are no other zone meters in the remainder of this system; however, additional subarea flows (i.e., zones) are captured via meters at Zone 1 Tank and the Kingswood booster station.

- **Leak Detection Meter:** Customer side leaks are able to be detected through the District's newer Itron AMR's. Customer side leak detection is provided in 70.1 percent of the District's service meters.

9.1.3 Conservation Pricing

The District has and continues to implement water conservation pricing for their customers by using tiered rates. Residential customers are charged per 1,000 gallons in excess of the allowed amount per residential unit. Commercial customers are charged per 1,000 gallons in excess of the allowed amount for their meter size. Dedicated irrigation meters are charged for every 1,000 gallons of water used regardless of meter size. The tiered water rates are available at: <http://ntpud.org/rate-information>

The District offers the following rebates to customers for conservation efforts:

- Low flow toilet rebates
- Irrigation "smart controller" rebates
- Water-saving dishwasher rebates
- Shower/sink water saving faucet rebates
- Water-saving washing machine rebates

9.1.4 Public Education and Outreach

The District has ongoing public information and outreach programs for customers and visitors. The District also has a webpage specifically for water conservation: <http://ntpud.org/howtoconserve>. The programs include the following:

- Winterization information
- Water conservation tips during power outages
- Outreach campaigns in the quarterly newsletter
- Tips on the District's website, Facebook, and various events through the Tahoe Water Suppliers Association
- Public information booths regarding water conservation at public events such as Earth Day, SnowFest, NTPUD Pancake Breakfast, and Music on the Beach
- Teaming with the Sierra Watershed Education Partnership to provide funding to develop and coordinate educational assemblies at all North Tahoe schools
- Outreach to customers when high water usage is noted in meter reports
- Customer support on high water bill complaints
- Leak detection on the District's water mains and on the customer's side of the meter
- Customer leak notifications

- Provide free low-flow shower heads, shower timers, faucet aerators, and dye tablets
- Rebates for low-flow toilets, shower heads and faucets, dishwashers, washing machines, and smart irrigation controllers
- Public workshops to teach community members and local landscapers about water efficient landscaping methods.

9.1.5 Program to Assess and Manage Distribution System Real Losses

The District has a 3-pronged approach to minimizing losses, as described below:

- **Capital Improvements:** With recent upgrades performed at source sites (Supervisory Control and Data Acquisition at the National Avenue Water Treatment Plant), and storage facilities (increasing fire storage), the District is now focused on main line replacements. System efficiencies (i.e., water losses) weigh heavy in the prioritization of areas identified for replacement. Current District Capital revenue allows replacement of approximately 5,500 linear feet of main line every other year.
- **Leak Detection:** See Section 9.1.2 for leak detection on customer's side. On the main lines, the District has two types of devices: MLOG's and AMR leak sensors. Currently there are 237 units in the field (124 MLOG's and 113 AMR's). These devices largely cover areas of the District's older mains.

Through the District's leak detection sensors, zone meters and customers alerting of issues, the District is able to respond 24/7 to any leak.

The District completes and submits monthly and annual reports to the State Water Resources Control Board via the "DRINC" portal. Said reports quantify "system problems," including leaks.

- **System Audit Analysis:** The District is currently engaged in the SB-555 compliance program. Said program follows AWWA methodology and identified areas in need of attention. The District has added a focus on meter accuracy as a source of potential unaccounted for water.

9.1.6 Water Conservation Program Coordination and Staffing Support

The District has several designated staff members for water conservation program coordination. The staff includes:

- Public Information Officer
- Engineering and Operations Manager
- Utility Operations Manager
- Lead Water Quality Control technician
- Contracts and Planning Coordinator

These members work as a team for public education and outreach, excessive water use notifications, winterization information, Ordinance compliance, rebate and give-away programs, and workshops.

9.2 Implementation over the Past 5 Years

The District continues to implement projects to support water conservation. A recent 2020 Water Conservation Grant included a project for Public Park Irrigation Upgrades and Irrigation Smart Controller Rebates.

This project includes public park irrigation upgrades to the North Tahoe Regional Park in Tahoe Vista, and customer irrigation smart controller rebates within the district. The park irrigation upgrades include irrigation layout design improvements, replacing sprinkler heads on park fields with high efficiency heads, new valve boxes, installation of sub-meters and electronic radio transmitters with leak sensors for each irrigation area. In addition, water conserving drip and micro-spray irrigation will be added to the community garden.

This project component is anticipated to result in a water savings of 10.75 acre-feet per year (AFY) (with an anticipated reduction in water use from 25.26 AFY to 14.51 AFY).

The Irrigation Smart Controller Rebate Program includes: Public outreach to the District's top domestic users and all commercial/irrigation meter customers and customer irrigation smart controller rebates. This project component is anticipated to yield a 20 percent reduction in residential outdoor water use from participants (reducing water use from 0.581 AFY to 0.465 AFY).

9.3 Planned Implementation to Achieve Water Use Targets

The District plans to continue implementation of the following activities to achieve its water use targets:

- Perform distribution system water audits
- Reduce unaccounted for water
- Monitor and inform customers of high water use
- Distribution system upgrades to replace older and leaking water mains
- Continue low-flow rebate programs
- Provide free water-saving devices such as shower heads, faucet aerators, shut-off spray nozzles, leak test tablets, etc.
- Public education and outreach

9.4 Members of the California Urban Water Conservation Council

The District is a member of the California Urban Water Conservation Council. The District maintains compliance with the following DMMs:

- Water waste prevention ordinances (Appendix F)
- Metering

- Conservation pricing
- Public education and outreach (this is an ongoing effort)
- Programs to assess and manage distribution system real loss
- Water conservation program coordination and staffing support

10 Plan Adoption, Submittal, and Implementation

CWC 10621

(b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days before the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

(d) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

CWC 10635(d)

The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

CWC 10642

Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of both the plan and the water shortage contingency plan. Prior to adopting either, the urban water supplier shall make both the plan and the water shortage contingency plan available for public inspection and shall hold a public hearing or hearings thereon. Prior to any of these hearings, notice of the time and place of the hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of a hearing to any city or county within which the supplier provides water supplies.

After the hearing or hearings, the plan or water shortage contingency plan shall be adopted as prepared or as modified after the hearing or hearings.

CWC 10644(a)(1)

An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

CWC 10645(a)

Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.



10.1 Inclusion of all 2020 Data

All 2020 data has been included herein. The District is reporting on a calendar year.

10.2 Notice of Public Hearing

At least 60 days prior to the public hearing on this 2020 UWMP, the District notified the municipalities within its service that the UWMP was undergoing review and revision. This effort was intended to inform the municipalities of the planning effort and solicit comments and input. Appendix C contains copies of the city and county notifications.

10.2.1 Notice to Cities and Counties

Table 10-1 shows whether notice to cities and counties were sent at least 60 days prior to the public hearing of this UWMP.

Table 10-1. Notification to Cities and Counties

Name	60 Day Notice (yes/no)	Notice of Public Hearing (yes/no)
County Name		
Placer	Yes	Yes

10.2.2 Notice to the Public

Prior to adoption of the 2020 UWMP, the District made the UWMP available for public review. Section 10642 of the UWMP Act requires that the urban water supplier make the UWMP available for the public hearing to allow for comments from the general public, as well as comments from the local governmental agencies. Notices were published in the newspaper at least 2 weeks prior to the public hearing to inform interested parties (Appendix C).

In accordance with the Act, the draft 2020 UWMP was available for public review on the District's website (www.ntpud.org), at the District's offices, and in the local newspaper. During the public comment period, no written comments were received (Appendix D). This Final 2020 UWMP incorporated responses to comments.

10.3 Public Hearing and Adoption

A public hearing, conducted by the District, was held on May 11, 2021, as a video conference. Members of the public were able to participate via a webinar link or telephone connection to listen and/or view the meeting proceedings and provide public comments and input on the draft UWMP. The District discussed adoption, implementation, and the economic impact of its water use targets at the public hearing. A copy of the Agenda, Board Report, Notice of Public Hearing, and Board Adoption are provided in Appendix D.

10.3.1 Adoption

The 2020 UWMP and Water Shortage Contingency Plan were adopted as prepared at the June 8, 2021 Regular Board meeting. Adoption passed.

10.4 Plan Submittal

10.4.1 Submitting a UWMP to DWR

The adopted 2020 UWMP was submitted within 30 days after adoption.

10.4.2 Electronic Data Submittal

The adopted 2020 UWMP (in PDF format) and data tables (in Excel format) were submitted via online submittal tools within 30 days after adoption.

10.4.3 Submitting a UWMP to the California State Library

A compact disc containing the UWMP in PDF format was mailed to the State Library within 30 days after adoption.

10.4.4 Submitting a UWMP to Cities and Counties

A compact disc containing the UWMP in PDF format was mailed to Placer County within 30 days after adoption. The Water Shortage Contingency Plan was included in the transmittal to Placer County.

10.5 Public Availability

Copies of the 2020 UWMP and Water Shortage Contingency Plan were made available to the public within 30 days after adoption. The documents were made available digitally (in PDF format) on the District's website and a hard copy was maintained at the District offices.

10.6 Amending an Adopted UWMP

Any amendments to the 2020 UWMP will follow the same protocol, notification, and adoption processes as performed with the initial document.

11 References

North Tahoe Public Utility District

2005 Emergency Response Plan

Department of Water Resources (DWR)

2020 2020 Urban Water Management Plans Guidebook for Urban Water Suppliers.

Appendix A. UWMP Act of 1983, as amended; Water Conservation Act of 2020

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Appendix A. California Water Code – Urban Water Management Planning

This material is for informational purposes only and not to be used in place of official California Water Code (Water Code).

This document presents updated sections of Water Code as of January 1, 2020, as compiled by DWR staff. The selection focuses on the portions of code directly relevant to preparation of the urban water management plan and contextually relevant to urban water suppliers and the Department of Water Resources (DWR). This includes the Urban Water Management Planning Act and the Sustainable Water Use and Demand Reduction (SB X7-7), and more. Further legislative information is available on the California Legislative Information website at

<https://leginfo.legislature.ca.gov/>.

The following Water Code sections are included in this appendix.

- **Sustainable Water Use and Demand Reduction (SB X7-7)
Water Code Division 6, Part 2.55**
 - **Chapter 1. General Declarations and Policy**, Sections 10608 – 10608.8
 - **Chapter 2. Definitions**, Section 10608.12
 - **Chapter 3. Urban Retail Water Suppliers**, Sections 10608.16 – 10608.44
 - **Chapter 4. Agricultural Water Suppliers**, Section 10608.48
 - **Chapter 5. Sustainable Water Management**, Section 10608.50
 - **Chapter 6. Standardized Data Collection**, Section 10608.52
 - **Chapter 7. Funding Provisions**, Sections 10608.56 – 10608.60
 - **Chapter 8. Quantifying Agricultural Water Use Efficiency**, Section 10608.64

- **Urban Water Management Planning Act
Water Code Division 6, Part 2.6**

- **Chapter 1. General Declaration and Policy**, Sections 10610 – 10610.4
- **Chapter 2. Definitions**, Sections 10611 – 10618
- **Chapter 3. Urban Water Management Plans**
 - Article 1. General Provisions, Sections 10620 – 10621
 - Article 2. Contents of Plans, Sections 10630 – 10634
 - Article 2.5. Water Service Reliability, Section 10635
 - Article 3. Adoption and Implementation of Plans, Sections 10640 – 10645
- **Chapter 4. Miscellaneous Provisions**, Sections 10650 – 10657

**PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION
CHAPTER 1. General Declaration and Policy [10608 – 10608.8]**

10608. The Legislature finds and declares all of the following:

- (a) Water is a public resource that the California Constitution protects against waste and unreasonable use.
- (b) Growing population, climate change, and the need to protect and grow California’s economy while protecting and restoring our fish and wildlife habitats make it essential that the state manage its water resources as efficiently as possible.
- (c) Diverse regional water supply portfolios will increase water supply reliability and reduce dependence on the Delta.
- (d) Reduced water use through conservation provides significant energy and environmental benefits, and can help protect water quality, improve streamflows, and reduce greenhouse gas emissions.
- (e) The success of state and local water conservation programs to increase efficiency of water use is best determined on the basis of measurable outcomes related to water use or efficiency.
- (f) Improvements in technology and management practices offer the potential for increasing water efficiency in California over time,

providing an essential water management tool to meet the need for water for urban, agricultural, and environmental uses.

- (g) The Governor has called for a 20 percent per capita reduction in urban water use statewide by 2020.
- (h) The factors used to formulate water use efficiency targets can vary significantly from location to location based on factors including weather, patterns of urban and suburban development, and past efforts to enhance water use efficiency.
- (i) Per capita water use is a valid measure of a water provider's efforts to reduce urban water use within its service area. However, per capita water use is less useful for measuring relative water use efficiency between different water providers. Differences in weather, historical patterns of urban and suburban development, and density of housing in a particular location need to be considered when assessing per capita water use as a measure of efficiency.

10608.4. It is the intent of the Legislature, by the enactment of this part, to do all of the following:

- (a) Require all water suppliers to increase the efficiency of use of this essential resource.
- (b) Establish a framework to meet the state targets for urban water conservation identified in this part and called for by the Governor.
- (c) Measure increased efficiency of urban water use on a per capita basis.
- (d) Establish a method or methods for urban retail water suppliers to determine targets for achieving increased water use efficiency by the year 2020, in accordance with the Governor's goal of a 20-percent reduction.
- (e) Establish consistent water use efficiency planning and implementation standards for urban water suppliers and agricultural water suppliers.
- (f) Promote urban water conservation standards that are consistent with the California Urban Water Conservation Council's adopted best management practices and the requirements for demand management in Section 10631.

- (g) Establish standards that recognize and provide credit to water suppliers that made substantial capital investments in urban water conservation since the drought of the early 1990s.
- (h) Recognize and account for the investment of urban retail water suppliers in providing recycled water for beneficial uses.
- (i) Require implementation of specified efficient water management practices for agricultural water suppliers.
- (j) Support the economic productivity of California's agricultural, commercial, and industrial sectors.
- (k) Advance regional water resources management.

10608.8. (a) (1) Water use efficiency measures adopted and implemented pursuant to this part or Part 2.8 (commencing with Section 10800) are water conservation measures subject to the protections provided under Section 1011.

- (2) Because an urban agency is not required to meet its urban water use target until 2020 pursuant to subdivision (b) of Section 10608.24, an urban retail water supplier's failure to meet those targets shall not establish a violation of law for purposes of any state administrative or judicial proceeding prior to January 1, 2021. Nothing in this paragraph limits the use of data reported to the department or the board in litigation or an administrative proceeding. This paragraph shall become inoperative on January 1, 2021.
 - (3) To the extent feasible, the department and the board shall provide for the use of water conservation reports required under this part to meet the requirements of Section 1011 for water conservation reporting.
- (b) This part does not limit or otherwise affect the application of Chapter 3.5 (commencing with Section 11340), Chapter 4 (commencing with Section 11370), Chapter 4.5 (commencing with Section 11400), and Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.
 - (c) This part does not require a reduction in the total water used in the agricultural or urban sectors, because other factors, including, but not limited to, changes in agricultural economics or population

growth may have greater effects on water use. This part does not limit the economic productivity of California's agricultural, commercial, or industrial sectors.

- (d) The requirements of this part do not apply to an agricultural water supplier that is a party to the Quantification Settlement Agreement, as defined in subdivision (a) of Section 1 of Chapter 617 of the Statutes of 2002, during the period within which the Quantification Settlement Agreement remains in effect. After the expiration of the Quantification Settlement Agreement, to the extent conservation water projects implemented as part of the Quantification Settlement Agreement remain in effect, the conserved water created as part of those projects shall be credited against the obligations of the agricultural water supplier pursuant to this part.

CHAPTER 2. Definitions [10608.12]

10608.12. Unless the context otherwise requires, the following definitions govern the construction of this part:

- (a) "Agricultural water supplier" means a water supplier, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding recycled water. "Agricultural water supplier" includes a supplier or contractor for water, regardless of the basis of right, that distributes or sells water for ultimate resale to customers. "Agricultural water supplier" does not include the department.
- (b) "Base daily per capita water use" means any of the following:
 - (1) The urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous 10-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.
 - (2) For an urban retail water supplier that meets at least 10 percent of its 2008 measured retail water demand through recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier, the urban retail water supplier may extend the

calculation described in paragraph (1) up to an additional five years to a maximum of a continuous 15-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.

- (3) For the purposes of Section 10608.22, the urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous five-year period ending no earlier than December 31, 2007, and no later than December 31, 2010.
- (c) "Baseline commercial, industrial, and institutional water use" means an urban retail water supplier's base daily per capita water use for commercial, industrial, and institutional users.
- (d) "CII water use" means water used by commercial water users, industrial water users, institutional water users, and large landscape water users.
- (e) "Commercial water user" means a water user that provides or distributes a product or service.
- (f) "Compliance daily per capita water use" means the gross water use during the final year of the reporting period, reported in gallons per capita per day.
- (g) "Disadvantaged community" means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.
- (h) "Gross water use" means the total volume of water, whether treated or untreated, entering the distribution system of an urban retail water supplier, excluding all of the following:
- (1) Recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier.
 - (2) The net volume of water that the urban retail water supplier places into long-term storage.
 - (3) The volume of water the urban retail water supplier conveys for use by another urban water supplier.
 - (4) The volume of water delivered for agricultural use, except as otherwise provided in subdivision (f) of Section 10608.24.
- (i) "Industrial water user" means a water user that is primarily a

manufacturer or processor of materials as defined by the North American Industry Classification System code sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development.

- (j) "Institutional water user" means a water user dedicated to public service. This type of user includes, among other users, higher education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions.
- (k) "Interim urban water use target" means the midpoint between the urban retail water supplier's base daily per capita water use and the urban retail water supplier's urban water use target for 2020.
- (l) "Large landscape" means a nonresidential landscape as described in the performance measures for CII water use adopted pursuant to Section 10609.10.
- (m) "Locally cost effective" means that the present value of the local benefits of implementing an agricultural efficiency water management practice is greater than or equal to the present value of the local cost of implementing that measure.
- (n) "Performance measures" means actions to be taken by urban retail water suppliers that will result in increased water use efficiency by CII water users. Performance measures may include, but are not limited to, educating CII water users on best management practices, conducting water use audits, and preparing water management plans. Performance measures do not include process water.
- (o) "Potable reuse" means direct potable reuse, indirect potable reuse for groundwater recharge, and reservoir water augmentation as those terms are defined in Section 13561.
- (p) "Process water" means water used by industrial water users for producing a product or product content or water used for research and development. Process water includes, but is not limited to, continuous manufacturing processes, and water used for testing, cleaning, and maintaining equipment. Water used to cool machinery or buildings used in the manufacturing process or necessary to maintain product quality or chemical characteristics for product manufacturing or control rooms, data centers, laboratories, clean rooms, and other industrial facility units that

are integral to the manufacturing or research and development process is process water. Water used in the manufacturing process that is necessary for complying with local, state, and federal health and safety laws, and is not incidental water, is process water. Process water does not mean incidental water uses.

- (q) "Recycled water" means recycled water, as defined in subdivision (n) of Section 13050.
- (r) "Regional water resources management" means sources of supply resulting from watershed-based planning for sustainable local water reliability or any of the following alternative sources of water:
 - (1) The capture and reuse of stormwater or rainwater.
 - (2) The use of recycled water.
 - (3) The desalination of brackish groundwater.
 - (4) The conjunctive use of surface water and groundwater in a manner that is consistent with the safe yield of the groundwater basin.
- (s) "Reporting period" means the years for which an urban retail water supplier reports compliance with the urban water use targets.
- (t) "Urban retail water supplier" means a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes.
- (u) "Urban water use objective" means an estimate of aggregate efficient water use for the previous year based on adopted water use efficiency standards and local service area characteristics for that year, as described in Section 10609.20.
- (v) "Urban water use target" means the urban retail water supplier's targeted future daily per capita water use.
- (w) "Urban wholesale water supplier" means a water supplier, either publicly or privately owned, that provides more than 3,000 acre-feet of water annually at wholesale for potable municipal purposes.

CHAPTER 3. Urban Retail Water Suppliers [10608.16 – 10608.44]

10608.16. (a) The state shall achieve a 20-percent reduction in urban per capita water use in California on or before December 31, 2020.

- (1) The state shall make incremental progress towards the state target specified in subdivision (a) by reducing urban per capita water use by at least 10 percent on or before December 31, 2015.

10608.20. (a) (1) Each urban retail water supplier shall develop urban water use targets and an interim urban water use target by July 1, 2011. Urban retail water suppliers may elect to determine and report progress toward achieving these targets on an individual or regional basis, as provided in subdivision (a) of Section 10608.28, and may determine the targets on a fiscal year or calendar year basis.

- (2) It is the intent of the Legislature that the urban water use targets described in paragraph (1) cumulatively result in a 20-percent reduction from the baseline daily per capita water use by December 31, 2020.

(b) An urban retail water supplier shall adopt one of the following methods for determining its urban water use target pursuant to subdivision (a):

- (1) Eighty percent of the urban retail water supplier's baseline per capita daily water use.
- (2) The per capita daily water use that is estimated using the sum of the following performance standards:
 - (A) For indoor residential water use, 55 gallons per capita daily water use as a provisional standard. Upon completion of the department's 2017 report to the Legislature pursuant to Section 10608.42, this standard may be adjusted by the Legislature by statute.
 - (B) For landscape irrigated through dedicated or residential meters or connections, water efficiency equivalent to the standards of the Model Water Efficient Landscape Ordinance set forth in Chapter 2.7 (commencing with Section 490) of Division 2 of Title 23 of the California Code of Regulations, as in effect the later of the year of the landscape's installation or 1992. An urban retail

water supplier using the approach specified in this subparagraph shall use satellite imagery, site visits, or other best available technology to develop an accurate estimate of landscaped areas.

(C) For commercial, industrial, and institutional uses, a 10-percent reduction in water use from the baseline commercial, industrial, and institutional water use by 2020.

(3) Ninety-five percent of the applicable state hydrologic region target, as set forth in the state's draft 20x2020 Water Conservation Plan (dated April 30, 2009). If the service area of an urban water supplier includes more than one hydrologic region, the supplier shall apportion its service area to each region based on population or area.

(4) A method that shall be identified and developed by the department, through a public process, and reported to the Legislature no later than December 31, 2010. The method developed by the department shall identify per capita targets that cumulatively result in a statewide 20-percent reduction in urban daily per capita water use by December 31, 2020. In developing urban daily per capita water use targets, the department shall do all of the following:

(A) Consider climatic differences within the state.

(B) Consider population density differences within the state.

(C) Provide flexibility to communities and regions in meeting the targets.

(D) Consider different levels of per capita water use according to plant water needs in different regions.

(E) Consider different levels of commercial, industrial, and institutional water use in different regions of the state.

(F) Avoid placing an undue hardship on communities that have implemented conservation measures or taken actions to keep per capita water use low.

(c) If the department adopts a regulation pursuant to paragraph (4) of

subdivision (b) that results in a requirement that an urban retail water supplier achieve a reduction in daily per capita water use that is greater than 20 percent by December 31, 2020, an urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may limit its urban water use target to a reduction of not more than 20 percent by December 31, 2020, by adopting the method described in paragraph (1) of subdivision (b).

- (d) The department shall update the method described in paragraph (4) of subdivision (b) and report to the Legislature by December 31, 2014. An urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may adopt a new urban daily per capita water use target pursuant to this updated method.
- (e) An urban retail water supplier shall include in its urban water management plan due in 2010 pursuant to Part 2.6 (commencing with Section 10610) the baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.
- (f) When calculating per capita values for the purposes of this chapter, an urban retail water supplier shall determine population using federal, state, and local population reports and projections.
- (g) An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan required pursuant to Part 2.6 (commencing with Section 10610).
- (h) (1) The department, through a public process and in consultation with the California Urban Water Conservation Council, shall develop technical methodologies and criteria for the consistent implementation of this part, including, but not limited to, both of the following:
 - (A) Methodologies for calculating base daily per capita water use, baseline commercial, industrial, and institutional water use, compliance daily per capita water use, gross water use, service area population, indoor residential water use, and landscaped area water use.

- (B) Criteria for adjustments pursuant to subdivisions (d) and (e) of Section 10608.24.
- (2) The department shall post the methodologies and criteria developed pursuant to this subdivision on its internet website, and make written copies available, by October 1, 2010. An urban retail water supplier shall use the methods developed by the department in compliance with this part.
- (i) (1) The department shall adopt regulations for implementation of the provisions relating to process water in accordance with Section 10608.12, subdivision (e) of Section 10608.24, and subdivision (d) of Section 10608.26.
- (2) The initial adoption of a regulation authorized by this subdivision is deemed to address an emergency, for purposes of Sections 11346.1 and 11349.6 of the Government Code, and the department is hereby exempted for that purpose from the requirements of subdivision (b) of Section 11346.1 of the Government Code. After the initial adoption of an emergency regulation pursuant to this subdivision, the department shall not request approval from the Office of Administrative Law to readopt the regulation as an emergency regulation pursuant to Section 11346.1 of the Government Code.
- (j) (1) An urban retail water supplier is granted an extension to July 1, 2011, for adoption of an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) due in 2010 to allow the use of technical methodologies developed by the department pursuant to paragraph (4) of subdivision (b) and subdivision (h). An urban retail water supplier that adopts an urban water management plan due in 2010 that does not use the methodologies developed by the department pursuant to subdivision (h) shall amend the plan by July 1, 2011, to comply with this part.
- (2) An urban wholesale water supplier whose urban water management plan prepared pursuant to Part 2.6 (commencing with Section 10610) was due and not submitted in 2010 is granted an extension to July 1, 2011, to permit coordination between an urban wholesale water

supplier and urban retail water suppliers.

10608.22. Notwithstanding the method adopted by an urban retail water supplier pursuant to Section 10608.20, an urban retail water supplier's per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use as defined in paragraph (3) of subdivision (b) of Section 10608.12. This section does not apply to an urban retail water supplier with a base daily per capita water use at or below 100 gallons per capita per day.

10608.24. (a) Each urban retail water supplier shall meet its interim urban water use target by December 31, 2015.

- (b) Each urban retail water supplier shall meet its urban water use target by December 31, 2020.
- (c) An urban retail water supplier's compliance daily per capita water use shall be the measure of progress toward achievement of its urban water use target.
- (d) (1) When determining compliance daily per capita water use, an urban retail water supplier may consider the following factors:
 - (A) Differences in evapotranspiration and rainfall in the baseline period compared to the compliance reporting period.
 - (B) Substantial changes to commercial or industrial water use resulting from increased business output and economic development that have occurred during the reporting period.
 - (C) Substantial changes to institutional water use resulting from fire suppression services or other extraordinary events, or from new or expanded operations, that have occurred during the reporting period.
- (2) If the urban retail water supplier elects to adjust its estimate of compliance daily per capita water use due to one or more of the factors described in paragraph (1), it shall provide the basis for, and data supporting, the adjustment in the report required by Section 10608.40.
- (e) When developing the urban water use target pursuant to Section 10608.20, an urban retail water supplier that has a substantial

percentage of industrial water use in its service area may exclude process water from the calculation of gross water use to avoid a disproportionate burden on another customer sector.

- (f) (1) An urban retail water supplier that includes agricultural water use in an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) may include the agricultural water use in determining gross water use. An urban retail water supplier that includes agricultural water use in determining gross water use and develops its urban water use target pursuant to paragraph (2) of subdivision (b) of Section 10608.20 shall use a water efficient standard for agricultural irrigation of 100 percent of reference evapotranspiration multiplied by the crop coefficient for irrigated acres.
- (2) An urban retail water supplier, that is also an agricultural water supplier, is not subject to the requirements of Chapter 4 (commencing with Section 10608.48), if the agricultural water use is incorporated into its urban water use target pursuant to paragraph (1).

10608.26. (a) In complying with this part, an urban retail water supplier shall conduct at least one public hearing to accomplish all of the following:

- (1) Allow community input regarding the urban retail water supplier's implementation plan for complying with this part.
 - (2) Consider the economic impacts of the urban retail water supplier's implementation plan for complying with this part.
 - (3) Adopt a method, pursuant to subdivision (b) of Section 10608.20, for determining its urban water use target.
- (b) In complying with this part, an urban retail water supplier may meet its urban water use target through efficiency improvements in any combination among its customer sectors. An urban retail water supplier shall avoid placing a disproportionate burden on any customer sector.
- (c) For an urban retail water supplier that supplies water to a United States Department of Defense military installation, the urban retail water supplier's implementation plan for complying with this part shall consider the conservation of that military installation under

federal Executive Order 13514.

- (d) (1) Any ordinance or resolution adopted by an urban retail water supplier after the effective date of this section shall not require existing customers as of the effective date of this section, to undertake changes in product formulation, operations, or equipment that would reduce process water use, but may provide technical assistance and financial incentives to those customers to implement efficiency measures for process water. This section shall not limit an ordinance or resolution adopted pursuant to a declaration of drought emergency by an urban retail water supplier.
- (2) This part shall not be construed or enforced so as to interfere with the requirements of Chapter 4 (commencing with Section 113980) to Chapter 13 (commencing with Section 114380), inclusive, of Part 7 of Division 104 of the Health and Safety Code, or any requirement or standard for the protection of public health, public safety, or worker safety established by federal, state, or local government or recommended by recognized standard setting organizations or trade associations.

10608.28. (a) An urban retail water supplier may meet its urban water use target within its retail service area, or through mutual agreement, by any of the following:

- (1) Through an urban wholesale water supplier.
- (2) Through a regional agency authorized to plan and implement water conservation, including, but not limited to, an agency established under the Bay Area Water Supply and Conservation Agency Act (Division 31 (commencing with Section 81300)).
- (3) Through a regional water management group as defined in Section 10537.
- (4) By an integrated regional water management funding area.
- (5) By hydrologic region.
- (6) Through other appropriate geographic scales for which computation methods have been developed by the

department.

- (b) A regional water management group, with the written consent of its member agencies, may undertake any or all planning, reporting, and implementation functions under this chapter for the member agencies that consent to those activities. Any data or reports shall provide information both for the regional water management group and separately for each consenting urban retail water supplier and urban wholesale water supplier.

10608.32. All costs incurred pursuant to this part by a water utility regulated by the Public Utilities Commission may be recoverable in rates subject to review and approval by the Public Utilities Commission, and may be recorded in a memorandum account and reviewed for reasonableness by the Public Utilities Commission.

10608.34. (a) (1) On or before January 1, 2017, the department shall adopt rules for all of the following:

- (A) The conduct of standardized water loss audits by urban retail water suppliers in accordance with the method adopted by the American Water Works Association in the third edition of Water Audits and Loss Control Programs, Manual M36 and in the Free Water Audit Software, version 5.0.
- (B) The process for validating a water loss audit report prior to submitting the report to the department. For the purposes of this section, “validating” is a process whereby an urban retail water supplier uses a technical expert to confirm the basis of all data entries in the urban retail water supplier’s water loss audit report and to appropriately characterize the quality of the reported data. The validation process shall follow the principles and terminology laid out by the American Water Works Association in the third edition of Water Audits and Loss Control Programs, Manual M36 and in the Free Water Audit Software, version 5.0. A validated water loss audit report shall include the name and technical qualifications of the person engaged for validation.
- (C) The technical qualifications required of a person to

- engage in validation, as described in subparagraph (B).
 - (D) The certification requirements for a person selected by an urban retail water supplier to provide validation of its own water loss audit report.
 - (E) The method of submitting a water loss audit report to the department.
- (2) The department shall update rules adopted pursuant to paragraph (1) no later than six months after the release of subsequent editions of the American Water Works Association's Water Audits and Loss Control Programs, Manual M36. Except as provided by the department, until the department adopts updated rules pursuant to this paragraph, an urban retail water supplier may rely upon a subsequent edition of the American Water Works Association's Water Audits and Loss Control Programs, Manual M36 or the Free Water Audit Software.
- (b) (1) On or before October 1 of each year until October 1, 2023, each urban retail water supplier reporting on a calendar year basis shall submit a completed and validated water loss audit report for the previous calendar year or the previous fiscal year as prescribed by the department pursuant to subdivision (a).
- (2) On or before January 1 of each year until January 1, 2024, each urban retail water supplier reporting on a fiscal year basis shall submit a completed and validated water loss audit report for the previous fiscal year as prescribed by the department pursuant to subdivision (a).
- (3) On or before January 1, 2024, and on or before January 1 of each year thereafter, each urban retail water supplier shall submit a completed and validated water loss audit report for the previous calendar year or previous fiscal year as part of the report submitted to the department pursuant to subdivision (a) of Section 10609.24 and as prescribed by the department pursuant to subdivision (a).
- (4) Water loss audit reports submitted on or before October 1, 2017, may be completed and validated with assistance as described in subdivision (c).

- (c) Using funds available for the 2016–17 fiscal year, the board shall contribute up to four hundred thousand dollars (\$400,000) towards procuring water loss audit report validation assistance for urban retail water suppliers.
- (d) Each water loss audit report submitted to the department shall be accompanied by information, in a form specified by the department, identifying steps taken in the preceding year to increase the validity of data entered into the final audit, reduce the volume of apparent losses, and reduce the volume of real losses.
- (e) At least one of the following employees of an urban retail water supplier shall attest to each water loss audit report submitted to the department:
 - (1) The chief financial officer.
 - (2) The chief engineer.
 - (3) The general manager.
- (f) The department shall deem incomplete and return to the urban retail water supplier any final water loss audit report found by the department to be incomplete, not validated, unattested, or incongruent with known characteristics of water system operations. A water supplier shall resubmit a completed water loss audit report within 90 days of an audit being returned by the department.
- (g) The department shall post all validated water loss audit reports on its internet website in a manner that allows for comparisons across water suppliers. The department shall make the validated water loss audit reports available for public viewing in a timely manner after their receipt.
- (h) Using available funds, the department shall provide technical assistance to guide urban retail water suppliers' water loss detection programs, including, but not limited to, metering techniques, pressure management techniques, condition-based assessment techniques for transmission and distribution pipelines, and utilization of portable and permanent water loss detection devices.
- (i) No earlier than January 1, 2019, and no later than July 1, 2020, the board shall adopt rules requiring urban retail water suppliers to meet performance standards for the volume of water losses. In

adopting these rules, the board shall employ full life-cycle cost accounting to evaluate the costs of meeting the performance standards. The board may consider establishing a minimum allowable water loss threshold that, if reached and maintained by an urban water supplier, would exempt the urban water supplier from further water loss reduction requirements.

10608.35. (a) The department, in coordination with the board, shall conduct necessary studies and investigations and make a recommendation to the Legislature, by January 1, 2020, on the feasibility of developing and enacting water loss reporting requirements for urban wholesale water suppliers.

(b) The studies and investigations shall include an evaluation of the suitability of applying the processes and requirements of Section 10608.34 to urban wholesale water suppliers.

(c) In conducting necessary studies and investigations and developing its recommendation, the department shall solicit broad public participation from stakeholders and other interested persons.

10608.36. Urban wholesale water suppliers shall include in the urban water management plans required pursuant to Part 2.6 (commencing with Section 10610) an assessment of their present and proposed future measures, programs, and policies to help achieve the water use reductions required by this part.

10608.40. Urban water retail suppliers shall report to the department on their progress in meeting their urban water use targets as part of their urban water management plans submitted pursuant to Section 10631. The data shall be reported using a standardized form developed pursuant to Section 10608.52.

10608.42. (a) The department shall review the 2015 urban water management plans and report to the Legislature by July 1, 2017, on progress towards achieving a 20-percent reduction in urban water use by December 31, 2020. The report shall include recommendations on changes to water efficiency standards or urban water use targets to achieve the 20-percent reduction and to reflect updated efficiency information and technology changes.

- (b) A report to be submitted pursuant to subdivision (a) shall be submitted in compliance with Section 9795 of the Government Code.

10608.43. The department, in conjunction with the California Urban Water Conservation Council, by April 1, 2010, shall convene a representative task force consisting of academic experts, urban retail water suppliers, environmental organizations, commercial water users, industrial water users, and institutional water users to develop alternative best management practices for commercial, industrial, and institutional users and an assessment of the potential statewide water use efficiency improvement in the commercial, industrial, and institutional sectors that would result from implementation of these best management practices. The taskforce, in conjunction with the department, shall submit a report to the Legislature by April 1, 2012, that shall include a review of multiple sectors within commercial, industrial, and institutional users and that shall recommend water use efficiency standards for commercial, industrial, and institutional users among various sectors of water use. The report shall include, but not be limited to, the following:

- (a) Appropriate metrics for evaluating commercial, industrial, and institutional water use.
- (b) Evaluation of water demands for manufacturing processes, goods, and cooling.
- (c) Evaluation of public infrastructure necessary for delivery of recycled water to the commercial, industrial, and institutional sectors.
- (d) Evaluation of institutional and economic barriers to increased recycled water use within the commercial, industrial, and institutional sectors.
- (e) Identification of technical feasibility and cost of the best management practices to achieve more efficient water use statewide in the commercial, industrial, and institutional sectors that is consistent with the public interest and reflects past investments in water use efficiency.

10608.44. Each state agency shall reduce water use at facilities it operates to support urban retail water suppliers in meeting the target identified in

Section 10608.16.

CHAPTER 4. Agricultural Water Suppliers [10608.48]

10608.48. (a) On or before July 31, 2012, an agricultural water supplier shall implement efficient water management practices pursuant to subdivisions (b) and (c).

- (b) Agricultural water suppliers shall implement both of the following critical efficient management practices:
 - (1) Measure the volume of water delivered to customers with sufficient accuracy to comply with subdivision (a) of Section 531.10 and to implement paragraph (2).
 - (2) Adopt a pricing structure for water customers based at least in part on quantity delivered.
- (c) Agricultural water suppliers shall implement additional efficient management practices, including, but not limited to, practices to accomplish all of the following, if the measures are locally cost effective and technically feasible:
 - (1) Facilitate alternative land use for lands with exceptionally high water duties or whose irrigation contributes to significant problems, including drainage.
 - (2) Facilitate use of available recycled water that otherwise would not be used beneficially, meets all health and safety criteria, and does not harm crops or soils.
 - (3) Facilitate the financing of capital improvements for on-farm irrigation systems.
 - (4) Implement an incentive pricing structure that promotes one or more of the following goals:
 - (A) More efficient water use at the farm level.
 - (B) Conjunctive use of groundwater.
 - (C) Appropriate increase of groundwater recharge.
 - (D) Reduction in problem drainage.

- (E) Improved management of environmental resources.
 - (F) Effective management of all water sources throughout the year by adjusting seasonal pricing structures based on current conditions.
- (5) Expand line or pipe distribution systems, and construct regulatory reservoirs to increase distribution system flexibility and capacity, decrease maintenance, and reduce seepage.
 - (6) Increase flexibility in water ordering by, and delivery to, water customers within operational limits.
 - (7) Construct and operate supplier spill and tailwater recovery systems.
 - (8) Increase planned conjunctive use of surface water and groundwater within the supplier service area.
 - (9) Automate canal control structures.
 - (10) Facilitate or promote customer pump testing and evaluation.
 - (11) Designate a water conservation coordinator who will develop and implement the water management plan and prepare progress reports.
 - (12) Provide for the availability of water management services to water users. These services may include, but are not limited to, all of the following:
 - (A) On-farm irrigation and drainage system evaluations.
 - (B) Normal year and real-time irrigation scheduling and crop evapotranspiration information.
 - (C) Surface water, groundwater, and drainage water quantity and quality data.
 - (D) Agricultural water management educational programs and materials for farmers, staff, and the public.
 - (13) Evaluate the policies of agencies that provide the supplier with water to identify the potential for institutional changes to allow more flexible water deliveries and storage.
 - (14) Evaluate and improve the efficiencies of the supplier's

pumps.

- (d) Agricultural water suppliers shall include in the agricultural water management plans required pursuant to Part 2.8 (commencing with Section 10800) a report on which efficient water management practices have been implemented and are planned to be implemented, an estimate of the water use efficiency improvements that have occurred since the last report, and an estimate of the water use efficiency improvements estimated to occur five and 10 years in the future. If an agricultural water supplier determines that an efficient water management practice is not locally cost effective or technically feasible, the supplier shall submit information documenting that determination.
- (e) The department shall require information about the implementation of efficient water management practices to be reported using a standardized form developed pursuant to Section 10608.52. (f) An agricultural water supplier may meet the requirements of subdivisions (d) and (e) by submitting to the department a water conservation plan submitted to the United States Bureau of Reclamation that meets the requirements described in Section 10828.
- (f) On or before December 31, 2013, December 31, 2016, and December 31, 2021, the department, in consultation with the board, shall submit to the Legislature a report on the agricultural efficient water management practices that have been implemented and are planned to be implemented and an assessment of the manner in which the implementation of those efficient water management practices has affected and will affect agricultural operations, including estimated water use efficiency improvements, if any.
- (g) The department may update the efficient water management practices required pursuant to subdivision (c), in consultation with the Agricultural Water Management Council, the United States Bureau of Reclamation, and the board. All efficient water management practices for agricultural water use pursuant to this chapter shall be adopted or revised by the department only after the department conducts public hearings to allow participation of the diverse geographical areas and interests of the state.

- (h) (1) The department shall adopt regulations that provide for a range of options that agricultural water suppliers may use or implement to comply with the measurement requirement in paragraph (1) of subdivision (b).
- (2) The initial adoption of a regulation authorized by this subdivision is deemed to address an emergency, for purposes of Sections 11346.1 and 11349.6 of the Government Code, and the department is hereby exempted for that purpose from the requirements of subdivision (b) of Section 11346.1 of the Government Code. After the initial adoption of an emergency regulation pursuant to this subdivision, the department shall not request approval from the Office of Administrative Law to readopt the regulation as an emergency regulation pursuant to Section 11346.1 of the Government Code.

CHAPTER 5. Sustainable Water Management [10608.50]

10608.50. (a) The department, in consultation with the board, shall promote implementation of regional water resources management practices through increased incentives and removal of barriers consistent with state and federal law. Potential changes may include, but are not limited to, all of the following:

- (1) Revisions to the requirements for urban and agricultural water management plans.
- (2) Revisions to the requirements for integrated regional water management plans.
- (3) Revisions to the eligibility for state water management grants and loans.
- (4) Revisions to state or local permitting requirements that increase water supply opportunities, but do not weaken water quality protection under state and federal law.
- (5) Increased funding for research, feasibility studies, and project construction.
- (6) Expanding technical and educational support for local land use and water management agencies.

- (b) No later than January 1, 2011, and updated as part of the California Water Plan, the department, in consultation with the board, and with public input, shall propose new statewide targets, or review and update existing statewide targets, for regional water resources management practices, including, but not limited to, recycled water, brackish groundwater desalination, and infiltration and direct use of urban stormwater runoff.

CHAPTER 6. Standardized Data Collection [10608.52]

10608.52. (a) The department, in consultation with the board, the California Bay-Delta Authority or its successor agency, the State Department of Public Health, and the Public Utilities Commission, shall develop a single standardized water use reporting form to meet the water use information needs of each agency, including the needs of urban water suppliers that elect to determine and report progress toward achieving targets on a regional basis as provided in subdivision (a) of Section 10608.28.

- (b) At a minimum, the form shall be developed to accommodate information sufficient to assess an urban water supplier's compliance with conservation targets pursuant to Section 10608.24 and an agricultural water supplier's compliance with implementation of efficient water management practices pursuant to subdivision (a) of Section 10608.48. The form shall accommodate reporting by urban water suppliers on an individual or regional basis as provided in subdivision (a) of Section 10608.28.

CHAPTER 7. Funding Provisions [10608.56 – 10608.60]

10608.56. (a) On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

- (b) On and after July 1, 2013, an agricultural water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.
- (c) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita

reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per capita reductions. The supplier may request grant or loan funds to achieve the per capita reductions to the extent the request is consistent with the eligibility requirements applicable to the water funds.

- (d) Notwithstanding subdivision (b), the department shall determine that an agricultural water supplier is eligible for a water grant or loan even though the supplier is not implementing all of the efficient water management practices described in Section 10608.48, if the agricultural water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the efficient water management practices. The supplier may request grant or loan funds to implement the efficient water management practices to the extent the request is consistent with the eligibility requirements applicable to the water funds.
- (e) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.
- (f) The department shall not deny eligibility to an urban retail water supplier or agricultural water supplier in compliance with the requirements of this part and Part 2.8 (commencing with Section 10800), that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the requirements of this part or Part 2.8 (commencing with Section 10800).

10608.60. (a) It is the intent of the Legislature that funds made available by Section 75026 of the Public Resources Code should be expended, consistent with Division 43 (commencing with Section 75001) of the Public

Resources Code and upon appropriation by the Legislature, for grants to implement this part. In the allocation of funding, it is the intent of the Legislature that the department give consideration to disadvantaged communities to assist in implementing the requirements of this part.

- (b) It is the intent of the Legislature that funds made available by Section 75041 of the Public Resources Code, should be expended, consistent with Division 43 (commencing with Section 75001) of the Public Resources Code and upon appropriation by the Legislature, for direct expenditures to implement this part.

CHAPTER 8. Quantifying Agricultural Water Use Efficiency [10608.64]

10608.64. The department, in consultation with the Agricultural Water Management Council, academic experts, and other stakeholders, shall develop a methodology for quantifying the efficiency of agricultural water use. Alternatives to be assessed shall include, but not be limited to, determination of efficiency levels based on crop type or irrigation system distribution uniformity. On or before December 31, 2011, the department shall report to the Legislature on a proposed methodology and a plan for implementation. The plan shall include the estimated implementation costs and the types of data needed to support the methodology. Nothing in this section authorizes the department to implement a methodology established pursuant to this section.

PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION [10608 – 10609.42]

CHAPTER 9. Urban Water Use Objectives and Water Use Reporting [10609 – 10609.38]

10609. (a) The Legislature finds and declares that this chapter establishes a method to estimate the aggregate amount of water that would have been delivered the previous year by an urban retail water supplier if all that water had been used efficiently. This estimated aggregate water use is the urban retail water supplier's urban water use objective. The method is based on water use efficiency standards and local service area characteristics for that year. By comparing the amount of water actually used in the previous year with the urban water use objective, local urban water suppliers will be in a better position to help eliminate unnecessary use of water; that is, water used in excess of that needed to accomplish the intended beneficial use.

(b) The Legislature further finds and declares all of the following:

(1) This chapter establishes standards and practices for the following water uses:

- (A) Indoor residential use.
- (B) Outdoor residential use.
- (C) CII water use.
- (D) Water losses.
- (E) Other unique local uses and situations that can have a material effect on an urban water supplier's total water use.

(2) This chapter further does all of the following:

- (A) Establishes a method to calculate each urban water use objective.
- (B) Considers recycled water quality in establishing efficient irrigation standards.
- (C) Requires the department to provide or otherwise identify data regarding the unique local conditions to support the calculation of an urban water use objective.
- (D) Provides for the use of alternative sources of data if alternative sources are shown to be as accurate as, or more accurate than, the data provided by the department.
- (E) Requires annual reporting of the previous year's water use with the urban water use objective.
- (F) Provides a bonus incentive for the amount of potable recycled water used the previous year when comparing the previous year's water use with the urban water use objective, of up to 10 percent of the urban water use objective.

(3) This chapter requires the department and the board to solicit broad public participation from stakeholders and other interested persons in the development of the standards and the adoption of regulations pursuant to this chapter.

- (4) This chapter preserves the Legislature's authority over long-term water use efficiency target setting and ensures appropriate legislative oversight of the implementation of this chapter by doing all of the following:
 - (A) Requiring the Legislative Analyst to conduct a review of the implementation of this chapter, including compliance with the adopted standards and regulations, accuracy of the data, use of alternate data, and other issues the Legislative Analyst deems appropriate.
 - (B) Stating legislative intent that the director of the department and the chairperson of the board appear before the appropriate Senate and Assembly policy committees to report on progress in implementing this chapter.
 - (C) Providing one-time-only authority to the department and board to adopt water use efficiency standards, except as explicitly provided in this chapter. Authorization to update the standards shall require separate legislation.
- (c) It is the intent of the Legislature that the following principles apply to the development and implementation of long-term standards and urban water use objectives:
 - (1) Local urban retail water suppliers should have primary responsibility for meeting standards-based water use targets, and they shall retain the flexibility to develop their water supply portfolios, design and implement water conservation strategies, educate their customers, and enforce their rules.
 - (2) Long-term standards and urban water use objectives should advance the state's goals to mitigate and adapt to climate change.
 - (3) Long-term standards and urban water use objectives should acknowledge the shade, air quality, and heat-island reduction benefits provided to communities by trees through the support of water-efficient irrigation practices that keep trees healthy.

- (4) The state should identify opportunities for streamlined reporting, eliminate redundant data submissions, and incentivize open access to data collected by urban and agricultural water suppliers.

10609.2. (a) The board, in coordination with the department, shall adopt long-term standards for the efficient use of water pursuant to this chapter on or before June 30, 2022.

(b) Standards shall be adopted for all of the following:

- (1) Outdoor residential water use.
- (2) Outdoor irrigation of landscape areas with dedicated irrigation meters in connection with CII water use.
- (3) A volume for water loss.

(c) When adopting the standards under this section, the board shall consider the policies of this chapter and the proposed efficiency standards' effects on local wastewater management, developed and natural parklands, and urban tree health. The standards and potential effects shall be identified by May 30, 2022. The board shall allow for public comment on potential effects identified by the board under this subdivision.

(d) The long-term standards shall be set at a level designed so that the water use objectives, together with other demands excluded from the long-term standards such as CII indoor water use and CII outdoor water use not connected to a dedicated landscape meter, would exceed the statewide conservation targets required pursuant to Chapter 3 (commencing with Section 10608.16).

(e) The board, in coordination with the department, shall adopt by regulation variances recommended by the department pursuant to Section 10609.14 and guidelines and methodologies pertaining to the calculation of an urban retail water supplier's urban water use objective recommended by the department pursuant to Section 10609.16.

10609.4. (a) (1) Until January 1, 2025, the standard for indoor residential water use shall be 55 gallons per capita daily.

(2) Beginning January 1, 2025, and until January 1, 2030, the

standard for indoor residential water use shall be the greater of 52.5 gallons per capita daily or a standard recommended pursuant to subdivision (b).

(3) Beginning January 1, 2030, the standard for indoor residential water use shall be the greater of 50 gallons per capita daily or a standard recommended pursuant to subdivision (b).

(b) (1) The department, in coordination with the board, shall conduct necessary studies and investigations and may jointly recommend to the Legislature a standard for indoor residential water use that more appropriately reflects best practices for indoor residential water use than the standard described in subdivision (a). A report on the results of the studies and investigations shall be made to the chairpersons of the relevant policy committees of each house of the Legislature by January 1, 2021, and shall include information necessary to support the recommended standard, if there is one. The studies and investigations shall also include an analysis of the benefits and impacts of how the changing standard for indoor residential water use will impact water and wastewater management, including potable water usage, wastewater, recycling and reuse systems, infrastructure, operations, and supplies.

(2) The studies, investigations, and report described in paragraph (1) shall include collaboration with, and input from, a broad group of stakeholders, including, but not limited to, environmental groups, experts in indoor plumbing, and water, wastewater, and recycled water agencies.

10609.6. (a) (1) The department, in coordination with the board, shall conduct necessary studies and investigations and recommend, no later than October 1, 2021, standards for outdoor residential use for adoption by the board in accordance with this chapter.

(2) (A) The standards shall incorporate the principles of the model water efficient landscape ordinance adopted by the department pursuant to the Water Conservation in Landscaping Act (Article 10.8 (commencing with Section 65591) of Chapter 3 of Division 1 of Title 7 of the Government Code).

(B) The standards shall apply to irrigable lands.

- (C) The standards shall include provisions for swimming pools, spas, and other water features. Ornamental water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, shall be analyzed separately from swimming pools and spas.
- (b) The department shall, by January 1, 2021, provide each urban retail water supplier with data regarding the area of residential irrigable lands in a manner that can reasonably be applied to the standards adopted pursuant to this section.
- (c) The department shall not recommend standards pursuant to this section until it has conducted pilot projects or studies, or some combination of the two, to ensure that the data provided to local agencies are reasonably accurate for the data's intended uses, taking into consideration California's diverse landscapes and community characteristics.

10609.8. (a) The department, in coordination with the board, shall conduct necessary studies and investigations and recommend, no later than October 1, 2021, standards for outdoor irrigation of landscape areas with dedicated irrigation meters or other means of calculating outdoor irrigation use in connection with CII water use for adoption by the board in accordance with this chapter.

- (b) The standards shall incorporate the principles of the model water efficient landscape ordinance adopted by the department pursuant to the Water Conservation in Landscaping Act (Article 10.8 (commencing with Section 65591) of Chapter 3 of Division 1 of Title 7 of the Government Code).
- (c) The standards shall include an exclusion for water for commercial agricultural use meeting the definition of subdivision (b) of Section 51201 of the Government Code.

10609.9. For purposes of Sections 10609.6 and 10609.8, "principles of the model water efficient landscape ordinance" means those provisions of the model water efficient landscape ordinance applicable to the establishment or determination of the amount of water necessary to efficiently irrigate both new and existing landscapes. These provisions include, but are not limited to, all of the following:

- (a) Evapotranspiration adjustment factors, as applicable.
- (b) Landscape area.
- (c) Maximum applied water allowance.
- (d) Reference evapotranspiration.
- (e) Special landscape areas, including provisions governing evapotranspiration adjustment factors for different types of water used for irrigating the landscape.

10609.10. (a) The department, in coordination with the board, shall conduct necessary studies and investigations and recommend, no later than October 1, 2021, performance measures for CII water use for adoption by the board in accordance with this chapter.

- (b) Prior to recommending performance measures for CII water use, the department shall solicit broad public participation from stakeholders and other interested persons relating to all of the following:
 - (1) Recommendations for a CII water use classification system for California that address significant uses of water.
 - (2) Recommendations for setting minimum size thresholds for converting mixed CII meters to dedicated irrigation meters, and evaluation of, and recommendations for, technologies that could be used in lieu of requiring dedicated irrigation meters.
 - (3) Recommendations for CII water use best management practices, which may include, but are not limited to, water audits and water management plans for those CII customers that exceed a recommended size, volume of water use, or other threshold.
- (c) Recommendations of appropriate performance measures for CII water use shall be consistent with the October 21, 2013, report to the Legislature by the Commercial, Industrial, and Institutional Task Force entitled "Water Use Best Management Practices," including the technical and financial feasibility recommendations provided in that report, and shall support the economic productivity of California's commercial, industrial, and institutional sectors.

- (d) (1) The board, in coordination with the department, shall adopt performance measures for CII water use on or before June 30, 2022.

- (a) Each urban retail water supplier shall implement the performance measures adopted by the board pursuant to paragraph (1).

10609.12. The standards for water loss for urban retail water suppliers shall be the standards adopted by the board pursuant to subdivision (i) of Section 10608.34.

10609.14. (a) The department, in coordination with the board, shall conduct necessary studies and investigations and, no later than October 1, 2021, recommend for adoption by the board in accordance with this chapter appropriate variances for unique uses that can have a material effect on an urban retail water supplier's urban water use objective.

- (b) Appropriate variances may include, but are not limited to, allowances for the following:

- (1) Significant use of evaporative coolers.
- (2) Significant populations of horses and other livestock.
- (3) Significant fluctuations in seasonal populations.
- (4) Significant landscaped areas irrigated with recycled water having high levels of total dissolved solids.
- (5) Significant use of water for soil compaction and dust control.
- (6) Significant use of water to supplement ponds and lakes to sustain wildlife.
- (7) Significant use of water to irrigate vegetation for fire protection.
- (8) Significant use of water for commercial or noncommercial agricultural use.

- (c) The department, in recommending variances for adoption by the board, shall also recommend a threshold of significance for each recommended variance.

- (d) Before including any specific variance in calculating an urban retail water supplier's water use objective, the urban retail water supplier shall request and receive approval by the board for the inclusion of that variance.

- (e) The board shall post on its Internet Web site all of the following:

- (1) A list of all urban retail water suppliers with approved variances.
- (2) The specific variance or variances approved for each urban retail water supplier.
- (3) The data supporting approval of each variance.

10609.15. To help streamline water data reporting, the department and the board shall do all of the following:

- (a) Identify urban water reporting requirements shared by both agencies, and post on each agency's Internet Web site how the data is used for planning, regulatory, or other purposes.
- (b) Analyze opportunities for more efficient publication of urban water reporting requirements within each agency, and analyze how each agency can integrate various data sets in a publicly accessible location, identify priority actions, and implement priority actions identified in the analysis.
- (c) Make appropriate data pertaining to the urban water reporting requirements that are collected by either agency available to the public according to the principles and requirements of the Open and Transparent Water Data Act (Part 4.9 (commencing with Section 12400)).

10609.16. The department, in coordination with the board, shall conduct necessary studies and investigations and recommend, no later than October 1, 2021, guidelines and methodologies for the board to adopt that identify how an urban retail water supplier calculates its urban water use objective. The guidelines and methodologies shall address, as necessary, all of the following:

- (a) Determining the irrigable lands within the urban retail water supplier's service area.
- (b) Updating and revising methodologies described pursuant to subparagraph (A) of paragraph (1) of subdivision (h) of Section 10608.20, as appropriate, including methodologies for calculating the population in an urban retail water supplier's service area.
- (c) Using landscape area data provided by the department or alternative data.

- (d) Incorporating precipitation data and climate data into estimates of a urban retail water supplier's outdoor irrigation budget for its urban water use objective.
- (e) Estimating changes in outdoor landscape area and population, and calculating the urban water use objective, for years when updated landscape imagery is not available from the department.
- (f) Determining acceptable levels of accuracy for the supporting data, the urban water use objective, and compliance with the urban water use objective.

10609.18. The department and the board shall solicit broad public participation from stakeholders and other interested persons in the development of the standards and the adoption of regulations pursuant to this chapter. The board shall hold at least one public meeting before taking any action on any standard or variance recommended by the department.

10609.20. (a) Each urban retail water supplier shall calculate its urban water use objective no later than January 1, 2024, and by January 1 every year thereafter.

- (b) The calculation shall be based on the urban retail water supplier's water use conditions for the previous calendar or fiscal year.
- (c) Each urban water supplier's urban water use objective shall be composed of the sum of the following:
 - (1) Aggregate estimated efficient indoor residential water use.
 - (2) Aggregate estimated efficient outdoor residential water use.
 - (3) Aggregate estimated efficient outdoor irrigation of landscape areas with dedicated irrigation meters or equivalent technology in connection with CII water use.
 - (4) Aggregate estimated efficient water losses.
 - (5) Aggregate estimated water use in accordance with variances, as appropriate.
- (d) (1) An urban retail water supplier that delivers water from a groundwater basin, reservoir, or other source that is augmented by potable reuse water may adjust its urban water use objective by a bonus incentive calculated pursuant to this subdivision.

- (2) The water use objective bonus incentive shall be the volume of its potable reuse delivered to residential water users and to landscape areas with dedicated irrigation meters in connection with CII water use, on an acre-foot basis.
- (3) The bonus incentive pursuant to paragraph (1) shall be limited in accordance with one of the following:
 - (A) The bonus incentive shall not exceed 15 percent of the urban water supplier's water use objective for any potable reuse water produced at an existing facility.
 - (B) The bonus incentive shall not exceed 10 percent of the urban water supplier's water use objective for any potable reuse water produced at any facility that is not an existing facility.
- (4) For purposes of this subdivision, "existing facility" means a facility that meets all of the following:
 - (A) The facility has a certified environmental impact report, mitigated negative declaration, or negative declaration on or before January 1, 2019.
 - (B) The facility begins producing and delivering potable reuse water on or before January 1, 2022.
 - (C) The facility uses microfiltration and reverse osmosis technologies to produce the potable reuse water.
- (e) (1) The calculation of the urban water use objective shall be made using landscape area and other data provided by the department and pursuant to the standards, guidelines, and methodologies adopted by the board. The department shall provide data to the urban water supplier at a level of detail sufficient to allow the urban water supplier to verify its accuracy at the parcel level.
- (2) Notwithstanding paragraph (1), an urban retail water supplier may use alternative data in calculating the urban water use objective if the supplier demonstrates to the department that the alternative data are equivalent, or superior, in quality and accuracy to the data provided by the department. The department may provide technical assistance to an urban retail water supplier in evaluating whether the alternative data are appropriate for use in calculating the supplier's urban water use objective.

10609.21. (a) For purposes of Section 10609.20, and notwithstanding paragraph (4) of subdivision (d) of Section 10609.20, “existing facility” also includes the North City Project, phase one of the Pure Water San Diego Program, for which an environmental impact report was certified on April 10, 2018.

(b) This section shall become operative on January 1, 2019.

10609.22. (a) An urban retail water supplier shall calculate its actual urban water use no later than January 1, 2024, and by January 1 every year thereafter.

(b) The calculation shall be based on the urban retail water supplier’s water use for the previous calendar or fiscal year.

(c) Each urban water supplier’s urban water use shall be composed of the sum of the following:

- (1) Aggregate residential water use.
- (2) Aggregate outdoor irrigation of landscape areas with dedicated irrigation meters in connection with CII water use.
- (3) Aggregate water losses.

10609.24. (a) An urban retail water supplier shall submit a report to the department no later than January 1, 2024, and by January 1 every year thereafter. The report shall include all of the following:

- (1) The urban water use objective calculated pursuant to Section 10609.20 along with relevant supporting data.
- (2) The actual urban water use calculated pursuant to Section 10609.22 along with relevant supporting data.
- (3) Documentation of the implementation of the performance measures for CII water use.
- (4) A description of the progress made towards meeting the urban water use objective.
- (5) The validated water loss audit report conducted pursuant to Section 10608.34.

(b) The department shall post the reports and information on its internet website.

- (c) The board may issue an information order or conservation order to, or impose civil liability on, an entity or individual for failure to submit a report required by this section.

10609.25. As part of the first report submitted to the department by an urban retail water supplier no later than January 1, 2024, pursuant to subdivision (a) of Section 10609.24, each urban retail water supplier shall provide a narrative that describes the water demand management measures that the supplier plans to implement to achieve its urban water use objective by January 1, 2027.

10609.26. (a) (1) On and after January 1, 2024, the board may issue informational orders pertaining to water production, water use, and water conservation to an urban retail water supplier that does not meet its urban water use objective required by this chapter. Informational orders are intended to obtain information on supplier activities, water production, and conservation efforts in order to identify technical assistance needs and assist urban water suppliers in meeting their urban water use objectives.

- (2) In determining whether to issue an informational order, the board shall consider the degree to which the urban retail water supplier is not meeting its urban water use objective, information provided in the report required by Section 10609.24, and actions the urban retail water supplier has implemented or will implement in order to help meet the urban water use objective.

- (3) The board shall share information received pursuant to this subdivision with the department.

- (4) An urban water supplier may request technical assistance from the department. The technical assistance may, to the extent available, include guidance documents, tools, and data.

- (b) On and after January 1, 2025, the board may issue a written notice to an urban retail water supplier that does not meet its urban water use objective required by this chapter. The written notice may warn the urban retail water supplier that it is not meeting its urban water use objective described in Section 10609.20 and is not making adequate progress in meeting the urban water use objective, and may request that the urban retail water supplier

address areas of concern in its next annual report required by Section 10609.24. In deciding whether to issue a written notice, the board may consider whether the urban retail water supplier has received an informational order, the degree to which the urban retail water supplier is not meeting its urban water use objective, information provided in the report required by Section 10609.24, and actions the urban retail water supplier has implemented or will implement in order to help meet its urban water use objective.

- (c) (1) On and after January 1, 2026, the board may issue a conservation order to an urban retail water supplier that does not meet its urban water use objective. A conservation order may consist of, but is not limited to, referral to the department for technical assistance, requirements for education and outreach, requirements for local enforcement, and other efforts to assist urban retail water suppliers in meeting their urban water use objective.
 - (2) In issuing a conservation order, the board shall identify specific deficiencies in an urban retail water supplier's progress towards meeting its urban water use objective, and identify specific actions to address the deficiencies.
 - (3) The board may request that the department provide an urban retail water supplier with technical assistance to support the urban retail water supplier's actions to remedy the deficiencies.
- (d) A conservation order issued in accordance with this chapter may include requiring actions intended to increase water-use efficiency, but shall not curtail or otherwise limit the exercise of a water right, nor shall it require the imposition of civil liability pursuant to Section 377.

10609.27. Notwithstanding Section 10609.26, the board shall not issue an information order, written notice, or conservation order pursuant to Section 10609.26 if both of the following conditions are met:

- (a) The board determines that the urban retail water supplier is not meeting its urban water use objective solely because the volume of water loss exceeds the urban retail water supplier's standard for water loss.

- (b) Pursuant to Section 10608.34, the board is taking enforcement action against the urban retail water supplier for not meeting the performance standards for the volume of water losses.

10609.28. The board may issue a regulation or informational order requiring a wholesale water supplier, an urban retail water supplier, or a distributor of a public water supply, as that term is used in Section 350, to provide a monthly report relating to water production, water use, or water conservation.

10609.30. On or before January 10, 2024, the Legislative Analyst shall provide to the appropriate policy committees of both houses of the Legislature and the public a report evaluating the implementation of the water use efficiency standards and water use reporting pursuant to this chapter. The board and the department shall provide the Legislative Analyst with the available data to complete this report.

- (a) The report shall describe all of the following:

- (1) The rate at which urban retail water users are complying with the standards, and factors that might facilitate or impede their compliance.
- (2) The accuracy of the data and estimates being used to calculate urban water use objectives.
- (3) Indications of the economic impacts, if any, of the implementation of this chapter on urban water suppliers and urban water users, including CII water users.
- (4) The frequency of use of the bonus incentive, the volume of water associated with the bonus incentive, value to urban water suppliers of the bonus incentive, and any implications of the use of the bonus incentive on water use efficiency.
- (5) The early indications of how implementing this chapter might impact the efficiency of statewide urban water use.
- (6) Recommendations, if any, for improving statewide urban water use efficiency and the standards and practices described in this chapter.
- (7) Any other issues the Legislative Analyst deems appropriate.

10609.32. It is the intent of the Legislature that the chairperson of the board and the director of the department appear before the appropriate policy committees of both houses of the Legislature on or around January 1, 2026, and report on the implementation of the water use efficiency standards and water use reporting pursuant to this chapter. It is the intent of the Legislature that the topics to be covered include all of the following:

- (a) The rate at which urban retail water suppliers are complying with the standards, and factors that might facilitate or impede their compliance.
- (b) What enforcement actions have been taken, if any.
- (c) The accuracy of the data and estimates being used to calculate urban water use objectives.
- (d) Indications of the economic impacts, if any, of the implementation of this chapter on urban water suppliers and urban water users, including CII water users.
- (e) The frequency of use of the bonus incentive, the volume of water associated with the bonus incentive, value to urban water suppliers of the bonus incentive, and any implications of the use of the bonus incentive on water use efficiency.
- (f) An assessment of how implementing this chapter is affecting the efficiency of statewide urban water use.

10609.34. Notwithstanding Section 15300.2 of Title 14 of the California Code of Regulations, an action of the board taken under this chapter shall be deemed to be a Class 8 action, within the meaning of Section 15308 of Title 14 of the California Code of Regulations, provided that the action does not involve relaxation of existing water conservation or water use standards.

10609.36. (a) Nothing in this chapter shall be construed to determine or alter water rights. Sections 1010 and 1011 apply to water conserved through implementation of this chapter.

- (b) Nothing in this chapter shall be construed to authorize the board to update or revise water use efficiency standards authorized by this chapter except as explicitly provided in this chapter. Authorization to update the standards beyond that explicitly provided in this chapter shall require separate legislation.

- (c) Nothing in this chapter shall be construed to limit or otherwise affect the use of recycled water as seawater barriers for groundwater salinity management.

10609.38. The board may waive the requirements of this chapter for a period of up to five years for any urban retail water supplier whose water deliveries are significantly affected by changes in water use as a result of damage from a disaster such as an earthquake or fire. In establishing the period of a waiver, the board shall take into consideration the breadth of the damage and the time necessary for the damaged areas to recover from the disaster.

PART 2.6. URBAN WATER MANAGEMENT PLANNING

CHAPTER 1. General Declaration and Policy [10610 – 10610.4]

10610. This part shall be known and may be cited as the "Urban Water Management Planning Act."

10610.2. (a) The Legislature finds and declares all of the following:

- (1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.
- (2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.
- (3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate, and increasing long-term water conservation among Californians, improving water use efficiency within the state's communities and agricultural production, and strengthening local and regional drought planning are critical to California's resilience to drought and climate change.
- (4) As part of its long-range planning activities, every urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years now and into the

foreseeable future, and every urban water supplier should collaborate closely with local land-use authorities to ensure water demand forecasts are consistent with current land-use planning.

- (5) Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.
 - (6) Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.
 - (7) Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.
 - (8) Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.
 - (9) The quality of source supplies can have a significant impact on water management strategies and supply reliability.
- (b) This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.

10610.4. The Legislature finds and declares that it is the policy of the state as follows:

- (a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.
- (b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.
- (c) Urban water suppliers shall be required to develop water management plans to achieve the efficient use of available supplies and strengthen local drought planning.

CHAPTER 2. Definitions [10611 – 10618]

10611. Unless the context otherwise requires, the definitions of this chapter govern the construction of this part.

10611.3. "Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.

10611.5. "Demand management" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.

10612. "Drought risk assessment" means a method that examines water shortage risks based on the driest five-year historic sequence for the agency's water supply, as described in subdivision (b) of Section 10635.

10613. "Efficient use" means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable method of use.

10614. "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.

10615. "Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.

10616. "Public agency" means any board, commission, county, city and county, city, regional agency, district, or other public entity.

10616.5. "Recycled water" means the reclamation and reuse of wastewater for beneficial use.

10617. "Urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

10617.5. "Water shortage contingency plan" means a document that incorporates the provisions detailed in subdivision (a) of Section 10632 and is subsequently adopted by an urban water supplier pursuant to this article.

10618. "Water supply and demand assessment" means a method that looks at current year and one or more dry year supplies and demands for determining water shortage risks, as described in Section 10632.1.

CHAPTER 3. Urban Water Management Plans

ARTICLE 1. General Provisions [10620 – 10621]

10620. (a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).

- (b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.
- (c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.
- (d) (1) An urban water supplier may satisfy the requirements of this part by participation in areawide, regional, watershed, or basinwide urban water management planning where those plans will reduce

preparation costs and contribute to the achievement of conservation, efficient water use, and improved local drought resilience.

- (2) Notwithstanding paragraph (1), each urban water supplier shall develop its own water shortage contingency plan, but an urban water supplier may incorporate, collaborate, and otherwise share information with other urban water suppliers or other governing entities participating in an areawide, regional, watershed, or basinwide urban water management plan, an agricultural management plan, or groundwater sustainability plan development.
- (3) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.
- (e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.
- (f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

10621. (a) Each urban water supplier shall update its plan at least once every five years on or before July 1, in years ending in six and one, incorporating updated and new information from the five years preceding each update.

- (b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days before the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.
- (c) An urban water supplier regulated by the Public Utilities Commission shall include its most recent plan and water shortage

contingency plan as part of the supplier's general rate case filings.

- (d) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).
- (e) Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.
- (f) Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.

CHAPTER 3. Urban Water Management Plans

ARTICLE 2. Contents of Plans [10630 – 10634]

10630. It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied, while accounting for impacts from climate change.

10630.5. Each plan shall include a simple lay description of how much water the agency has on a reliable basis, how much it needs for the foreseeable future, what the agency's strategy is for meeting its water needs, the challenges facing the agency, and any other information necessary to provide a general understanding of the agency's plan.

10631. A plan shall be adopted in accordance with this chapter that shall do all of the following:

- (a) Describe the service area of the supplier, including current and projected population, climate, and other social, economic, and demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available. The description shall include the current and projected land uses within the existing or anticipated service area affecting the supplier's water management planning. Urban water suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land use information, including,

where appropriate, land use information obtained from local or regional land use authorities, as developed pursuant to Article 5 (commencing with Section 65300) of Chapter 3 of Division 1 of Title 7 of the Government Code.

- (b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a), providing supporting and related information, including all of the following:
 - (1) A detailed discussion of anticipated supply availability under a normal water year, single dry year, and droughts lasting at least five years, as well as more frequent and severe periods of drought, as described in the drought risk assessment. For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.
 - (2) When multiple sources of water supply are identified, a description of the management of each supply in correlation with the other identified supplies.
 - (3) For any planned sources of water supply, a description of the measures that are being undertaken to acquire and develop those water supplies.
 - (4) If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information:
 - (A) The current version of any groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720), any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management for basins underlying the urban water supplier's service area.
 - (B) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater.

For basins that a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For a basin that has not been adjudicated, information as to whether the department has identified the basin as a high- or medium-priority basin in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to coordinate with groundwater sustainability agencies or groundwater management agencies listed in subdivision (c) of Section 10723 to maintain or achieve sustainable groundwater conditions in accordance with a groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720).

- (C) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.
 - (D) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.
- (c) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.
- (d) (1) For an urban retail water supplier, quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors,

including, but not necessarily limited to, all of the following:

- (A) Single-family residential.
 - (B) Multifamily.
 - (C) Commercial.
 - (D) Industrial.
 - (E) Institutional and governmental.
 - (F) Landscape.
 - (G) Sales to other agencies.
 - (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.
 - (I) Agricultural.
 - (J) Distribution system water loss.
- (2) The water use projections shall be in the same five-year increments described in subdivision (a).
- (3) (A) The distribution system water loss shall be quantified for each of the five years preceding the plan update, in accordance with rules adopted pursuant to Section 10608.34.
- (B) The distribution system water loss quantification shall be reported in accordance with a worksheet approved or developed by the department through a public process. The water loss quantification worksheet shall be based on the water system balance methodology developed by the American Water Works Association.
- (C) In the plan due July 1, 2021, and in each update thereafter, data shall be included to show whether the urban retail water supplier met the distribution loss standards enacted by the board pursuant to Section 10608.34.
- (4) (A) Water use projections, where available, shall display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area.

- (B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following:
 - (i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections.
 - (ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.
- (e) Provide a description of the supplier's water demand management measures. This description shall include all of the following:
 - (1) (A) For an urban retail water supplier, as defined in Section 10608.12, a narrative description that addresses the nature and extent of each water demand management measure implemented over the past five years. The narrative shall describe the water demand management measures that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.
 - (B) The narrative pursuant to this paragraph shall include descriptions of the following water demand management measures:
 - (i) Water waste prevention ordinances.
 - (ii) Metering.
 - (iii) Conservation pricing.
 - (iv) Public education and outreach.
 - (v) Programs to assess and manage distribution system real loss.
 - (vi) Water conservation program coordination and staffing support.
 - (vii) Other demand management measures that have a significant impact on water use as measured in

gallons per capita per day, including innovative measures, if implemented.

- (2) For an urban wholesale water supplier, as defined in Section 10608.12, a narrative description of the items in clauses (ii), (iv), (vi), and (vii) of subparagraph (B) of paragraph (1), and a narrative description of its distribution system asset management and wholesale supplier assistance programs.
- (f) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use, as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in normal and single-dry water years and for a period of drought lasting five consecutive water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.
- (g) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.
- (h) An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (f). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (f).

10631.1. (a) The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.

(b) It is the intent of the Legislature that the identification of projected water use for single-family and multifamily residential housing for lower income households will assist a supplier in complying with the requirement under Section 65589.7 of the Government Code to grant a priority for the provision of service to housing units affordable to lower income households.

10631.2. (a) In addition to the requirements of Section 10631, an urban water management plan shall include any of the following information that the urban water supplier can readily obtain:

- (1) An estimate of the amount of energy used to extract or divert water supplies.
- (2) An estimate of the amount of energy used to convey water supplies to the water treatment plants or distribution systems.
- (3) An estimate of the amount of energy used to treat water supplies.
- (4) An estimate of the amount of energy used to distribute water supplies through its distribution systems.
- (5) An estimate of the amount of energy used for treated water supplies in comparison to the amount used for nontreated water supplies.
- (6) An estimate of the amount of energy used to place water into or withdraw from storage.
- (7) Any other energy-related information the urban water supplier deems appropriate.

(b) The department shall include in its guidance for the preparation of urban water management plans a methodology for the voluntary calculation or estimation of the energy intensity of urban water systems. The department may consider studies and calculations conducted by the Public Utilities Commission in developing the methodology.

- (c) The Legislature finds and declares that energy use is only one factor in water supply planning and shall not be considered independently of other factors.

10632. (a) Every urban water supplier shall prepare and adopt a water shortage contingency plan as part of its urban water management plan that consists of each of the following elements:

- (1) The analysis of water supply reliability conducted pursuant to Section 10635.
- (2) The procedures used in conducting an annual water supply and demand assessment that include, at a minimum, both of the following:
 - (A) The written decision making process that an urban water supplier will use each year to determine its water supply reliability.
 - (B) The key data inputs and assessment methodology used to evaluate the urban water supplier's water supply reliability for the current year and one dry year, including all of the following:
 - (i) Current year unconstrained demand, considering weather, growth, and other influencing factors, such as policies to manage current supplies to meet demand objectives in future years, as applicable.
 - (ii) Current year available supply, considering hydrological and regulatory conditions in the current year and one dry year. The annual supply and demand assessment may consider more than one dry year solely at the discretion of the urban water supplier.
 - (iii) Existing infrastructure capabilities and plausible constraints.
 - (iv) A defined set of locally applicable evaluation criteria that are consistently relied upon for each annual water supply and demand assessment.
 - (v) A description and quantification of each source of water supply.

- (3) (A) Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50 percent shortages and greater than 50 percent shortage. Urban water suppliers shall define these shortage levels based on the suppliers' water supply conditions, including percentage reductions in water supply, changes in groundwater levels, changes in surface elevation or level of subsidence, or other changes in hydrological or other local conditions indicative of the water supply available for use. Shortage levels shall also apply to catastrophic interruption of water supplies, including, but not limited to, a regional power outage, an earthquake, and other potential emergency events.
 - (B) An urban water supplier with an existing water shortage contingency plan that uses different water shortage levels may comply with the requirement in subparagraph (A) by developing and including a cross-reference relating its existing categories to the six standard water shortage levels.
- (4) Shortage response actions that align with the defined shortage levels and include, at a minimum, all of the following:
 - (A) Locally appropriate supply augmentation actions.
 - (B) Locally appropriate demand reduction actions to adequately respond to shortages.
 - (C) Locally appropriate operational changes.
 - (D) Additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions.
 - (E) For each action, an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.
- (5) Communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding, at a minimum, all of the following:

- (A) Any current or predicted shortages as determined by the annual water supply and demand assessment described pursuant to Section 10632.1.
 - (B) Any shortage response actions triggered or anticipated to be triggered by the annual water supply and demand assessment described pursuant to Section 10632.1.
 - (C) Any other relevant communications.
- (6) For an urban retail water supplier, customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions as determined pursuant to Section 10632.2.
- (7) (A) A description of the legal authorities that empower the urban water supplier to implement and enforce its shortage response actions specified in paragraph (4) that may include, but are not limited to, statutory authorities, ordinances, resolutions, and contract provisions.
 - (A) A statement that an urban water supplier shall declare a water shortage emergency in accordance with Chapter 3 (commencing with Section 350) of Division 1.
 - (B) A statement that an urban water supplier shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency, as defined in Section 8558 of the Government Code.
- (8) A description of the financial consequences of, and responses for, drought conditions, including, but not limited to, all of the following:
 - (A) A description of potential revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).
 - (B) A description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).

- (C) A description of the cost of compliance with Chapter 3.3 (commencing with Section 365) of Division 1.
- (9) For an urban retail water supplier, monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.
- (10) Reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the water shortage contingency plan in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.
- (b) For purposes of developing the water shortage contingency plan pursuant to subdivision (a), an urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.
- (c) The urban water supplier shall make available the water shortage contingency plan prepared pursuant to this article to its customers and any city or county within which it provides water supplies no later than 30 days after adoption of the water shortage contingency plan.

10632.1. An urban water supplier shall conduct an annual water supply and demand assessment pursuant to subdivision (a) of Section 10632 and, on or before July 1 of each year, submit an annual water shortage assessment report to the department with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the supplier's water shortage contingency plan. An urban water supplier that relies on imported water from the State Water Project or the Bureau of Reclamation shall submit its annual water supply and demand assessment within 14 days of receiving its final allocations, or by July 1 of each year, whichever is later.

10632.2. An urban water supplier shall follow, where feasible and appropriate, the prescribed procedures and implement determined shortage response actions in its water shortage contingency plan, as identified in

subdivision (a) of Section 10632, or reasonable alternative actions, provided that descriptions of the alternative actions are submitted with the annual water shortage assessment report pursuant to Section 10632.1. Nothing in this section prohibits an urban water supplier from taking actions not specified in its water shortage contingency plan, if needed, without having to formally amend its urban water management plan or water shortage contingency plan.

10632.3. It is the intent of the Legislature that, upon proclamation by the Governor of a state of emergency under the California Emergency Services Act (Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code) based on drought conditions, the board defer to implementation of locally adopted water shortage contingency plans to the extent practicable.

10632.5. (a) In addition to the requirements of paragraph (3) of subdivision (a) of Section 10632, beginning January 1, 2020, the plan shall include a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities.

- (b) An urban water supplier shall update the seismic risk assessment and mitigation plan when updating its urban water management plan as required by Section 10621.
- (c) An urban water supplier may comply with this section by submitting, pursuant to Section 10644, a copy of the most recent adopted local hazard mitigation plan or multihazard mitigation plan under the federal Disaster Mitigation Act of 2000 (Public Law 106-390) if the local hazard mitigation plan or multihazard mitigation plan addresses seismic risk.

10633. The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:

- (a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the

amount of wastewater collected and treated and the methods of wastewater disposal.

- (b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.
- (c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.
- (d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.
- (e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.
- (f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.
- (g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

10634. The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

CHAPTER 3. Urban Water Management Plans**ARTICLE 2.5. Water Service Reliability [10635]**

10635. (a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

(b) Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment for its water service to its customers as part of information considered in developing the demand management measures and water supply projects and programs to be included in the urban water management plan. The urban water supplier may conduct an interim update or updates to this drought risk assessment within the five-year cycle of its urban water management plan update. The drought risk assessment shall include each of the following:

- (1) A description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive water years, starting from the year following when the assessment is conducted.
- (2) A determination of the reliability of each source of supply under a variety of water shortage conditions. This may include a determination that a particular source of water supply is fully reliable under most, if not all, conditions.
- (3) A comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.
- (4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate

change conditions, anticipated regulatory changes, and other locally applicable criteria.

- (d) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.
- (e) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.
- (f) Nothing in this article is intended to change existing law concerning an urban water supplier's obligation to provide water service to its existing customers or to any potential future customers.

CHAPTER 3. Urban Water Management Plans

ARTICLE 3. Adoption and Implementation of Plans [10640 – 10645]

10640. (a) Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630). The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

- (b) Every urban water supplier required to prepare a water shortage contingency plan shall prepare a water shortage contingency plan pursuant to Section 10632. The supplier shall likewise periodically review the water shortage contingency plan as required by paragraph (10) of subdivision (a) of Section 10632 and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

10641. An urban water supplier required to prepare a plan or a water shortage contingency plan may consult with, and obtain comments from, any public agency or state agency or any person who has special expertise with respect to water demand management methods and techniques.

10642. Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of both the plan and the water shortage contingency plan. Prior to adopting either, the urban water supplier shall make both the plan and the water shortage contingency plan available for public inspection and shall hold a public hearing or hearings thereon. Prior to any of these hearings, notice of the time and place of the hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of a hearing to any city or county within which the supplier provides water supplies. Notices by a local public agency pursuant to this section shall be provided pursuant to Chapter 17.5 (commencing with Section 7290) of Division 7 of Title 1 of the Government Code. A privately owned water supplier shall provide an equivalent notice within its service area. After the hearing or hearings, the plan or water shortage contingency plan shall be adopted as prepared or as modified after the hearing or hearings.

10643. An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

10644. (a) (1) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

(2) The plan, or amendments to the plan, submitted to the department pursuant to paragraph (1) shall be submitted electronically and shall include any standardized forms, tables, or displays specified by the department.

(b) If an urban water supplier revises its water shortage contingency plan, the supplier shall submit to the department a copy of its

water shortage contingency plan prepared pursuant to subdivision (a) of Section 10632 no later than 30 days after adoption, in accordance with protocols for submission and using electronic reporting tools developed by the department.

- (c) (1) (A) Notwithstanding Section 10231.5 of the Government Code, the department shall prepare and submit to the Legislature, on or before July 1, in the years ending in seven and two, a report summarizing the status of the plans and water shortage contingency plans adopted pursuant to this part. The report prepared by the department shall identify the exemplary elements of the individual plans and water shortage contingency plans. The department shall provide a copy of the report to each urban water supplier that has submitted its plan and water shortage contingency plan to the department. The department shall also prepare reports and provide data for any legislative hearings designed to consider the effectiveness of plans and water shortage contingency plans submitted pursuant to this part.

(B) The department shall prepare and submit to the board, on or before September 30 of each year, a report summarizing the submitted water supply and demand assessment results along with appropriate reported water shortage conditions and the regional and statewide analysis of water supply conditions developed by the department. As part of the report, the department shall provide a summary and, as appropriate, urban water supplier specific information regarding various shortage response actions implemented as a result of annual supplier-specific water supply and demand assessments performed pursuant to Section 10632.1.

(C) The department shall submit the report to the Legislature for the 2015 plans by July 1, 2017, and the report to the Legislature for the 2020 plans and water shortage contingency plans by July 1, 2022.

- (2) A report to be submitted pursuant to subparagraph (A) of paragraph (1) shall be submitted in compliance with Section 9795 of the Government Code.

- (d) The department shall make available to the public the standard the department will use to identify exemplary water demand management measures.

10645. (a) Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

- (b) Not later than 30 days after filing a copy of its water shortage contingency plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

CHAPTER 4. Miscellaneous Provisions [10650 – 10657]

10650. Any actions or proceedings, other than actions by the board, to attack, review, set aside, void, or annul the acts or decisions of an urban water supplier on the grounds of noncompliance with this part shall be commenced as follows:

- (a) An action or proceeding alleging failure to adopt a plan or a water shortage contingency plan shall be commenced within 18 months after that adoption is required by this part.
- (b) Any action or proceeding alleging that a plan or water shortage contingency plan, or action taken pursuant to either, does not comply with this part shall be commenced within 90 days after filing of the plan or water shortage contingency plan or an amendment to either pursuant to Section 10644 or the taking of that action.

10651. In any action or proceeding to attack, review, set aside, void, or annul a plan or a water shortage contingency plan, or an action taken pursuant to either by an urban water supplier on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the supplier has not proceeded in a manner required by law or if the action by the water supplier is not supported by substantial evidence.

10652. The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the

preparation and adoption of plans pursuant to this part or to the implementation of actions taken pursuant to Section 10632. Nothing in this part shall be interpreted as exempting from the California Environmental Quality Act any project that would significantly affect water supplies for fish and wildlife, or any project for implementation of the plan, other than projects implementing Section 10632, or any project for expanded or additional water supplies.

10653. The adoption of a plan shall satisfy any requirements of state law, regulation, or order, including those of the board and the Public Utilities Commission, for the preparation of water management plans, water shortage contingency plans, or conservation plans; provided, that if the board or the Public Utilities Commission requires additional information concerning water conservation, drought response measures, or financial conditions to implement its existing authority, nothing in this part shall be deemed to limit the board or the commission in obtaining that information. The requirements of this part shall be satisfied by any urban water demand management plan that complies with analogous federal laws or regulations after the effective date of this part, and which substantially meets the requirements of this part, or by any existing urban water management plan which includes the contents of a plan required under this part.

10654. An urban water supplier may recover in its rates the costs incurred in preparing its urban water management plan, its drought risk assessment, its water supply and demand assessment, and its water shortage contingency plan and implementing the reasonable water conservation measures included in either of the plans.

10655. If any provision of this part or the application thereof to any person or circumstances is held invalid, that invalidity shall not affect other provisions or applications of this part which can be given effect without the invalid provision or application thereof, and to this end the provisions of this part are severable.

10656. An urban water supplier is not eligible for a water grant or loan awarded or administered by the state unless the urban water supplier complies with this part.

10657. The department may adopt regulations regarding the definitions of water, water use, and reporting periods, and may adopt any other regulations deemed necessary or desirable to implement this part. In developing regulations pursuant to this section, the department shall solicit broad public participation from stakeholders and other interested persons.

Appendix B. Changes to the California Water Code Since 2015 UWMP

This material is for informational purposes only and not to be used in place of official California Water Code (Water Code).

This document presents changes made to Water Code statutes that appeared in the 2015 Urban Water Management Plan Guidebook and it includes updated Water Code statutes (as of January 1, 2020). The information presented focuses on Water Code sections affecting urban water suppliers and the California Department of Water Resources (DWR), as compiled by DWR staff.

- Section 10608 – 10608.44
- Section 10609 – 10609.38
- Sections 10610 – 10657

[Note to reader: ~~Strikeouts~~ indicated text removed from the 2015 version while *italic* text represents new language since 2015.]

PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION [10608 – 10609.42]

CHAPTER 1. General Declarations and Policy [10608 – 10608.8]

10608. The Legislature finds and declares all of the following:

- (a) Water is a public resource that the California Constitution protects against waste and unreasonable use.
- (b) Growing population, climate change, and the need to protect and grow California's economy while protecting and restoring our fish and wildlife habitats make it essential that the state manage its water resources as efficiently as possible.
- (c) Diverse regional water supply portfolios will increase water supply reliability and reduce dependence on the Delta.
- (d) Reduced water use through conservation provides significant

energy and environmental benefits, and can help protect water quality, improve streamflows, and reduce greenhouse gas emissions.

- (e) The success of state and local water conservation programs to increase efficiency of water use is best determined on the basis of measurable outcomes related to water use or efficiency.
- (f) Improvements in technology and management practices offer the potential for increasing water efficiency in California over time, providing an essential water management tool to meet the need for water for urban, agricultural, and environmental uses.
- (g) The Governor has called for a 20 percent per capita reduction in urban water use statewide by 2020.
- (h) The factors used to formulate water use efficiency targets can vary significantly from location to location based on factors including weather, patterns of urban and suburban development, and past efforts to enhance water use efficiency.
- (i) Per capita water use is a valid measure of a water provider's efforts to reduce urban water use within its service area. However, per capita water use is less useful for measuring relative water use efficiency between different water providers. Differences in weather, historical patterns of urban and suburban development, and density of housing in a particular location need to be considered when assessing per capita water use as a measure of efficiency.

10608.4. It is the intent of the Legislature, by the enactment of this part, to do all of the following:

- (a) Require all water suppliers to increase the efficiency of use of this essential resource.
- (b) Establish a framework to meet the state targets for urban water conservation identified in this part and called for by the Governor.
- (c) Measure increased efficiency of urban water use on a per capita basis.
- (d) Establish a method or methods for urban retail water suppliers to determine targets for achieving increased water use efficiency by the year 2020, in accordance with the Governor's goal of a 20-percent reduction.

- (e) Establish consistent water use efficiency planning and implementation standards for urban water suppliers and agricultural water suppliers.
- (f) Promote urban water conservation standards that are consistent with the California Urban Water Conservation Council's adopted best management practices and the requirements for demand management in Section 10631.
- (g) Establish standards that recognize and provide credit to water suppliers that made substantial capital investments in urban water conservation since the drought of the early 1990s.
- (h) Recognize and account for the investment of urban retail water suppliers in providing recycled water for beneficial uses.
- (i) Require implementation of specified efficient water management practices for agricultural water suppliers.
- (j) Support the economic productivity of California's agricultural, commercial, and industrial sectors.
- (k) Advance regional water resources management.

10608.8. (a) (1) Water use efficiency measures adopted and implemented pursuant to this part or Part 2.8 (commencing with Section 10800) are water conservation measures subject to the protections provided under Section 1011.

(2) Because an urban agency is not required to meet its urban water use target until 2020 pursuant to subdivision (b) of Section 10608.24, an urban retail water supplier's failure to meet those targets shall not establish a violation of law for purposes of any state administrative or judicial proceeding prior to January 1, 2021. Nothing in this paragraph limits the use of data reported to the department or the board in litigation or an administrative proceeding. This paragraph shall become inoperative on January 1, 2021.

(3) To the extent feasible, the department and the board shall provide for the use of water conservation reports required under this part to meet the requirements of Section 1011 for water conservation reporting.

(b) This part does not limit or otherwise affect the application of Chapter 3.5 (commencing with Section 11340), Chapter 4

(commencing with Section 11370), Chapter 4.5 (commencing with Section 11400), and Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

- (c) This part does not require a reduction in the total water used in the agricultural or urban sectors, because other factors, including, but not limited to, changes in agricultural economics or population growth may have greater effects on water use. This part does not limit the economic productivity of California's agricultural, commercial, or industrial sectors.
- (d) The requirements of this part do not apply to an agricultural water supplier that is a party to the Quantification Settlement Agreement, as defined in subdivision (a) of Section 1 of Chapter 617 of the Statutes of 2002, during the period within which the Quantification Settlement Agreement remains in effect. After the expiration of the Quantification Settlement Agreement, to the extent conservation water projects implemented as part of the Quantification Settlement Agreement remain in effect, the conserved water created as part of those projects shall be credited against the obligations of the agricultural water supplier pursuant to this part.

PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION [10608 – 10609.42]

CHAPTER 2. Definitions [10608.12 – 10608.12.]

10608.12. Unless the context otherwise requires, the following definitions govern the construction of this part:

- (a) "Agricultural water supplier" means a water supplier, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding recycled water. "Agricultural water supplier" includes a supplier or contractor for water, regardless of the basis of right, that distributes or sells water for ultimate resale to customers. "Agricultural water supplier" does not include the department.
- (b) "Base daily per capita water use" means any of the following:
 - (1) The urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous 10-year period ending no earlier

than December 31, 2004, and no later than December 31, 2010.

- (2) For an urban retail water supplier that meets at least 10 percent of its 2008 measured retail water demand through recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier, the urban retail water supplier may extend the calculation described in paragraph (1) up to an additional five years to a maximum of a continuous 15-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.
- (3) For the purposes of Section 10608.22, the urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous five-year period ending no earlier than December 31, 2007, and no later than December 31, 2010.
- (c) "Baseline commercial, industrial, and institutional water use" means an urban retail water supplier's base daily per capita water use for commercial, industrial, and institutional users.
- (d) *"CII water use" means water used by commercial water users, industrial water users, institutional water users, and large landscape water users.*
- (e) "Commercial water user" means a water user that provides or distributes a product or service.
- ~~(e)~~(f) "Compliance daily per capita water use" means the gross water use during the final year of the reporting period, reported in gallons per capita per day.
- ~~(f)~~(g) "Disadvantaged community" means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.
- ~~(g)~~(h) "Gross water use" means the total volume of water, whether treated or untreated, entering the distribution system of an urban retail water supplier, excluding all of the following:
 - (1) Recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier.
 - (2) The net volume of water that the urban retail water supplier places into long-term storage.

- (3) The volume of water the urban retail water supplier conveys for use by another urban water supplier.
- (4) The volume of water delivered for agricultural use, except as otherwise provided in subdivision (f) of Section 10608.24.
- ~~(h)~~(i) "Industrial water user" means a water user that is primarily a manufacturer or processor of materials as defined by the North American Industry Classification System code sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development.
- ~~(i)~~(j) "Institutional water user" means a water user dedicated to public service. This type of user includes, among other users, higher education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions.
- ~~(j)~~(k) "Interim urban water use target" means the midpoint between the urban retail water supplier's base daily per capita water use and the urban retail water supplier's urban water use target for 2020.
- ~~(k)~~(l) *"Large landscape" means a nonresidential landscape as described in the performance measures for CII water use adopted pursuant to Section 10609.10.*
- (m) "Locally cost effective" means that the present value of the local benefits of implementing an agricultural efficiency water management practice is greater than or equal to the present value of the local cost of implementing that measure.
- (n) *"Performance measures" means actions to be taken by urban retail water suppliers that will result in increased water use efficiency by CII water users. Performance measures may include, but are not limited to, educating CII water users on best management practices, conducting water use audits, and preparing water management plans. Performance measures do not include process water.*
- (o) *"Potable reuse" means direct potable reuse, indirect potable reuse for groundwater recharge, and reservoir water augmentation as those terms are defined in Section 13561.*
- (p) "Process water" means water used by industrial water users for producing a product or product content or water used for research and development, ~~including~~, but not limited to, continuous

manufacturing processes, water used for testing and maintaining equipment ~~used in producing a~~. *Water used to cool machinery or buildings used in the manufacturing process or necessary to maintain product or quality or chemical characteristics for product content, and water used in combined heat and power facilities used in producing a product or product content.* *manufacturing or control rooms, data centers, laboratories, clean rooms, and other industrial facility units that are integral to the manufacturing or research and development process is process water. Water used in the manufacturing process that is necessary for complying with local, state, and federal health and safety laws, and is not incidental water, is process water.* Process water does not mean incidental water ~~uses not related to the production of a product or product content, including, but not limited to, water used for~~ restrooms, landscaping, air conditioning, heating, kitchens, and laundry.

- ~~(m)~~(q) "Recycled water" means recycled water, as defined in subdivision (n) of Section 13050 ~~that is used to offset potable demand, including recycled water supplied for direct use and indirect potable reuse, that meets the following requirements, where applicable:~~
- ~~(1) For groundwater recharge, including recharge through spreading basins, water supplies that are all of the following:~~
 - ~~(A) Metered.~~
 - ~~(B) Developed through planned investment by the urban water supplier or a wastewater treatment agency.~~
 - ~~(C) Treated to a minimum tertiary level.~~
 - ~~(D) Delivered within the service area of an urban retail water supplier or its urban wholesale water supplier that helps an urban retail water supplier meet its urban water use target.~~
 - ~~(2) For reservoir augmentation, water supplies that meet the criteria of paragraph (1) and are conveyed through a distribution system constructed specifically for recycled water.~~
- ~~(n)~~(r) "Regional water resources management" means sources of supply resulting from watershed-based planning for sustainable

local water reliability or any of the following alternative sources of water:

- (1) The capture and reuse of stormwater or rainwater.
- (2) The use of recycled water.
- (3) The desalination of brackish groundwater.
- (4) The conjunctive use of surface water and groundwater in a manner that is consistent with the safe yield of the groundwater basin.

~~(θ)~~(s) "Reporting period" means the years for which an urban retail water supplier reports compliance with the urban water use targets.

~~(ρ)~~(t) "Urban retail water supplier" means a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes.

~~(ϕ)~~(u) "*Urban water use objective*" means an estimate of aggregate efficient water use for the previous year based on adopted water use efficiency standards and local service area characteristics for that year, as described in Section 10609.20.

(v) "Urban water use target" means the urban retail water supplier's targeted future daily per capita water use.

~~(τ)~~(w) "Urban wholesale water supplier" means a water supplier, either publicly or privately owned, that provides more than 3,000 acre-feet of water annually at wholesale for potable municipal purposes.

PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION [10608 – 10609.42]

CHAPTER 3. Urban Retail Water Suppliers [10608.16 – 10608.44]

10608.16. (a) The state shall achieve a 20-percent reduction in urban per capita water use in California on or before December 31, 2020.

(b) The state shall make incremental progress towards the state target specified in subdivision (a) by reducing urban per capita water use by at least 10 percent on or before December 31, 2015.

10608.20. (a) (1) Each urban retail water supplier shall develop urban water use targets and an interim urban water use target by July 1, 2011. Urban retail water suppliers may elect to determine and report progress toward achieving these targets on an individual or regional basis, as provided in subdivision (a) of Section 10608.28, and may determine the targets on a fiscal year or calendar year basis.

(2) It is the intent of the Legislature that the urban water use targets described in paragraph (1) cumulatively result in a 20-percent reduction from the baseline daily per capita water use by December 31, 2020.

(b) An urban retail water supplier shall adopt one of the following methods for determining its urban water use target pursuant to subdivision (a):

(1) Eighty percent of the urban retail water supplier's baseline per capita daily water use.

(2) The per capita daily water use that is estimated using the sum of the following performance standards:

(A) For indoor residential water use, 55 gallons per capita daily water use as a provisional standard. Upon completion of the ~~department's 2016~~ *department's 2017* report to the Legislature pursuant to Section 10608.42, this standard may be adjusted by the Legislature by statute.

(B) For landscape irrigated through dedicated or residential meters or connections, water efficiency equivalent to the standards of the Model Water Efficient Landscape Ordinance set forth in Chapter 2.7 (commencing with Section 490) of Division 2 of Title 23 of the California Code of Regulations, as in effect the later of the year of the landscape's installation or 1992. An urban retail water supplier using the approach specified in this subparagraph shall use satellite imagery, site visits, or other best available technology to develop an accurate estimate of landscaped areas.

(C) For commercial, industrial, and institutional uses, a 10-percent reduction in water use from the baseline commercial, industrial, and institutional water use by

2020.

- (3) Ninety-five percent of the applicable state hydrologic region target, as set forth in the state's draft 20x2020 Water Conservation Plan (dated April 30, 2009). If the service area of an urban water supplier includes more than one hydrologic region, the supplier shall apportion its service area to each region based on population or area.
- (4) A method that shall be identified and developed by the department, through a public process, and reported to the Legislature no later than December 31, 2010. The method developed by the department shall identify per capita targets that cumulatively result in a statewide 20-percent reduction in urban daily per capita water use by December 31, 2020. In developing urban daily per capita water use targets, the department shall do all of the following:
 - (A) Consider climatic differences within the state.
 - (B) Consider population density differences within the state.
 - (C) Provide flexibility to communities and regions in meeting the targets.
 - (D) Consider different levels of per capita water use according to plant water needs in different regions.
 - (E) Consider different levels of commercial, industrial, and institutional water use in different regions of the state.
 - (F) Avoid placing an undue hardship on communities that have implemented conservation measures or taken actions to keep per capita water use low.
- (c) If the department adopts a regulation pursuant to paragraph (4) of subdivision (b) that results in a requirement that an urban retail water supplier achieve a reduction in daily per capita water use that is greater than 20 percent by December 31, 2020, an urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may limit its urban water use target to a reduction of not more than 20 percent by December 31, 2020, by adopting the method described in paragraph (1) of subdivision (b).

- (d) The department shall update the method described in paragraph (4) of subdivision (b) and report to the Legislature by December 31, 2014. An urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may adopt a new urban daily per capita water use target pursuant to this updated method.
- (e) An urban retail water supplier shall include in its urban water management plan due in 2010 pursuant to Part 2.6 (commencing with Section 10610) the baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.
- (f) When calculating per capita values for the purposes of this chapter, an urban retail water supplier shall determine population using federal, state, and local population reports and projections.
- (g) An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan required pursuant to Part 2.6 (commencing with Section 10610).
- (h) (1) The department, through a public process and in consultation with the California Urban Water Conservation Council, shall develop technical methodologies and criteria for the consistent implementation of this part, including, but not limited to, both of the following:
 - (A) Methodologies for calculating base daily per capita water use, baseline commercial, industrial, and institutional water use, compliance daily per capita water use, gross water use, service area population, indoor residential water use, and landscaped area water use.
 - (B) Criteria for adjustments pursuant to subdivisions (d) and (e) of Section 10608.24.
- (2) The department shall post the methodologies and criteria developed pursuant to this subdivision on its internet ~~Web~~ *website*, and make written copies available, by October 1, 2010. An urban retail water supplier shall use the methods developed by the department in compliance with this part.

- (i) (1) The department shall adopt regulations for implementation of the provisions relating to process water in accordance with ~~subdivision (l) of Section 10608.12~~, subdivision (e) of Section 10608.24, and subdivision (d) of Section 10608.26.
- (2) The initial adoption of a regulation authorized by this subdivision is deemed to address an emergency, for purposes of Sections 11346.1 and 11349.6 of the Government Code, and the department is hereby exempted for that purpose from the requirements of subdivision (b) of Section 11346.1 of the Government Code. After the initial adoption of an emergency regulation pursuant to this subdivision, the department shall not request approval from the Office of Administrative Law to readopt the regulation as an emergency regulation pursuant to Section 11346.1 of the Government Code.
- (j) (1) An urban retail water supplier is granted an extension to July 1, 2011, for adoption of an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) due in 2010 to allow the use of technical methodologies developed by the department pursuant to paragraph (4) of subdivision (b) and subdivision (h). An urban retail water supplier that adopts an urban water management plan due in 2010 that does not use the methodologies developed by the department pursuant to subdivision (h) shall amend the plan by July 1, 2011, to comply with this part.
- (2) An urban wholesale water supplier whose urban water management plan prepared pursuant to Part 2.6 (commencing with Section 10610) was due and not submitted in 2010 is granted an extension to July 1, 2011, to permit coordination between an urban wholesale water supplier and urban retail water suppliers.

10608.22. Notwithstanding the method adopted by an urban retail water supplier pursuant to Section 10608.20, an urban retail water supplier's per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use as defined in paragraph (3) of subdivision (b) of Section 10608.12. This section does not apply to an urban retail water supplier with a base daily per capita water use at or below 100 gallons per capita per day.

10608.24. (a) Each urban retail water supplier shall meet its interim urban water use target by December 31, 2015.

- (b) Each urban retail water supplier shall meet its urban water use target by December 31, 2020.
- (c) An urban retail water supplier's compliance daily per capita water use shall be the measure of progress toward achievement of its urban water use target.
- (d) (1) When determining compliance daily per capita water use, an urban retail water supplier may consider the following factors:
 - (A) Differences in evapotranspiration and rainfall in the baseline period compared to the compliance reporting period.
 - (B) Substantial changes to commercial or industrial water use resulting from increased business output and economic development that have occurred during the reporting period.
 - (C) Substantial changes to institutional water use resulting from fire suppression services or other extraordinary events, or from new or expanded operations, that have occurred during the reporting period.
- (2) If the urban retail water supplier elects to adjust its estimate of compliance daily per capita water use due to one or more of the factors described in paragraph (1), it shall provide the basis for, and data supporting, the adjustment in the report required by Section 10608.40.
- (e) When developing the urban water use target pursuant to Section 10608.20, an urban retail water supplier that has a substantial percentage of industrial water use in its service area may exclude process water from the calculation of gross water use to avoid a disproportionate burden on another customer sector.
- (f) (1) An urban retail water supplier that includes agricultural water use in an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) may include the agricultural water use in determining gross water use. An urban retail water supplier that includes agricultural water use in determining gross water use and develops its urban water use target pursuant to paragraph (2) of subdivision (b) of Section 10608.20 shall use a

water efficient standard for agricultural irrigation of 100 percent of reference evapotranspiration multiplied by the crop coefficient for irrigated acres.

- (2) An urban retail water supplier, that is also an agricultural water supplier, is not subject to the requirements of Chapter 4 (commencing with Section 10608.48), if the agricultural water use is incorporated into its urban water use target pursuant to paragraph (1).

10608.26. (a) In complying with this part, an urban retail water supplier shall conduct at least one public hearing to accomplish all of the following:

- (1) Allow community input regarding the urban retail water supplier's implementation plan for complying with this part.
 - (2) Consider the economic impacts of the urban retail water supplier's implementation plan for complying with this part.
 - (3) Adopt a method, pursuant to subdivision (b) of Section 10608.20, for determining its urban water use target.
- (b) In complying with this part, an urban retail water supplier may meet its urban water use target through efficiency improvements in any combination among its customer sectors. An urban retail water supplier shall avoid placing a disproportionate burden on any customer sector.
- (c) For an urban retail water supplier that supplies water to a United States Department of Defense military installation, the urban retail water supplier's implementation plan for complying with this part shall consider the conservation of that military installation under federal Executive Order 13514.
- (d) (1) Any ordinance or resolution adopted by an urban retail water supplier after the effective date of this section shall not require existing customers as of the effective date of this section, to undertake changes in product formulation, operations, or equipment that would reduce process water use, but may provide technical assistance and financial incentives to those customers to implement efficiency measures for process water. This section shall not limit an ordinance or resolution adopted pursuant to a declaration of drought emergency by an urban retail water supplier.

- (2) This part shall not be construed or enforced so as to interfere with the requirements of Chapter 4 (commencing with Section 113980) to Chapter 13 (commencing with Section 114380), inclusive, of Part 7 of Division 104 of the Health and Safety Code, or any requirement or standard for the protection of public health, public safety, or worker safety established by federal, state, or local government or recommended by recognized standard setting organizations or trade associations.

10608.28. (a) An urban retail water supplier may meet its urban water use target within its retail service area, or through mutual agreement, by any of the following:

- (1) Through an urban wholesale water supplier.
 - (2) Through a regional agency authorized to plan and implement water conservation, including, but not limited to, an agency established under the Bay Area Water Supply and Conservation Agency Act (Division 31 (commencing with Section 81300)).
 - (3) Through a regional water management group as defined in Section 10537.
 - (4) By an integrated regional water management funding area.
 - (5) By hydrologic region.
 - (6) Through other appropriate geographic scales for which computation methods have been developed by the department.
- (b) A regional water management group, with the written consent of its member agencies, may undertake any or all planning, reporting, and implementation functions under this chapter for the member agencies that consent to those activities. Any data or reports shall provide information both for the regional water management group and separately for each consenting urban retail water supplier and urban wholesale water supplier.

10608.32. All costs incurred pursuant to this part by a water utility regulated by the Public Utilities Commission may be recoverable in rates subject to review and approval by the Public Utilities Commission, and may

be recorded in a memorandum account and reviewed for reasonableness by the Public Utilities Commission.

10608.34. (a) (1) On or before January 1, 2017, the department shall adopt rules for all of the following:

- (A) The conduct of standardized water loss audits by urban retail water suppliers in accordance with the method adopted by the American Water Works Association in the third edition of Water Audits and Loss Control Programs, Manual M36 and in the Free Water Audit Software, version 5.0.
 - (B) The process for validating a water loss audit report prior to submitting the report to the department. For the purposes of this section, "validating" is a process whereby an urban retail water supplier uses a technical expert to confirm the basis of all data entries in the urban retail water supplier's water loss audit report and to appropriately characterize the quality of the reported data. The validation process shall follow the principles and terminology laid out by the American Water Works Association in the third edition of Water Audits and Loss Control Programs, Manual M36 and in the Free Water Audit Software, version 5.0. A validated water loss audit report shall include the name and technical qualifications of the person engaged for validation.
 - (C) The technical qualifications required of a person to engage in validation, as described in subparagraph (B).
 - (D) The certification requirements for a person selected by an urban retail water supplier to provide validation of its own water loss audit report.
 - (E) The method of submitting a water loss audit report to the department.
- (2) The department shall update rules adopted pursuant to paragraph (1) no later than six months after the release of subsequent editions of the American Water Works Association's Water Audits and Loss Control Programs, Manual M36. Except as provided by the department, until the department adopts updated rules pursuant to this paragraph,

an urban retail water supplier may rely upon a subsequent edition of the American Water Works Association's Water Audits and Loss Control Programs, Manual M36 or the Free Water Audit Software.

~~(b) On or before October 1, 2017, and on or before October~~(b)

- (1) On or before October 1 of each year until October 1, 2023, each urban retail water supplier reporting on a calendar year basis shall submit a completed and validated water loss audit report for the previous calendar year or the previous fiscal year as prescribed by the department pursuant to subdivision (a).*
 - (2) On or before January 1 of each year until January 1, 2024, each urban retail water supplier reporting on a fiscal year basis shall submit a completed and validated water loss audit report for the previous fiscal year as prescribed by the department pursuant to subdivision (a).*
 - (3) On or before January 1, 2024, and on or before January 1 of each year thereafter, each urban retail water supplier shall submit a completed and validated water loss audit report for the previous calendar year or the previous fiscal year as part of the report submitted to the department pursuant to subdivision (a) of Section 10609.24 and as prescribed by the department pursuant to subdivision (a).*
 - (4) Water loss audit reports submitted on or before October 1, 2017, may be completed and validated with assistance as described in subdivision (c).*
- (c) Using funds available for the 2016–17 fiscal year, the board shall contribute up to four hundred thousand dollars (\$400,000) towards procuring water loss audit report validation assistance for urban retail water suppliers.
- (d) Each water loss audit report submitted to the department shall be accompanied by information, in a form specified by the department, identifying steps taken in the preceding year to increase the validity of data entered into the final audit, reduce the volume of apparent losses, and reduce the volume of real losses.

- (e) At least one of the following employees of an urban retail water supplier shall attest to each water loss audit report submitted to the department:
 - (1) The chief financial officer.
 - (2) The chief engineer.
 - (3) The general manager.
- (f) The department shall deem incomplete and return to the urban retail water supplier any final water loss audit report found by the department to be incomplete, not validated, unattested, or incongruent with known characteristics of water system operations. A water supplier shall resubmit a completed water loss audit report within 90 days of an audit being returned by the department.
- (g) The department shall post all validated water loss audit reports on its internet ~~Web site~~ *website* in a manner that allows for comparisons across water suppliers. The department shall make the validated water loss audit reports available for public viewing in a timely manner after their receipt.
- (h) Using available funds, the department shall provide technical assistance to guide urban retail water suppliers' water loss detection programs, including, but not limited to, metering techniques, pressure management techniques, condition-based assessment techniques for transmission and distribution pipelines, and utilization of portable and permanent water loss detection devices.
- (i) No earlier than January 1, 2019, and no later than July 1, 2020, the board shall adopt rules requiring urban retail water suppliers to meet performance standards for the volume of water losses. In adopting these rules, the board shall employ full life-cycle cost accounting to evaluate the costs of meeting the performance standards. The board may consider establishing a minimum allowable water loss threshold that, if reached and maintained by an urban water supplier, would exempt the urban water supplier from further water loss reduction requirements.

10608.35. *(a) The department, in coordination with the board, shall conduct necessary studies and investigations and make a recommendation to the Legislature, by January 1, 2020, on the feasibility of developing and*

enacting water loss reporting requirements for urban wholesale water suppliers.

(b) The studies and investigations shall include an evaluation of the suitability of applying the processes and requirements of Section 10608.34 to urban wholesale water suppliers.

(c) In conducting necessary studies and investigations and developing its recommendation, the department shall solicit broad public participation from stakeholders and other interested persons.

10608.36. Urban wholesale water suppliers shall include in the urban water management plans required pursuant to Part 2.6 (commencing with Section 10610) an assessment of their present and proposed future measures, programs, and policies to help achieve the water use reductions required by this part.

10608.40. Urban water retail suppliers shall report to the department on their progress in meeting their urban water use targets as part of their urban water management plans submitted pursuant to Section 10631. The data shall be reported using a standardized form developed pursuant to Section 10608.52.

10608.42. (a) The department shall review the 2015 urban water management plans and report to the Legislature by July 1, 2017, on progress towards achieving a 20-percent reduction in urban water use by December 31, 2020. The report shall include recommendations on changes to water efficiency standards or urban water use targets to achieve the 20-percent reduction and to reflect updated efficiency information and technology changes.

(b) A report to be submitted pursuant to subdivision (a) shall be submitted in compliance with Section 9795 of the Government Code.

10608.43. The department, in conjunction with the California Urban Water Conservation Council, by April 1, 2010, shall convene a representative task force consisting of academic experts, urban retail water suppliers, environmental organizations, commercial water users, industrial water users, and institutional water users to develop alternative best management practices for commercial, industrial, and institutional users and an assessment of the potential statewide water use efficiency improvement in

the commercial, industrial, and institutional sectors that would result from implementation of these best management practices. The taskforce, in conjunction with the department, shall submit a report to the Legislature by April 1, 2012, that shall include a review of multiple sectors within commercial, industrial, and institutional users and that shall recommend water use efficiency standards for commercial, industrial, and institutional users among various sectors of water use. The report shall include, but not be limited to, the following:

- (a) Appropriate metrics for evaluating commercial, industrial, and institutional water use.
- (b) Evaluation of water demands for manufacturing processes, goods, and cooling.
- (c) Evaluation of public infrastructure necessary for delivery of recycled water to the commercial, industrial, and institutional sectors.
- (d) Evaluation of institutional and economic barriers to increased recycled water use within the commercial, industrial, and institutional sectors.
- (e) Identification of technical feasibility and cost of the best management practices to achieve more efficient water use statewide in the commercial, industrial, and institutional sectors that is consistent with the public interest and reflects past investments in water use efficiency.

10608.44. Each state agency shall reduce water use at facilities it operates to support urban retail water suppliers in meeting the target identified in Section 10608.16.

PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION [10608 – 10609.42]

CHAPTER 4. Agricultural Water Suppliers [10608.48 – 10608.48.]

10608.48. *(a) On or before July 31, 2012, an agricultural water supplier shall implement efficient water management practices pursuant to subdivisions (b) and (c).*

(b) Agricultural water suppliers shall implement both of the following critical efficient management practices:

- (1) Measure the volume of water delivered to customers with sufficient accuracy to comply with subdivision (a) of Section 531.10 and to implement paragraph (2).*
- (2) Adopt a pricing structure for water customers based at least in part on quantity delivered.*
- (c) Agricultural water suppliers shall implement additional efficient management practices, including, but not limited to, practices to accomplish all of the following, if the measures are locally cost effective and technically feasible:*
 - (1) Facilitate alternative land use for lands with exceptionally high water duties or whose irrigation contributes to significant problems, including drainage.*
 - (2) Facilitate use of available recycled water that otherwise would not be used beneficially, meets all health and safety criteria, and does not harm crops or soils.*
 - (3) Facilitate the financing of capital improvements for on-farm irrigation systems.*
 - (4) Implement an incentive pricing structure that promotes one or more of the following goals:*
 - (A) More efficient water use at the farm level.*
 - (B) Conjunctive use of groundwater.*
 - (C) Appropriate increase of groundwater recharge.*
 - (D) Reduction in problem drainage.*
 - (E) Improved management of environmental resources.*
 - (F) Effective management of all water sources throughout the year by adjusting seasonal pricing structures based on current conditions.*
 - (5) Expand line or pipe distribution systems, and construct regulatory reservoirs to increase distribution system flexibility and capacity, decrease maintenance, and reduce seepage.*
 - (6) Increase flexibility in water ordering by, and delivery to, water customers within operational limits.*
 - (7) Construct and operate supplier spill and tailwater recovery systems.*

- (8) Increase planned conjunctive use of surface water and groundwater within the supplier service area.*
 - (9) Automate canal control structures.*
 - (10) Facilitate or promote customer pump testing and evaluation.*
 - (11) Designate a water conservation coordinator who will develop and implement the water management plan and prepare progress reports.*
 - (12) Provide for the availability of water management services to water users. These services may include, but are not limited to, all of the following:*
 - (A) On-farm irrigation and drainage system evaluations.*
 - (B) Normal year and real-time irrigation scheduling and crop evapotranspiration information.*
 - (C) Surface water, groundwater, and drainage water quantity and quality data.*
 - (D) Agricultural water management educational programs and materials for farmers, staff, and the public.*
 - (13) Evaluate the policies of agencies that provide the supplier with water to identify the potential for institutional changes to allow more flexible water deliveries and storage.*
 - (14) Evaluate and improve the efficiencies of the supplier's pumps.*
- (d) Agricultural water suppliers shall include in the agricultural water management plans required pursuant to Part 2.8 (commencing with Section 10800) a report on which efficient water management practices have been implemented and are planned to be implemented, an estimate of the water use efficiency improvements that have occurred since the last report, and an estimate of the water use efficiency improvements estimated to occur five and 10 years in the future. If an agricultural water supplier determines that an efficient water management practice is not locally cost effective or technically feasible, the supplier shall submit information documenting that determination.*

- (e) The department shall require information about the implementation of efficient water management practices to be reported using a standardized form developed pursuant to Section 10608.52.*
- (f) An agricultural water supplier may meet the requirements of subdivisions (d) and (e) by submitting to the department a water conservation plan submitted to the United States Bureau of Reclamation that meets the requirements described in Section 10828.*
- (g) On or before December 31, 2013, December 31, 2016, and December 31, 2021, the department, in consultation with the board, shall submit to the Legislature a report on the agricultural efficient water management practices that have been implemented and are planned to be implemented and an assessment of the manner in which the implementation of those efficient water management practices has affected and will affect agricultural operations, including estimated water use efficiency improvements, if any.*
- (h) The department may update the efficient water management practices required pursuant to subdivision (c), in consultation with the Agricultural Water Management Council, the United States Bureau of Reclamation, and the board. All efficient water management practices for agricultural water use pursuant to this chapter shall be adopted or revised by the department only after the department conducts public hearings to allow participation of the diverse geographical areas and interests of the state.*
- (i) (1) The department shall adopt regulations that provide for a range of options that agricultural water suppliers may use or implement to comply with the measurement requirement in paragraph (1) of subdivision (b).*
 - (2) The initial adoption of a regulation authorized by this subdivision is deemed to address an emergency, for purposes of Sections 11346.1 and 11349.6 of the Government Code, and the department is hereby exempted for that purpose from the requirements of subdivision (b) of Section 11346.1 of the Government Code. After the initial adoption of an emergency regulation pursuant to this subdivision, the department shall not request approval from the Office of Administrative Law to readopt the regulation as an emergency regulation pursuant to Section 11346.1 of the Government Code.*

**PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION
[10608 – 10609.42]****CHAPTER 5. Sustainable Water Management [10608.50 – 10608.50.]**

10608.50. (a) The department, in consultation with the board, shall promote implementation of regional water resources management practices through increased incentives and removal of barriers consistent with state and federal law. Potential changes may include, but are not limited to, all of the following:

- (1) Revisions to the requirements for urban and agricultural water management plans.
 - (2) Revisions to the requirements for integrated regional water management plans.
 - (3) Revisions to the eligibility for state water management grants and loans.
 - (4) Revisions to state or local permitting requirements that increase water supply opportunities, but do not weaken water quality protection under state and federal law.
 - (5) Increased funding for research, feasibility studies, and project construction.
 - (6) Expanding technical and educational support for local land use and water management agencies.
- (b) No later than January 1, 2011, and updated as part of the California Water Plan, the department, in consultation with the board, and with public input, shall propose new statewide targets, or review and update existing statewide targets, for regional water resources management practices, including, but not limited to, recycled water, brackish groundwater desalination, and infiltration and direct use of urban stormwater runoff.

**PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION
[10608 – 10609.42]****CHAPTER 6. Standardized Data Collection [10608.52 – 10608.52.]**

10608.52. (a) The department, in consultation with the board, the California Bay-Delta Authority or its successor agency, the State Department of Public Health, and the Public Utilities Commission, shall develop a single standardized water use reporting form to meet the water use information needs of each agency, including the needs of urban water suppliers that elect to determine and report progress toward achieving targets on a regional basis as provided in subdivision (a) of Section 10608.28.

- (b) At a minimum, the form shall be developed to accommodate information sufficient to assess an urban water supplier's compliance with conservation targets pursuant to Section 10608.24 and an agricultural water supplier's compliance with implementation of efficient water management practices pursuant to subdivision (a) of Section 10608.48. The form shall accommodate reporting by urban water suppliers on an individual or regional basis as provided in subdivision (a) of Section 10608.28.

**PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION
[10608 – 10609.42]****CHAPTER 7. Funding Provisions [10608.56 – 10608.60]**

10608.56. (a) On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

- (b) On and after July 1, 2013, an agricultural water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.
- (c) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per capita reductions. The

supplier may request grant or loan funds to achieve the per capita reductions to the extent the request is consistent with the eligibility requirements applicable to the water funds.

- (d) Notwithstanding subdivision (b), the department shall determine that an agricultural water supplier is eligible for a water grant or loan even though the supplier is not implementing all of the efficient water management practices described in Section 10608.48, if the agricultural water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the efficient water management practices. The supplier may request grant or loan funds to implement the efficient water management practices to the extent the request is consistent with the eligibility requirements applicable to the water funds.
- (e) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.
- (f) The department shall not deny eligibility to an urban retail water supplier or agricultural water supplier in compliance with the requirements of this part and Part 2.8 (commencing with Section 10800), that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the requirements of this part or Part 2.8 (commencing with Section 10800).

10608.60. (a) It is the intent of the Legislature that funds made available by Section 75026 of the Public Resources Code should be expended, consistent with Division 43 (commencing with Section 75001) of the Public Resources Code and upon appropriation by the Legislature, for grants to implement this part. In the allocation of funding, it is the intent of the Legislature that the department give consideration to disadvantaged communities to assist in implementing the requirements of this part.

- (b) It is the intent of the Legislature that funds made available by Section 75041 of the Public Resources Code, should be expended, consistent with Division 43 (commencing with Section 75001) of the Public Resources Code and upon appropriation by the Legislature, for direct expenditures to implement this part.

**PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION
[10608 – 10609.42]**

**CHAPTER 8. Quantifying Agricultural Water Use Efficiency
[10608.64 – 10608.64.]**

10608.64. The department, in consultation with the Agricultural Water Management Council, academic experts, and other stakeholders, shall develop a methodology for quantifying the efficiency of agricultural water use. Alternatives to be assessed shall include, but not be limited to, determination of efficiency levels based on crop type or irrigation system distribution uniformity. On or before December 31, 2011, the department shall report to the Legislature on a proposed methodology and a plan for implementation. The plan shall include the estimated implementation costs and the types of data needed to support the methodology. Nothing in this section authorizes the department to implement a methodology established pursuant to this section.

**PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION
[10608 – 10609.42]**

**CHAPTER 9. Urban Water Use Objectives and Water Use Reporting
[10609 – 10609.38]**

10609. (a) *The Legislature finds and declares that this chapter establishes a method to estimate the aggregate amount of water that would have been delivered the previous year by an urban retail water supplier if all that water had been used efficiently. This estimated aggregate water use is the urban retail water supplier's urban water use objective. The method is based on water use efficiency standards and local service area characteristics for that year. By comparing the amount of water actually used in the previous year with the urban water use objective, local urban water suppliers will be in a better position to help eliminate unnecessary use of water; that is, water used in excess of that needed to accomplish the intended beneficial use.*

(b) The Legislature further finds and declares all of the following:

(1) This chapter establishes standards and practices for the following water uses:

(A) Indoor residential use.

(B) Outdoor residential use.

(C) CII water use.

(D) Water losses.

(E) Other unique local uses and situations that can have a material effect on an urban water supplier's total water use.

(2) This chapter further does all of the following:

(A) Establishes a method to calculate each urban water use objective.

(B) Considers recycled water quality in establishing efficient irrigation standards.

(C) Requires the department to provide or otherwise identify data regarding the unique local conditions to support the calculation of an urban water use objective.

(D) Provides for the use of alternative sources of data if alternative sources are shown to be as accurate as, or more accurate than, the data provided by the department.

(E) Requires annual reporting of the previous year's water use with the urban water use objective.

(F) Provides a bonus incentive for the amount of potable recycled water used the previous year when comparing the previous year's water use with the urban water use objective, of up to 10 percent of the urban water use objective.

(3) This chapter requires the department and the board to solicit broad public participation from stakeholders and other interested persons in the development of the standards and the adoption of regulations pursuant to this chapter.

- (4) This chapter preserves the Legislature’s authority over long-term water use efficiency target setting and ensures appropriate legislative oversight of the implementation of this chapter by doing all of the following:*
- (A) Requiring the Legislative Analyst to conduct a review of the implementation of this chapter, including compliance with the adopted standards and regulations, accuracy of the data, use of alternate data, and other issues the Legislative Analyst deems appropriate.*
 - (B) Stating legislative intent that the director of the department and the chairperson of the board appear before the appropriate Senate and Assembly policy committees to report on progress in implementing this chapter.*
 - (C) Providing one-time-only authority to the department and board to adopt water use efficiency standards, except as explicitly provided in this chapter. Authorization to update the standards shall require separate legislation.*
- (c) It is the intent of the Legislature that the following principles apply to the development and implementation of long-term standards and urban water use objectives:*
- (1) Local urban retail water suppliers should have primary responsibility for meeting standards-based water use targets, and they shall retain the flexibility to develop their water supply portfolios, design and implement water conservation strategies, educate their customers, and enforce their rules.*
 - (2) Long-term standards and urban water use objectives should advance the state’s goals to mitigate and adapt to climate change.*
 - (3) Long-term standards and urban water use objectives should acknowledge the shade, air quality, and heat-island reduction benefits provided to communities by trees through the support of water-efficient irrigation practices that keep trees healthy.*
 - (4) The state should identify opportunities for streamlined*

reporting, eliminate redundant data submissions, and incentivize open access to data collected by urban and agricultural water suppliers.

10609.2. *(a) The board, in coordination with the department, shall adopt long-term standards for the efficient use of water pursuant to this chapter on or before June 30, 2022.*

(b) Standards shall be adopted for all of the following:

(1) Outdoor residential water use.

(2) Outdoor irrigation of landscape areas with dedicated irrigation meters in connection with CII water use.

(3) A volume for water loss.

(c) When adopting the standards under this section, the board shall consider the policies of this chapter and the proposed efficiency standards' effects on local wastewater management, developed and natural parklands, and urban tree health. The standards and potential effects shall be identified by May 30, 2022. The board shall allow for public comment on potential effects identified by the board under this subdivision.

(d) The long-term standards shall be set at a level designed so that the water use objectives, together with other demands excluded from the long-term standards such as CII indoor water use and CII outdoor water use not connected to a dedicated landscape meter, would exceed the statewide conservation targets required pursuant to Chapter 3 (commencing with Section 10608.16).

(e) The board, in coordination with the department, shall adopt by regulation variances recommended by the department pursuant to Section 10609.14 and guidelines and methodologies pertaining to the calculation of an urban retail water supplier's urban water use objective recommended by the department pursuant to Section 10609.16.

10609.4. *(a) (1) Until January 1, 2025, the standard for indoor residential water use shall be 55 gallons per capita daily.*

(2) Beginning January 1, 2025, and until January 1, 2030, the standard for indoor residential water use shall be the greater of 52.5 gallons per capita daily or a standard recommended

pursuant to subdivision (b).

(3) Beginning January 1, 2030, the standard for indoor residential water use shall be the greater of 50 gallons per capita daily or a standard recommended pursuant to subdivision (b).

(b) (1) The department, in coordination with the board, shall conduct necessary studies and investigations and may jointly recommend to the Legislature a standard for indoor residential water use that more appropriately reflects best practices for indoor residential water use than the standard described in subdivision (a). A report on the results of the studies and investigations shall be made to the chairpersons of the relevant policy committees of each house of the Legislature by January 1, 2021, and shall include information necessary to support the recommended standard, if there is one. The studies and investigations shall also include an analysis of the benefits and impacts of how the changing standard for indoor residential water use will impact water and wastewater management, including potable water usage, wastewater, recycling and reuse systems, infrastructure, operations, and supplies.

(2) The studies, investigations, and report described in paragraph (1) shall include collaboration with, and input from, a broad group of stakeholders, including, but not limited to, environmental groups, experts in indoor plumbing, and water, wastewater, and recycled water agencies.

10609.6. *(a) (1) The department, in coordination with the board, shall conduct necessary studies and investigations and recommend, no later than October 1, 2021, standards for outdoor residential use for adoption by the board in accordance with this chapter.*

(2) (A) The standards shall incorporate the principles of the model water efficient landscape ordinance adopted by the department pursuant to the Water Conservation in Landscaping Act (Article 10.8 (commencing with Section 65591) of Chapter 3 of Division 1 of Title 7 of the Government Code).

(B) The standards shall apply to irrigable lands.

(C) The standards shall include provisions for swimming pools, spas, and other water features. Ornamental water features that are artificially supplied with water, including ponds,

lakes, waterfalls, and fountains, shall be analyzed separately from swimming pools and spas.

- (b) The department shall, by January 1, 2021, provide each urban retail water supplier with data regarding the area of residential irrigable lands in a manner that can reasonably be applied to the standards adopted pursuant to this section.*
- (c) The department shall not recommend standards pursuant to this section until it has conducted pilot projects or studies, or some combination of the two, to ensure that the data provided to local agencies are reasonably accurate for the data's intended uses, taking into consideration California's diverse landscapes and community characteristics.*

10609.8. *(a) The department, in coordination with the board, shall conduct necessary studies and investigations and recommend, no later than October 1, 2021, standards for outdoor irrigation of landscape areas with dedicated irrigation meters or other means of calculating outdoor irrigation use in connection with CII water use for adoption by the board in accordance with this chapter.*

- (b) The standards shall incorporate the principles of the model water efficient landscape ordinance adopted by the department pursuant to the Water Conservation in Landscaping Act (Article 10.8 (commencing with Section 65591) of Chapter 3 of Division 1 of Title 7 of the Government Code).*
- (c) The standards shall include an exclusion for water for commercial agricultural use meeting the definition of subdivision (b) of Section 51201 of the Government Code.*

10609.9. *For purposes of Sections 10609.6 and 10609.8, "principles of the model water efficient landscape ordinance" means those provisions of the model water efficient landscape ordinance applicable to the establishment or determination of the amount of water necessary to efficiently irrigate both new and existing landscapes. These provisions include, but are not limited to, all of the following:*

- (a) Evapotranspiration adjustment factors, as applicable.*
- (b) Landscape area.*
- (c) Maximum applied water allowance.*

- (d) Reference evapotranspiration.*
- (e) Special landscape areas, including provisions governing evapotranspiration adjustment factors for different types of water used for irrigating the landscape.*

10609.10. *(a) The department, in coordination with the board, shall conduct necessary studies and investigations and recommend, no later than October 1, 2021, performance measures for CII water use for adoption by the board in accordance with this chapter.*

- (b) Prior to recommending performance measures for CII water use, the department shall solicit broad public participation from stakeholders and other interested persons relating to all of the following:*

- (1) Recommendations for a CII water use classification system for California that address significant uses of water.*
- (2) Recommendations for setting minimum size thresholds for converting mixed CII meters to dedicated irrigation meters, and evaluation of, and recommendations for, technologies that could be used in lieu of requiring dedicated irrigation meters.*
- (3) Recommendations for CII water use best management practices, which may include, but are not limited to, water audits and water management plans for those CII customers that exceed a recommended size, volume of water use, or other threshold.*

- (c) Recommendations of appropriate performance measures for CII water use shall be consistent with the October 21, 2013, report to the Legislature by the Commercial, Industrial, and Institutional Task Force entitled "Water Use Best Management Practices," including the technical and financial feasibility recommendations provided in that report, and shall support the economic productivity of California's commercial, industrial, and institutional sectors.*

- (d) (1) The board, in coordination with the department, shall adopt performance measures for CII water use on or before June 30, 2022.*
 - (2) Each urban retail water supplier shall implement the performance measures adopted by the board pursuant to paragraph (1).*

10609.12. *The standards for water loss for urban retail water suppliers shall be the standards adopted by the board pursuant to subdivision (i) of Section 10608.34.*

10609.14. *(a) The department, in coordination with the board, shall conduct necessary studies and investigations and, no later than October 1, 2021, recommend for adoption by the board in accordance with this chapter appropriate variances for unique uses that can have a material effect on an urban retail water supplier's urban water use objective.*

(b) Appropriate variances may include, but are not limited to, allowances for the following:

- (1) Significant use of evaporative coolers.*
- (2) Significant populations of horses and other livestock.*
- (3) Significant fluctuations in seasonal populations.*
- (4) Significant landscaped areas irrigated with recycled water having high levels of total dissolved solids.*
- (5) Significant use of water for soil compaction and dust control.*
- (6) Significant use of water to supplement ponds and lakes to sustain wildlife.*
- (7) Significant use of water to irrigate vegetation for fire protection.*
- (8) Significant use of water for commercial or noncommercial agricultural use.*

(c) The department, in recommending variances for adoption by the board, shall also recommend a threshold of significance for each recommended variance.

(d) Before including any specific variance in calculating an urban retail water supplier's water use objective, the urban retail water supplier shall request and receive approval by the board for the inclusion of that variance.

(e) The board shall post on its Internet Web site all of the following:

- (1) A list of all urban retail water suppliers with approved variances.*
- (2) The specific variance or variances approved for each urban retail water supplier.*

(3) The data supporting approval of each variance.

10609.15. *To help streamline water data reporting, the department and the board shall do all of the following:*

- (a) Identify urban water reporting requirements shared by both agencies, and post on each agency's Internet Web site how the data is used for planning, regulatory, or other purposes.*
- (b) Analyze opportunities for more efficient publication of urban water reporting requirements within each agency, and analyze how each agency can integrate various data sets in a publicly accessible location, identify priority actions, and implement priority actions identified in the analysis.*
- (c) Make appropriate data pertaining to the urban water reporting requirements that are collected by either agency available to the public according to the principles and requirements of the Open and Transparent Water Data Act (Part 4.9 (commencing with Section 12400)).*

10609.16. *The department, in coordination with the board, shall conduct necessary studies and investigations and recommend, no later than October 1, 2021, guidelines and methodologies for the board to adopt that identify how an urban retail water supplier calculates its urban water use objective. The guidelines and methodologies shall address, as necessary, all of the following:*

- (a) Determining the irrigable lands within the urban retail water supplier's service area.*
- (b) Updating and revising methodologies described pursuant to subparagraph (A) of paragraph (1) of subdivision (h) of Section 10608.20, as appropriate, including methodologies for calculating the population in an urban retail water supplier's service area.*
- (c) Using landscape area data provided by the department or alternative data.*
- (d) Incorporating precipitation data and climate data into estimates of a urban retail water supplier's outdoor irrigation budget for its urban water use objective.*
- (e) Estimating changes in outdoor landscape area and population, and calculating the urban water use objective, for years when updated landscape imagery is not available from the department.*

- (f) Determining acceptable levels of accuracy for the supporting data, the urban water use objective, and compliance with the urban water use objective.*

10609.18. *The department and the board shall solicit broad public participation from stakeholders and other interested persons in the development of the standards and the adoption of regulations pursuant to this chapter. The board shall hold at least one public meeting before taking any action on any standard or variance recommended by the department.*

10609.20. *(a) Each urban retail water supplier shall calculate its urban water use objective no later than January 1, 2024, and by January 1 every year thereafter.*

- (b) The calculation shall be based on the urban retail water supplier's water use conditions for the previous calendar or fiscal year.*

- (c) Each urban water supplier's urban water use objective shall be composed of the sum of the following:*

- (1) Aggregate estimated efficient indoor residential water use.*
- (2) Aggregate estimated efficient outdoor residential water use.*
- (3) Aggregate estimated efficient outdoor irrigation of landscape areas with dedicated irrigation meters or equivalent technology in connection with CII water use.*
- (4) Aggregate estimated efficient water losses.*
- (5) Aggregate estimated water use in accordance with variances, as appropriate.*

- (d) (1) An urban retail water supplier that delivers water from a groundwater basin, reservoir, or other source that is augmented by potable reuse water may adjust its urban water use objective by a bonus incentive calculated pursuant to this subdivision.*

- (2) The water use objective bonus incentive shall be the volume of its potable reuse delivered to residential water users and to landscape areas with dedicated irrigation meters in connection with CII water use, on an acre-foot basis.*

- (3) The bonus incentive pursuant to paragraph (1) shall be limited in accordance with one of the following:*

- (A) *The bonus incentive shall not exceed 15 percent of the urban water supplier's water use objective for any potable reuse water produced at an existing facility.*
 - (B) *The bonus incentive shall not exceed 10 percent of the urban water supplier's water use objective for any potable reuse water produced at any facility that is not an existing facility.*
- (4) *For purposes of this subdivision, "existing facility" means a facility that meets all of the following:*
 - (A) *The facility has a certified environmental impact report, mitigated negative declaration, or negative declaration on or before January 1, 2019.*
 - (B) *The facility begins producing and delivering potable reuse water on or before January 1, 2022.*
 - (C) *The facility uses microfiltration and reverse osmosis technologies to produce the potable reuse water.*
- (e) (1) *The calculation of the urban water use objective shall be made using landscape area and other data provided by the department and pursuant to the standards, guidelines, and methodologies adopted by the board. The department shall provide data to the urban water supplier at a level of detail sufficient to allow the urban water supplier to verify its accuracy at the parcel level.*
- (2) *Notwithstanding paragraph (1), an urban retail water supplier may use alternative data in calculating the urban water use objective if the supplier demonstrates to the department that the alternative data are equivalent, or superior, in quality and accuracy to the data provided by the department. The department may provide technical assistance to an urban retail water supplier in evaluating whether the alternative data are appropriate for use in calculating the supplier's urban water use objective.*

10609.21. (a) For purposes of Section 10609.20, and notwithstanding paragraph (4) of subdivision (d) of Section 10609.20, "existing facility" also includes the North City Project, phase one of the Pure Water San Diego Program, for which an environmental impact report was certified on April 10, 2018.

(b) This section shall become operative on January 1, 2019.

10609.22. *(a) An urban retail water supplier shall calculate its actual urban water use no later than January 1, 2024, and by January 1 every year thereafter.*

(b) The calculation shall be based on the urban retail water supplier's water use for the previous calendar or fiscal year.

(c) Each urban water supplier's urban water use shall be composed of the sum of the following:

- (1) Aggregate residential water use.*
- (2) Aggregate outdoor irrigation of landscape areas with dedicated irrigation meters in connection with CII water use.*
- (3) Aggregate water losses.*

10609.24. *(a) An urban retail water supplier shall submit a report to the department no later than January 1, 2024, and by January 1 every year thereafter. The report shall include all of the following:*

- (1) The urban water use objective calculated pursuant to Section 10609.20 along with relevant supporting data.*
- (2) The actual urban water use calculated pursuant to Section 10609.22 along with relevant supporting data.*
- (3) Documentation of the implementation of the performance measures for CII water use.*
- (4) A description of the progress made towards meeting the urban water use objective.*
- (5) The validated water loss audit report conducted pursuant to Section 10608.34.*

(b) The department shall post the reports and information on its internet website.

(c) The board may issue an information order or conservation order to, or impose civil liability on, an entity or individual for failure to submit a report required by this section.

10609.25. *As part of the first report submitted to the department by an urban retail water supplier no later than January 1, 2024, pursuant to*

subdivision (a) of Section 10609.24, each urban retail water supplier shall provide a narrative that describes the water demand management measures that the supplier plans to implement to achieve its urban water use objective by January 1, 2027.

10609.26. *(a) (1) On and after January 1, 2024, the board may issue informational orders pertaining to water production, water use, and water conservation to an urban retail water supplier that does not meet its urban water use objective required by this chapter. Informational orders are intended to obtain information on supplier activities, water production, and conservation efforts in order to identify technical assistance needs and assist urban water suppliers in meeting their urban water use objectives.*

(2) In determining whether to issue an informational order, the board shall consider the degree to which the urban retail water supplier is not meeting its urban water use objective, information provided in the report required by Section 10609.24, and actions the urban retail water supplier has implemented or will implement in order to help meet the urban water use objective.

(3) The board shall share information received pursuant to this subdivision with the department.

(4) An urban water supplier may request technical assistance from the department. The technical assistance may, to the extent available, include guidance documents, tools, and data.

(b) On and after January 1, 2025, the board may issue a written notice to an urban retail water supplier that does not meet its urban water use objective required by this chapter. The written notice may warn the urban retail water supplier that it is not meeting its urban water use objective described in Section 10609.20 and is not making adequate progress in meeting the urban water use objective, and may request that the urban retail water supplier address areas of concern in its next annual report required by Section 10609.24. In deciding whether to issue a written notice, the board may consider whether the urban retail water supplier has received an informational order, the degree to which the urban retail water supplier is not meeting its urban water use objective, information provided in the report required by Section 10609.24,

and actions the urban retail water supplier has implemented or will implement in order to help meet its urban water use objective.

- (c) (1) On and after January 1, 2026, the board may issue a conservation order to an urban retail water supplier that does not meet its urban water use objective. A conservation order may consist of, but is not limited to, referral to the department for technical assistance, requirements for education and outreach, requirements for local enforcement, and other efforts to assist urban retail water suppliers in meeting their urban water use objective.*
- (2) In issuing a conservation order, the board shall identify specific deficiencies in an urban retail water supplier's progress towards meeting its urban water use objective, and identify specific actions to address the deficiencies.*
- (3) The board may request that the department provide an urban retail water supplier with technical assistance to support the urban retail water supplier's actions to remedy the deficiencies.*
- (d) A conservation order issued in accordance with this chapter may include requiring actions intended to increase water-use efficiency, but shall not curtail or otherwise limit the exercise of a water right, nor shall it require the imposition of civil liability pursuant to Section 377.*

10609.27. *Notwithstanding Section 10609.26, the board shall not issue an information order, written notice, or conservation order pursuant to Section 10609.26 if both of the following conditions are met:*

- (a) The board determines that the urban retail water supplier is not meeting its urban water use objective solely because the volume of water loss exceeds the urban retail water supplier's standard for water loss.*
- (b) Pursuant to Section 10608.34, the board is taking enforcement action against the urban retail water supplier for not meeting the performance standards for the volume of water losses.*

10609.28. *The board may issue a regulation or informational order requiring a wholesale water supplier, an urban retail water supplier, or a distributor of a public water supply, as that term is used in Section 350, to provide a monthly*

report relating to water production, water use, or water conservation.

10609.30. *On or before January 10, 2024, the Legislative Analyst shall provide to the appropriate policy committees of both houses of the Legislature and the public a report evaluating the implementation of the water use efficiency standards and water use reporting pursuant to this chapter. The board and the department shall provide the Legislative Analyst with the available data to complete this report.*

(a) The report shall describe all of the following:

- (1) The rate at which urban retail water users are complying with the standards, and factors that might facilitate or impede their compliance.*
- (2) The accuracy of the data and estimates being used to calculate urban water use objectives.*
- (3) Indications of the economic impacts, if any, of the implementation of this chapter on urban water suppliers and urban water users, including CII water users.*
- (4) The frequency of use of the bonus incentive, the volume of water associated with the bonus incentive, value to urban water suppliers of the bonus incentive, and any implications of the use of the bonus incentive on water use efficiency.*
- (5) The early indications of how implementing this chapter might impact the efficiency of statewide urban water use.*
- (6) Recommendations, if any, for improving statewide urban water use efficiency and the standards and practices described in this chapter.*
- (7) Any other issues the Legislative Analyst deems appropriate.*

10609.32. *It is the intent of the Legislature that the chairperson of the board and the director of the department appear before the appropriate policy committees of both houses of the Legislature on or around January 1, 2026, and report on the implementation of the water use efficiency standards and water use reporting pursuant to this chapter. It is the intent of the Legislature that the topics to be covered include all of the following:*

- (a) The rate at which urban retail water suppliers are complying with the standards, and factors that might facilitate or impede their compliance.*

- (b) What enforcement actions have been taken, if any.*
- (c) The accuracy of the data and estimates being used to calculate urban water use objectives.*
- (d) Indications of the economic impacts, if any, of the implementation of this chapter on urban water suppliers and urban water users, including CII water users.*
- (e) The frequency of use of the bonus incentive, the volume of water associated with the bonus incentive, value to urban water suppliers of the bonus incentive, and any implications of the use of the bonus incentive on water use efficiency.*
- (f) An assessment of how implementing this chapter is affecting the efficiency of statewide urban water use.*

10609.34. *Notwithstanding Section 15300.2 of Title 14 of the California Code of Regulations, an action of the board taken under this chapter shall be deemed to be a Class 8 action, within the meaning of Section 15308 of Title 14 of the California Code of Regulations, provided that the action does not involve relaxation of existing water conservation or water use standards.*

10609.36. *(a) Nothing in this chapter shall be construed to determine or alter water rights. Sections 1010 and 1011 apply to water conserved through implementation of this chapter.*

- (b) Nothing in this chapter shall be construed to authorize the board to update or revise water use efficiency standards authorized by this chapter except as explicitly provided in this chapter. Authorization to update the standards beyond that explicitly provided in this chapter shall require separate legislation.*
- (c) Nothing in this chapter shall be construed to limit or otherwise affect the use of recycled water as seawater barriers for groundwater salinity management.*

10609.38. *The board may waive the requirements of this chapter for a period of up to five years for any urban retail water supplier whose water deliveries are significantly affected by changes in water use as a result of damage from a disaster such as an earthquake or fire. In establishing the period of a waiver, the board shall take into consideration the breadth of the damage and the time necessary for the damaged areas to recover from the disaster.*

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 – 10657]

CHAPTER 1. General Declaration and Policy [10610 – 10610.4]

10610. This part shall be known and may be cited as the "Urban Water Management Planning Act."

10610.2. (a) The Legislature finds and declares all of the following:

- (1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.
- (2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.
- (3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate, *and increasing long-term water conservation among Californians, improving water use efficiency within the state's communities and agricultural production, and strengthening local and regional drought planning are critical to California's resilience to drought and climate change.*
- (4) As part of its long-range planning activities, every urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years *now and into the foreseeable future, and every urban water supplier should collaborate closely with local land-use authorities to ensure water demand forecasts are consistent with current land-use planning.*
- (5) Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.
- (6) Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.

- (7) Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.
 - (8) Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.
 - (9) The quality of source supplies can have a significant impact on water management strategies and supply reliability.
- (b) This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.

10610.4. The Legislature finds and declares that it is the policy of the state as follows:

- (a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.
- (b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.
- (c) Urban water suppliers shall be required to develop water management plans to ~~actively pursue~~*achieve* the efficient use of available supplies *and strengthen local drought planning*.

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 – 10657]

CHAPTER 2. Definitions [10611 – 10618]

10611. Unless the context otherwise requires, the definitions of this chapter govern the construction of this part.

10611.3. *"Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.*

10611.5. *"Demand management" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.*

10612. ~~"Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.~~ *"Drought risk assessment" means a method that examines water shortage risks based on the driest five-year historic sequence for the agency's water supply, as described in subdivision (b) of Section 10635.*

10613. "Efficient use" means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable method of use.

10614. "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.

10615. "Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.

10616. "Public agency" means any board, commission, county, city and county, city, regional agency, district, or other public entity.

10616.5. "Recycled water" means the reclamation and reuse of wastewater for beneficial use.

10617. "Urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

10617.5. *"Water shortage contingency plan" means a document that incorporates the provisions detailed in subdivision (a) of Section 10632 and is subsequently adopted by an urban water supplier pursuant to this article.*

10618. *"Water supply and demand assessment" means a method that looks at current year and one or more dry year supplies and demands for determining water shortage risks, as described in Section 10632.1.*

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 – 10657]

CHAPTER 3. Urban Water Management Plans [10620 – 10645]

ARTICLE 1. General Provisions [10620 – 10621]

10620. (a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).

- (b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.
- (c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.
- (d) (1) An urban water supplier may satisfy the requirements of this part by participation in areawide, regional, watershed, or basinwide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation~~and~~, efficient water use, *and improved local drought resilience.*
 - (2) *Notwithstanding paragraph (1), each urban water supplier shall develop its own water shortage contingency plan, but an urban water supplier may incorporate, collaborate, and otherwise share information with other urban water suppliers or other governing entities participating in an areawide, regional, watershed, or basinwide urban water management plan, an agricultural management plan, or groundwater sustainability plan development.*

- (3) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.
- (e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.
- (f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

10621. (a) Each urban water supplier shall update its plan at least once every five years on or before ~~December 31~~ *July 1*, in years ending in *six and one, incorporating updated and new information from the five and zero, except as provided in subdivision (d).* years preceding each update.

- (b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days before the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.
- (c) *An urban water supplier regulated by the Public Utilities Commission shall include its most recent plan and water shortage contingency plan as part of the supplier's general rate case filings.*
- (d) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).
- ~~(d)~~ (e) Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.
- (f) *Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.*

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 – 10657]**CHAPTER 3. Urban Water Management Plans [10620 – 10645]****ARTICLE 2. Contents of Plans [10630 – 10634]**

10630. It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied, *while accounting for impacts from climate change.*

10630.5. *Each plan shall include a simple lay description of how much water the agency has on a reliable basis, how much it needs for the foreseeable future, what the agency's strategy is for meeting its water needs, the challenges facing the agency, and any other information necessary to provide a general understanding of the agency's plan.*

10631. A plan shall be adopted in accordance with this chapter that shall do all of the following:

- (a) Describe the service area of the supplier, including current and projected population, climate, and other *social, economic, and demographic* factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available. *The description shall include the current and projected land uses within the existing or anticipated service area affecting the supplier's water management planning. Urban water suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land use information, including, where appropriate, land use information obtained from local or regional land use authorities, as developed pursuant to Article 5 (commencing with Section 65300) of Chapter 3 of Division 1 of Title 7 of the Government Code.*
- (b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a)-, *providing supporting and related information, including all of the following:*

- (1) A detailed discussion of anticipated supply availability under a normal water year, single dry year, and droughts lasting at least five years, as well as more frequent and severe periods of drought, as described in the drought risk assessment. For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.*
- (2) When multiple sources of water supply are identified, a description of the management of each supply in correlation with the other identified supplies.*
- (3) For any planned sources of water supply, a description of the measures that are being undertaken to acquire and develop those water supplies.*
- (4) If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:*
 - (1) ~~A copy of~~(A) The current version of any groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720), any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management for basins underlying the urban water supplier's service area.*
 - (2) (B) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For basins that a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For ~~basins~~ a basin that ~~have~~has not been adjudicated, information as to whether the department has identified the basin ~~or basins as overdrafted or has projected that the basin will~~*

~~become overdrafted if present management conditions continue, as a high- or medium-priority basin in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition. coordinate with groundwater sustainability agencies or groundwater management agencies listed in subdivision (c) of Section 10723 to maintain or achieve sustainable groundwater conditions in accordance with a groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720).~~

~~(3)-(C)~~ A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

~~(4)-(D)~~ A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

~~(c)-(1) Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following:~~

~~(A) An average water year.~~

~~(B) A single dry water year.~~

~~(C) Multiple dry water years.~~

~~(2) For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.~~

- ~~(d)~~ Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.
- ~~(e)~~ ~~(1)~~ ~~Quantify~~ *(d) (1) For an urban retail water supplier, quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following:*
- (A) Single-family residential.
 - (B) Multifamily.
 - (C) Commercial.
 - (D) Industrial.
 - (E) Institutional and governmental.
 - (F) Landscape.
 - (G) Sales to other agencies.
 - (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.
 - (I) Agricultural.
 - (J) Distribution system water loss.
- (2) The water use projections shall be in the same five-year increments described in subdivision (a).
- (3) ~~(A) For the 2015 urban water management plan update, the distribution system water loss shall be quantified for the most recent 12-month period available. For all subsequent updates, the~~ *The distribution system water loss shall be quantified for each of the five years preceding the plan update, in accordance with rules adopted pursuant to Section 10608.34.*
- (B) The distribution system water loss quantification shall be reported in accordance with a worksheet approved or developed by the department through a public process. The water loss quantification worksheet shall be based on the water system balance methodology

developed by the American Water Works Association.

~~(4) (A) If available~~(C) *In the plan due July 1, 2021, and applicable in each update thereafter, data shall be included to show whether the urban retail water supplier, water met the distribution loss standards enacted by the board pursuant to Section 10608.34.*

(4) (A) *Water use projections may, where available, shall display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area.*

(B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following:

(i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections.

(ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.

~~(f)~~ (e) Provide a description of the ~~supplier's~~supplier's water demand management measures. This description shall include all of the following:

(1) (A) For an urban retail water supplier, as defined in Section 10608.12, a narrative description that addresses the nature and extent of each water demand management measure implemented over the past five years. The narrative shall describe the water demand management measures that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.

(B) The narrative pursuant to this paragraph shall include descriptions of the following water demand management measures:

- (i) Water waste prevention ordinances.
 - (ii) Metering.
 - (iii) Conservation pricing.
 - (iv) Public education and outreach.
 - (v) Programs to assess and manage distribution system real loss.
 - (vi) Water conservation program coordination and staffing support.
 - (vii) Other demand management measures that have a significant impact on water use as measured in gallons per capita per day, including innovative measures, if implemented.
- (2) For an urban wholesale water supplier, as defined in Section 10608.12, a narrative description of the items in clauses (ii), (iv), (vi), and (vii) of subparagraph (B) of paragraph (1), and a narrative description of its distribution system asset management and wholesale supplier assistance programs.
- ~~(g)~~ (f) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use, as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in ~~average~~, *normal and single-dry, and multiple-dry water years and for a period of drought lasting five consecutive* water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.
- ~~(h)~~ (g) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.
- ~~(i) For purposes of this part, urban water suppliers that are members of the California Urban Water Conservation Council shall be~~

~~deemed in compliance with the requirements of subdivision (f) by complying with all the provisions of the "Memorandum of Understanding Regarding Urban Water Conservation in California," dated December 10, 2008, as it may be amended, and by submitting the annual reports required by Section 6.2 of that memorandum.~~

- ~~(j)~~-(h) An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water ~~supplier's~~supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision ~~(e)~~-(f). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and ~~(e)~~-(f).

10631.1. (a) The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.

- (b) It is the intent of the Legislature that the identification of projected water use for single-family and multifamily residential housing for lower income households will assist a supplier in complying with the requirement under Section 65589.7 of the Government Code to grant a priority for the provision of service to housing units affordable to lower income households.

10631.2. (a) In addition to the requirements of Section 10631, an urban water management plan ~~may, but is not required to,~~shall include any of the following information *that the urban water supplier can readily obtain*:

- (1) An estimate of the amount of energy used to extract or divert water supplies.

- (2) An estimate of the amount of energy used to convey water supplies to the water treatment plants or distribution systems.
 - (3) An estimate of the amount of energy used to treat water supplies.
 - (4) An estimate of the amount of energy used to distribute water supplies through its distribution systems.
 - (5) An estimate of the amount of energy used for treated water supplies in comparison to the amount used for nontreated water supplies.
 - (6) An estimate of the amount of energy used to place water into or withdraw from storage.
 - (7) Any other energy-related information the urban water supplier deems appropriate.
- (b) The department shall include in its guidance for the preparation of urban water management plans a methodology for the voluntary calculation or estimation of the energy intensity of urban water systems. The department may consider studies and calculations conducted by the Public Utilities Commission in developing the methodology.

~~**10631.5.** (a) (1) Beginning January 1, 2009, the terms of, and eligibility for, a water management grant or loan made to an urban water supplier and awarded or administered by the department, state board, or California Bay-Delta Authority or its successor agency shall be conditioned on the implementation of the water demand management measures described in Section 10631, as determined by the department pursuant to subdivision (b).~~

- ~~(2) For the purposes of this section, water management grants and loans include funding for programs and projects for surface water or groundwater storage, recycling, desalination, water conservation, water supply reliability, and water supply augmentation. This section does not apply to water management projects funded by the federal American Recovery and Reinvestment Act of 2009 (Public Law 111-5).~~
- ~~(3) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management~~

~~grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if the urban water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the water demand management measures. The supplier may request grant or loan funds to implement the water demand management measures to the extent the request is consistent with the eligibility requirements applicable to the water management funds.~~

- ~~(4) (A) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if an urban water supplier submits to the department for approval documentation demonstrating that a water demand management measure is not locally cost effective. If the department determines that the documentation submitted by the urban water supplier fails to demonstrate that a water demand management measure is not locally cost effective, the department shall notify the urban water supplier and the agency administering the grant or loan program within 120 days that the documentation does not satisfy the requirements for an exemption, and include in that notification a detailed statement to support the determination.~~

~~(B) For purposes of this paragraph, "not locally cost effective" means that the present value of the local benefits of implementing a water demand management measure is less than the present value of the local costs of implementing that measure.~~

- ~~(b) (1) The department, in consultation with the state board and the California Bay Delta Authority or its successor agency, and after soliciting public comment regarding eligibility requirements, shall develop eligibility requirements to implement the requirement of paragraph (1) of subdivision (a). In establishing these eligibility requirements, the department shall do both of the following:~~

~~(A) Consider the conservation measures described in the~~

~~Memorandum of Understanding Regarding Urban Water Conservation in California, and alternative conservation approaches that provide equal or greater water savings.~~

~~(B) Recognize the different legal, technical, fiscal, and practical roles and responsibilities of wholesale water suppliers and retail water suppliers.~~

~~(2) (A) For the purposes of this section, the department shall determine whether an urban water supplier is implementing all of the water demand management measures described in Section 10631 based on either, or a combination, of the following:~~

~~(i) Compliance on an individual basis.~~

~~(ii) Compliance on a regional basis. Regional compliance shall require participation in a regional conservation program consisting of two or more urban water suppliers that achieves the level of conservation or water efficiency savings equivalent to the amount of conservation or savings achieved if each of the participating urban water suppliers implemented the water demand management measures. The urban water supplier administering the regional program shall provide participating urban water suppliers and the department with data to demonstrate that the regional program is consistent with this clause. The department shall review the data to determine whether the urban water suppliers in the regional program are meeting the eligibility requirements.~~

~~(B) The department may require additional information for any determination pursuant to this section.~~

~~(3) The department shall not deny eligibility to an urban water supplier in compliance with the requirements of this section that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the water demand management measures described in Section 10631.~~

- ~~(c) In establishing guidelines pursuant to the specific funding authorization for any water management grant or loan program subject to this section, the agency administering the grant or loan program shall include in the guidelines the eligibility requirements developed by the department pursuant to subdivision (b).~~
- ~~(d) Upon receipt of a water management grant or loan application by an agency administering a grant and loan program subject to this section, the agency shall request an eligibility determination from the department with respect to the requirements of this section. The department shall respond to the request within 60 days of the request.~~
- ~~(e) The urban water supplier may submit to the department copies of its annual reports and other relevant documents to assist the department in determining whether the urban water supplier is implementing or scheduling the implementation of water demand management activities. In addition, for urban water suppliers that are signatories to the Memorandum of Understanding Regarding Urban Water Conservation in California and submit biennial reports to the California Urban Water Conservation Council in accordance with the memorandum, the department may use these reports to assist in tracking the implementation of water demand management measures.~~
- ~~(f) This section shall remain in effect only until July 1, 2016, and as of that date is repealed, unless a later enacted statute, that is enacted before July 1, 2016, deletes or extends that date.~~

~~**10631.7.** The department, in consultation with the California Urban Water Conservation Council, shall convene an independent technical panel to provide information and recommendations to the department and the Legislature on new demand management measures, technologies, and approaches. The panel shall consist of no more than seven members, who shall be selected by the department to reflect a balanced representation of experts. The panel shall have at least one, but no more than two, representatives from each of the following: retail water suppliers, environmental organizations, the business community, wholesale water suppliers, and academia. The panel shall be convened by January 1, 2009, and shall report to the Legislature no later than January 1, 2010, and every five years thereafter. The department shall review the panel report and include in the final report to the Legislature the department's~~

~~recommendations and comments regarding the panel process and the panel's recommendations.~~

- (c) The Legislature finds and declares that energy use is only one factor in water supply planning and shall not be considered independently of other factors.*

10632. ~~(a) The plan shall provide an~~ *Every urban water supplier shall prepare and adopt a water shortage contingency analysis that includes plan as part of its urban water management plan that consists of each of the following elements that are within the authority of the urban water supplier:*

- ~~(1) Stages~~ *The analysis of action water supply reliability conducted pursuant to be undertaken by Section 10635.*
- (2) The procedures used in conducting an annual water supply and demand assessment that include, at a minimum, both of the following:*
 - (A) The written decision making process that an urban water supplier in response will use each year to determine its water supply shortages reliability.*
 - (B) The key data inputs and assessment methodology used to evaluate the urban water supplier's water supply reliability for the current year and one dry year, including all of the following:*
 - (i) Current year unconstrained demand, considering weather, growth, and other influencing factors, such as policies to manage current supplies to meet demand objectives in future years, as applicable.*
 - (ii) Current year available supply, considering hydrological and regulatory conditions in the current year and one dry year. The annual supply and demand assessment may consider more than one dry year solely at the discretion of the urban water supplier.*
 - (iii) Existing infrastructure capabilities and plausible constraints.*
 - (iv) A defined set of locally applicable evaluation criteria that are consistently relied upon for each annual water supply and demand assessment.*

- (v) A description and quantification of each source of water supply.*
- (3) (A) Six standard water shortage levels corresponding to progressive ranges of up to a 10, 20, 30, 40, and 50 percent reduction in water supply, and an outline of specific water supply conditions that are applicable to each stage.*
- (2) An estimate of the minimum water supply available during each of the next three water year shortages and greater than 50 percent shortage. Urban water suppliers shall define these shortage levels based on the driest three-year historic sequence for the agency's water supply.*
- (3) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a suppliers' water supply conditions, including percentage reductions in water supply, changes in groundwater levels, changes in surface elevation or level of subsidence, or other changes in hydrological or other local conditions indicative of the water supply available for use. Shortage levels shall also apply to catastrophic interruption of water supplies, including, but not limited to, a regional power outage, an earthquake, and other disaster potential emergency events.*
- (4) (B) An urban water supplier with an existing water shortage contingency plan that uses different water shortage levels may comply with the requirement in subparagraph (A) by developing and including a cross-reference relating its existing categories to the six standard water shortage levels.*
- (4) Shortage response actions that align with the defined shortage levels and include, at a minimum, all of the following:*
- (A) Locally appropriate supply augmentation actions.*
 - (B) Locally appropriate demand reduction actions to adequately respond to shortages.*
 - (C) Locally appropriate operational changes.*
 - (D) Additional, mandatory prohibitions against specific water use practices during water shortages, including,*

~~but not limited to, prohibiting the use of potable water for street cleaning that are in addition to state-mandated prohibitions and appropriate to the local conditions.~~

- ~~(5) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.~~
- ~~(6) Penalties or charges for excessive use, where applicable.~~
- ~~(7) An analysis of the impacts of each of the actions and conditions described in paragraphs (1) to (6), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.~~
- (E) For each action, an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.*
- (5) Communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding, at a minimum, all of the following:*
 - (A) Any current or predicted shortages as determined by the annual water supply and demand assessment described pursuant to Section 10632.1.*
 - (B) Any shortage response actions triggered or anticipated to be triggered by the annual water supply and demand assessment described pursuant to Section 10632.1.*
 - (C) Any other relevant communications.*
- (6) For an urban retail water supplier, customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions as determined pursuant to Section 10632.2.*

- (7)
 - (A) *A description of the legal authorities that empower the urban water supplier to implement and enforce its shortage response actions specified in paragraph (4) that may include, but are not limited to, statutory authorities, ordinances, resolutions, and contract provisions.*
 - (B) *A statement that an urban water supplier shall declare a water shortage emergency in accordance with Chapter 3 (commencing with Section 350) of Division 1.*
 - (C) *A statement that an urban water supplier shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency, as defined in Section 8558 of the Government Code.*
- (8) ~~A draft water~~ *A description of the financial consequences of, and responses for, drought conditions, including, but not limited to, all of the following:*
 - (A) *A description of potential revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).*
 - (B) *A description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).*
 - (C) *A description of the cost of compliance with Chapter 3.3 (commencing with Section 365) of Division 1.*
- (9) *For an urban retail water supplier, monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.*
- (10) *Reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the water shortage contingency resolution or ordinance plan in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.*

~~(9) A mechanism for determining actual reductions in water use pursuant to the urban~~(b) *For purposes of developing the water shortage contingency analysis.*~~(b) Commencing with the urban water management plan update due July 1, 2016, for purposes of developing the water shortage contingency analysis pursuant to subdivision (a), the~~an urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

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

10632.1. *An urban water supplier shall conduct an annual water supply and demand assessment pursuant to subdivision (a) of Section 10632 and, on or before July 1 of each year, submit an annual water shortage assessment report to the department with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the supplier's water shortage contingency plan. An urban water supplier that relies on imported water from the State Water Project or the Bureau of Reclamation shall submit its annual water supply and demand assessment within 14 days of receiving its final allocations, or by July 1 of each year, whichever is later.*

10632.2. *An urban water supplier shall follow, where feasible and appropriate, the prescribed procedures and implement determined shortage response actions in its water shortage contingency plan, as identified in subdivision (a) of Section 10632, or reasonable alternative actions, provided that descriptions of the alternative actions are submitted with the annual water shortage assessment report pursuant to Section 10632.1. Nothing in this section prohibits an urban water supplier from taking actions not specified in its water shortage contingency plan, if needed, without having to formally amend its urban water management plan or water shortage contingency plan.*

10632.3. *It is the intent of the Legislature that, upon proclamation by the Governor of a state of emergency under the California Emergency Services Act (Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code) based on drought conditions, the board defer to implementation of locally adopted water shortage contingency plans to the extent practicable.*

10632.5. *(a) In addition to the requirements of paragraph (3) of subdivision (a) of Section 10632, beginning January 1, 2020, the plan shall include a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities.*

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

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

10633. The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:

- (a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.
- (b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.
- (c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.

- (d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.
- (e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.
- (f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.
- (g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

10634. The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 – 10657]

CHAPTER 3. Urban Water Management Plans [10620 – 10645]

ARTICLE 2.5. Water Service Reliability [10635 – 10635.]

10635. (a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the *long-term* total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and ~~multiple dry~~ *a drought lasting five*

consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

~~(b)~~ *(b) Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment for its water service to its customers as part of information considered in developing the demand management measures and water supply projects and programs to be included in the urban water management plan. The urban water supplier may conduct an interim update or updates to this drought risk assessment within the five-year cycle of its urban water management plan update. The drought risk assessment shall include each of the following:*

- (1) A description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive water years, starting from the year following when the assessment is conducted.*
- (2) A determination of the reliability of each source of supply under a variety of water shortage conditions. This may include a determination that a particular source of water supply is fully reliable under most, if not all, conditions.*
- (3) A comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.*
- (4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.*

(c) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

~~(e)~~ *(d) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.*

- ~~(d)~~ (e) Nothing in this article is intended to change existing law concerning an urban water supplier's obligation to provide water service to its existing customers or to any potential future customers.

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 – 10657]

CHAPTER 3. Urban Water Management Plans [10620 – 10645]

ARTICLE 3. Adoption and Implementation of Plans [10640 – 10645]

10640. (a) Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630). The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

(b) Every urban water supplier required to prepare a water shortage contingency plan shall prepare a water shortage contingency plan pursuant to Section 10632. The supplier shall likewise periodically review the water shortage contingency plan as required by paragraph (10) of subdivision (a) of Section 10632 and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

10641. An urban water supplier required to prepare a *plan or a water shortage contingency plan* may consult with, and obtain comments from, any public agency or state agency or any person who has special expertise with respect to water demand management methods and techniques.

10642. Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of *both the plan and the water shortage contingency plan*. Prior to adopting a ~~plan~~ *neither*, the urban water supplier shall make *both the plan and the water shortage contingency plan* available for public inspection and shall hold a public hearing *or hearings* thereon. Prior to ~~the hearing~~ *any of these hearings*, notice of the time and place of *the* hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of a hearing to any city or county within which the supplier provides water supplies. *Notices by a local public agency pursuant to this section shall be provided pursuant to Chapter 17.5 (commencing with Section 7290) of*

Division 7 of Title 1 of the Government Code. A privately owned water supplier shall provide an equivalent notice within its service area. After the hearing or hearings, the plan or water shortage contingency plan shall be adopted as prepared or as modified after the hearing or hearings.

~~After the hearing, the plan shall be adopted as prepared or as modified after the hearing.~~

10643. An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

10644. (a) (1) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

(2) The plan, or amendments to the plan, submitted to the department pursuant to paragraph (1) shall be submitted electronically and shall include any standardized forms, tables, or displays specified by the department.

~~(b) (1) (b)~~ *If an urban water supplier revises its water shortage contingency plan, the supplier shall submit to the department a copy of its water shortage contingency plan prepared pursuant to subdivision (a) of Section 10632 no later than 30 days after adoption, in accordance with protocols for submission and using electronic reporting tools developed by the department.*

(c) (1) (A) Notwithstanding Section 10231.5 of the Government Code, the department shall prepare and submit to the Legislature, on or before ~~December 31~~ *July 1*, in the years ending in ~~sixseven~~ and ~~onetwo~~, a report summarizing the status of the plans *and water shortage contingency plans* adopted pursuant to this part. The report prepared by the department shall identify the exemplary elements of the individual plans *and water shortage contingency plans*. The department shall provide a copy of the report to each urban water supplier that has submitted its plan *and water shortage contingency plan* to the department. The department shall also prepare reports and provide data for

any legislative hearings designed to consider the effectiveness of plans *and water shortage contingency plans* submitted pursuant to this part.

(B) The department shall prepare and submit to the board, on or before September 30 of each year, a report summarizing the submitted water supply and demand assessment results along with appropriate reported water shortage conditions and the regional and statewide analysis of water supply conditions developed by the department. As part of the report, the department shall provide a summary and, as appropriate, urban water supplier specific information regarding various shortage response actions implemented as a result of annual supplier-specific water supply and demand assessments performed pursuant to Section 10632.1.

(C) The department shall submit the report to the Legislature for the 2015 plans by July 1, 2017, and the report to the Legislature for the 2020 plans and water shortage contingency plans by July 1, 2022.

(2) A report to be submitted pursuant to *subparagraph (A)* of paragraph (1) shall be submitted in compliance with Section 9795 of the Government Code.

~~(c) (1) For the purpose of identifying the exemplary elements of the individual plans, the department shall identify in the report water demand management measures adopted and implemented by specific urban water suppliers, and identified pursuant to Section 10631, that achieve water savings significantly above the levels established by the department to meet the requirements of Section 10631.5.~~

~~(2) The department shall distribute to the panel convened pursuant to Section 10631.7 the results achieved by the implementation of those water demand management measures described in paragraph (1).~~

~~(3)~~ (d) The department shall make available to the public the standard the department will use to identify exemplary water demand management measures.

10645. (a) Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

(b) *Not later than 30 days after filing a copy of its water shortage contingency plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.*

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 – 10657]

CHAPTER 4. Miscellaneous Provisions [10650 – 10657]

10650. Any actions or proceedings, *other than actions by the board*, to attack, review, set aside, void, or annul the acts or decisions of an urban water supplier on the grounds of noncompliance with this part shall be commenced as follows:

- (a) An action or proceeding alleging failure to adopt a plan *or a water shortage contingency plan* shall be commenced within 18 months after that adoption is required by this part.
- (b) Any action or proceeding alleging that a plan *or water shortage contingency plan*, or action taken pursuant to ~~the plan~~ *neither*, does not comply with this part shall be commenced within 90 days after filing of the plan *or water shortage contingency plan or an amendment thereto either* pursuant to Section 10644 or the taking of that action.

10651. In any action or proceeding to attack, review, set aside, void, or annul a plan *or a water shortage contingency plan*, or an action taken pursuant to ~~the plan~~ *neither* by an urban water supplier on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the supplier has not proceeded in a manner required by law or if the action by the water supplier is not supported by substantial evidence.

10652. The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part or to the implementation of actions taken pursuant to Section 10632. Nothing in this part shall be interpreted as exempting from the California Environmental Quality Act any project that would significantly affect water supplies for fish

and wildlife, or any project for implementation of the plan, other than projects implementing Section 10632, or any project for expanded or additional water supplies.

10653. The adoption of a plan shall satisfy any requirements of state law, regulation, or order, including those of the ~~State Water Resources Control Board~~*board* and the Public Utilities Commission, for the preparation of water management plans, *water shortage contingency plans*, or conservation plans; provided, that if the *board* or the Public Utilities Commission requires additional information concerning water conservation, *drought response measures*, or *financial conditions* to implement its existing authority, nothing in this part shall be deemed to limit the board or the commission in obtaining that information. The requirements of this part shall be satisfied by any urban water demand management plan *that complies with analogous* federal laws or regulations after the effective date of this part, and which substantially meets the requirements of this part, or by any existing urban water management plan which includes the contents of a plan required under this part.

10654. An urban water supplier may recover in its rates the costs incurred in preparing its *urban water management plan, its drought risk assessment, its water supply and demand assessment, and its water shortage contingency plan* and implementing the reasonable water conservation measures included in *either of the plan*. ~~Any best water management practice that is included in the plan that is identified in the "Memorandum of Understanding Regarding Urban Water Conservation in California" is deemed to be reasonable for the purposes of this section~~*plans*.

10655. If any provision of this part or the application thereof to any person or circumstances is held invalid, that invalidity shall not affect other provisions or applications of this part which can be given effect without the invalid provision or application thereof, and to this end the provisions of this part are severable.

10656. An urban water supplier ~~that does~~*is not* prepare, adopt, and submit its urban water management plan to the department in accordance with this part, ~~is ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) grant or Division 26 (commencing with Section 79000), loan awarded or receive drought assistance from~~*administered by* the state ~~until~~*unless* the urban water management plan is submitted pursuant to ~~supplier~~*supplier complies with this part*.

10657. *The department may adopt regulations regarding the definitions of water, water use, and reporting periods, and may adopt any other regulations deemed necessary or desirable to implement this article-part. In developing regulations pursuant to this section, the department shall solicit broad public participation from stakeholders and other interested persons.*

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Appendix B. DWR UWMP Checklist and Tables

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Submittal Table 2-1 Retail Only: Public Water Systems

Public Water System Number	Public Water System Name	Number of Municipal Connections 2020	Volume of Water Supplied 2020 *
<i>Add additional rows as needed</i>			
31-10001	Tahoe Main	3,390	332
31-10023	Carnelian Woods	283	23
31-10036	Dollar Cove	275	26
TOTAL		3,948	381
* Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.			
NOTES: Number of connections source: Meter Size & Connections by System 2020			

Submittal Table 2-2: Plan Identification

Select Only One	Type of Plan	Name of RUWMP or Regional Alliance <i>if applicable</i> (select from drop down list)
<input checked="" type="checkbox"/>	Individual UWMP	
	<input type="checkbox"/>	Water Supplier is also a member of a RUWMP
	<input type="checkbox"/>	Water Supplier is also a member of a Regional Alliance
<input type="checkbox"/>	Regional Urban Water Management Plan (RUWMP)	

NOTES:

Submittal Table 2-3: Supplier Identification	
Type of Supplier (select one or both)	
<input type="checkbox"/>	Supplier is a wholesaler
<input checked="" type="checkbox"/>	Supplier is a retailer
Fiscal or Calendar Year (select one)	
<input checked="" type="checkbox"/>	UWMP Tables are in calendar years
<input type="checkbox"/>	UWMP Tables are in fiscal years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
Units of measure used in UWMP * (select from drop down)	
Unit	MG
* Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.	
NOTES:	

Submittal Table 2-4 Retail: Water Supplier Information Exchange
The retail Supplier has informed the following wholesale supplier(s) of projected water use in accordance with Water Code Section 10631.
Wholesale Water Supplier Name
<i>Add additional rows as needed</i>
N/A
NOTES:

Submittal Table 3-1 Retail: Population - Current and Projected

Population Served	2020	2025	2030	2035	2040	2045(<i>opt</i>)
	4,869	5,008	5,150	5,297	5,448	5,604

NOTES: 2020 population based on DWR population tool and District boundary .kml file.
Projection assumes average annual growth in connections of 0.57% (1990-2020)

Submittal Table 4-1 Retail: Demands for Potable and Non-Potable¹ Water - Actual

Use Type	2020 Actual		
Drop down list May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool	Additional Description (as needed)	Level of Treatment When Delivered Drop down list	Volume ²
Add additional rows as needed			
Single Family		Drinking Water	174
Multi-Family		Drinking Water	55
Commercial		Drinking Water	57
Landscape		Drinking Water	20
Other Potable		Drinking Water	1
Losses	Unaccounted water	Drinking Water	75
TOTAL			381
¹ Recycled water demands are NOT reported in this table. Recycled water demands are reported in Table 6-4. Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.			
NOTES: Other Potable use includes fire.			

Submittal Table 4-2 Retail: Use for Potable and Non-Potable¹ Water - Projected

Use Type	Additional Description (as needed)	Projected Water Use ² <i>Report To the Extent that Records are Available</i>				
<u>Drop down list</u> May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool		2025	2030	2035	2040	2045 (opt)
Add additional rows as needed						
Single Family		179	184	189	194	200
Multi-Family		57	58	60	62	63
Commercial		58	60	62	63	65
Landscape		20	21	21	22	23
Other Potable		1	1	1	1	1
Losses		64	62	60	58	58
TOTAL		379	386	393	400	410

¹ Recycled water demands are NOT reported in this table. Recycled water demands are reported in Table 6-4.
measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.

² Units of

NOTES:

Submittal Table 4-3 Retail: Total Water Use (Potable and Non-Potable)

	2020	2025	2030	2035	2040	2045 (opt)
Potable Water, Raw, Other Non-potable <i>From Tables 4-1R and 4-2 R</i>	381	379	386	393	400	410
Recycled Water Demand ¹ <i>From Table 6-4</i>	0	0	0	0	0	0
Optional Deduction of Recycled Water Put Into Long-Term Storage ²						
TOTAL WATER USE	381	379	386	393	400	410

¹ Recycled water demand fields will be blank until Table 6-4 is complete ²
 Long term storage means water placed into groundwater or surface storage that is not removed from storage in the same year. Supplier *may* deduct recycled water placed in long-term storage from their reported demand. This value is manually entered into Table 4-3.

NOTES:

Submittal Table 4-4 Retail: Last Five Years of Water Loss Audit Reporting

Reporting Period Start Date (mm/yyyy)	Volume of Water Loss ^{1,2}
01/2016	89
01/2017	92
01/2018	77
01/2019	81
01/2020	75

¹ Taken from the field "Water Losses" (a combination of apparent losses and real losses) from the AWWA worksheet. ²

Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.

NOTES: 2020 water loss calculated as total production less total consumption, pending validated audit results.

Submittal Table 4-5 Retail Only: Inclusion in Water Use Projections**Are Future Water Savings Included in Projections?**

(Refer to Appendix K of UWMP Guidebook)

Drop down list (y/n)

No

If "Yes" to above, state the section or page number, in the cell to the right, where citations of the codes, ordinances, or otherwise are utilized in demand projections are found.

Are Lower Income Residential Demands Included In Projections?*Drop down list (y/n)*

Yes

NOTES:

Submittal Table 5-1 Baselines and Targets Summary
From SB X7-7 Verification Form
Retail Supplier or Regional Alliance Only

Baseline Period	Start Year *	End Year *	Average Baseline GPCD*	Confirmed 2020 Target*
10-15 year	2001	2010	296	237
5 Year	2006	2010	301	

**All cells in this table should be populated manually from the supplier's SBX7-7 Verification Form and reported in Gallons per Capita per Day (GPCD)*

NOTES:

Submittal Table 5-2: 2020 Compliance SB X7-7 2020 Compliance Form <i>Retail Supplier or Regional Alliance Only</i>				From
2020 GPCD			2020 Confirmed Target GPCD*	Did Supplier Achieve Targeted Reduction for 2020? Y/N
Actual 2020 GPCD*	2020 TOTAL Adjustments*	Adjusted 2020 GPCD* (Adjusted if applicable)		
215	0	215	237	Yes
<i>*All cells in this table should be populated manually from the supplier's SBX7-7 2020 Compliance Form and reported in Gallons per Capita per Day (GPCD)</i>				
NOTES:				

Submittal Table 6-1 Retail: Groundwater Volume Pumped						
<input type="checkbox"/>	Supplier does not pump groundwater. The supplier will not complete the table below.					
<input type="checkbox"/>	All or part of the groundwater described below is desalinated.					
Groundwater Type <i>Drop Down List</i> <i>May use each category multiple times</i>	Location or Basin Name	2016*	2017*	2018*	2019*	2020*
Add additional rows as needed						
Fractured Rock	Carnelian Well	23.5	25.9	23.7	24.4	23.3
Fractured Rock	Park Well	6.1	45.5	9.2	26.9	20.2
TOTAL		30	71	33	51	44
* Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.						
NOTES: Groundwater production values from 2016-2020 DRINC reports						

Submittal Table 6-2 Retail: Wastewater Collected Within Service Area in 2020						
<input type="checkbox"/>	There is no wastewater collection system. The supplier will not complete the table below.					
100	Percentage of 2020 service area covered by wastewater collection system <i>(optional)</i>					
100	Percentage of 2020 service area population covered by wastewater collection system <i>(optional)</i>					
Wastewater Collection			Recipient of Collected Wastewater			
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? <i>Drop Down List</i>	Volume of Wastewater Collected from UWMP Service Area 2020 *	Name of Wastewater Treatment Agency Receiving Collected Wastewater	Treatment Plant Name	Is WWTP Located Within UWMP Area? <i>Drop Down List</i>	Is WWTP Operation Contracted to a Third Party? <i>(optional)</i> <i>Drop Down List</i>
NTPUD	Metered	250	Tahoe-Truckee Sanitation Agency	TTSA Water Reclamation Plant	No	No
Total Wastewater Collected from Service Area in 2020:		250				
* Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3 .						
NOTES:						

Submittal Table 6-3 Retail: Wastewater Treatment and Discharge Within Service Area in 2020											
<input checked="" type="checkbox"/>	No wastewater is treated or disposed of within the UWMP service area. The supplier will not complete the table below.										
Wastewater Treatment Plant Name	Discharge Location Name or Identifier	Discharge Location Description	Wastewater Discharge ID Number (optional) ²	Method of Disposal <i>Drop down list</i>	Does This Plant Treat Wastewater Generated Outside the Service Area? <i>Drop down list</i>	Treatment Level <i>Drop down list</i>	2020 volumes ¹				
							Wastewater Treated	Discharged Treated Wastewater	Recycled Within Service Area	Recycled Outside of Service Area	Instream Flow Permit Requirement
Total							0	0	0	0	0
¹ Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.											
² If the Wastewater Discharge ID Number is not available to the UWMP preparer, access the SWRCB CIWQS regulated facility website at https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/CiwqsReportServlet?inCommand=reset&reportName=RegulatedFacility											
NOTES:											

Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area

☒

Recycled water is not used and is not planned for use within the service area of the supplier.
The supplier will not complete the table below.

Name of Supplier Producing (Treating) the Recycled Water:

Name of Supplier Operating the Recycled Water Distribution System:

Supplemental Water Added in 2020 (volume) *Include units*

Source of 2020 Supplemental Water

Beneficial Use Type <i>Insert additional rows if needed.</i>	Potential Beneficial Uses of Recycled Water (Describe)	Amount of Potential Uses of Recycled Water (Quantity) <i>Include volume units¹</i>	General Description of 2020 Uses	Level of Treatment <i>Drop down list</i>	2020 ¹	2025 ¹	2030 ¹	2035 ¹	2040 ¹	2045 ¹ (opt)
Agricultural irrigation										
Landscape irrigation (exc golf courses)										
Golf course irrigation										
Commercial use										
Industrial use										
Geothermal and other energy production										
Seawater intrusion barrier										
Recreational impoundment										
Wetlands or wildlife habitat										
Groundwater recharge (IPR)										
Reservoir water augmentation (IPR)										
Direct potable reuse										
Other (Description Required)										
				Total:	0	0	0	0	0	0
2020 Internal Reuse										

¹ Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.

NOTES:

Submittal Table 6-5 Retail: 2015 UWMP Recycled Water Use Projection Compared to 2020 Actual



Recycled water was not used in 2015 nor projected for use in 2020.
The supplier will not complete the table below. If recycled water was not used in 2020, and was not predicted to be in 2015, then check the box and do not complete the table.

Beneficial Use Type	2015 Projection for 2020 ¹	2020 Actual Use ¹
<i>Insert additional rows as needed.</i>		
Agricultural irrigation		
Landscape irrigation (exc golf courses)		
Golf course irrigation		
Commercial use		
Industrial use		
Geothermal and other energy production		
Seawater intrusion barrier		
Recreational impoundment		
Wetlands or wildlife habitat		
Groundwater recharge (IPR)		
Reservoir water augmentation (IPR)		
Direct potable reuse		
Other (Description Required)		
Total	0	0

¹ Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.

NOTE:

Submittal Table 6-6 Retail: Methods to Expand Future Recycled Water Use			
<input checked="" type="checkbox"/>	Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
	Provide page location of narrative in UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use *
Add additional rows as needed			
Total			0
<i>*Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.</i>			
NOTES:			

Submittal Table 6-7 Retail: Expected Future Water Supply Projects or Programs						
<input checked="" type="checkbox"/>	No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Supplier will not complete the table below.					
<input type="checkbox"/>	Some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.					
	Provide page location of narrative in the UWMP					
Name of Future Projects or Programs	Joint Project with other suppliers?		Description (if needed)	Planned Implementation Year	Planned for Use in Year Type <small>Drop Down List</small>	Expected Increase in Water Supply to Supplier* <small>This may be a range</small>
	<small>Drop Down List (y/n)</small>	<small>If Yes, Supplier Name</small>				
Add additional rows as needed						
*Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.						
NOTES:						

Submittal Table 6-8 Retail: Water Supplies — Actual

Water Supply	Additional Detail on Water Supply	2020		
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool		Actual Volume*	Water Quality Drop Down List	Total Right or Safe Yield* (optional)
Add additional rows as needed				
Purchased or Imported Water	Dollar Cove	26	Drinking Water	
Groundwater (not desalinated)	Carnelian Well	23	Drinking Water	
Groundwater (not desalinated)	Park Well	20	Drinking Water	
Surface water (not desalinated)	National Avenue Water Treatment Plant	312	Other Non- Potable Water	
Total		381		0
<i>*Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.</i>				
NOTES:				

Submittal Table 7-1 Retail: Basis of Water Year Data (Reliability Assessment)

Year Type	Base Year If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2019-2020, use 2020	Available Supplies if Year Type Repeats	
		<input type="checkbox"/>	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location _____
		<input checked="" type="checkbox"/>	Quantification of available supplies is provided in this table as either volume only, percent only, or both.
		Volume Available *	% of Average Supply
Average Year	2006	444872	100%
Single-Dry Year	2013	444872	100%
Consecutive Dry Years 1st Year	2011	444872	100%
Consecutive Dry Years 2nd Year	2012	444872	100%
Consecutive Dry Years 3rd Year	2013	444872	100%
Consecutive Dry Years 4th Year	2014	444872	100%
Consecutive Dry Years 5th Year	2015	444872	100%
<p><i>Supplier may use multiple versions of Table 7-1 if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If a Supplier uses multiple versions of Table 7-1, in the "Note" section of each table, state that multiple versions of Table 7-1 are being used and identify the particular water source that is being reported in each table.</i></p>			
<p>*Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.</p>			
<p>NOTES:</p>			

Submittal Table 7-2 Retail: Normal Year Supply and Demand Comparison

	2025	2030	2035	2040	2045 (<i>Opt</i>)
Supply totals (<i>autofill from Table 6-9</i>)	379	386	393	400	410
Demand totals (<i>autofill from Table 4-3</i>)	379	386	393	400	410
Difference	0	0	0	0	0

NOTES:

Submittal Table 7-3 Retail: Single Dry Year Supply and Demand Comparison					
	2025	2030	2035	2040	2045 (Opt)
Supply totals*	379	386	393	400	410
Demand totals*	379	386	393	400	410
Difference	0	0	0	0	0
<i>*Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.</i>					
NOTES:					

Submittal Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison

		2025*	2030*	2035*	2040*	2045* (Opt)
First year	Supply totals	379	386	393	400	410
	Demand totals	379	386	393	400	410
	Difference	0	0	0	0	0
Second year	Supply totals	379	386	393	400	410
	Demand totals	379	386	393	400	410
	Difference	0	0	0	0	0
Third year	Supply totals	379	386	393	400	410
	Demand totals	379	386	393	400	410
	Difference	0	0	0	0	0
Fourth year	Supply totals	379	386	393	400	410
	Demand totals	379	386	393	400	410
	Difference	0	0	0	0	0
Fifth year	Supply totals	379	386	393	400	410
	Demand totals	379	386	393	400	410
	Difference	0	0	0	0	0
Sixth year (optional)	Supply totals	379	386	393	400	410
	Demand totals	379	386	393	400	410
	Difference	0	0	0	0	0

****Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.***

NOTES:

Note: Totals can be entered directly or from the Optional I

Submittal Table 7-5: Five-Year Drought Risk Assessment Tables to address Water Code Section 10635(b)

2021	Total
Total Water Use	370
Total Supplies	370
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%

2022	Total
Total Water Use	372
Total Supplies	372
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%

2023	Total
Total Water Use	375
Total Supplies	375
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%

2024	Total
Total Water Use	377
Total Supplies	377
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	

WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%

2025	Total
Total Water Use	379
Total Supplies	379
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%

Submittal Table 8-1
Water Shortage Contingency Plan Levels

Shortage Level	Percent Shortage Range	Shortage Response Actions (Narrative description)
1	Up to 10%	Stage 1: Standard Operating Condition
2	Up to 20%	Stage 2: Drought Watch Condition
3	Up to 30%	Stage 3: Board Declared Emergency Action
4	Up to 40%	Stage 4: Drought Critical Condition
5	Up to 50%	Stage 5: State and Board Declared Extreme Emergency Action
6	>50%	Stage 6: State and Board Declared Extreme Emergency Action

NOTES:

Submittal Table 8-2: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions <i>Drop down list</i> <i>These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <i>For Retail Suppliers Only Drop Down List</i>
Add additional rows as needed				
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	10% reduction goal	NTPUD Water Ordinance Chapter 8.2.1(b)	Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation	10% reduction goal	NTPUD Water Ordinance Chapter 8.2.1(c)(d)	Yes
1	Other - Require automatic shut of hoses	10% reduction goal	NTPUD Water Ordinance Chapter 8.2.1(e)(f)	Yes
1	Water Features - Restrict water use for decorative water features, such as fountains	10% reduction goal	NTPUD Water Ordinance Chapter 8.2.1(g)	Yes
1	Other	10% reduction goal	NTPUD Water Ordinance Chapter 8.2.1(h)(i)	Yes
1	Landscape - Other landscape restriction or prohibition	10% reduction goal	NTPUD Water Ordinance Chapter 8.2.1(j)(k)(l)	Yes
1	Landscape - Limit landscape irrigation to specific times	10% reduction goal	NTPUD Water Ordinance Chapter 8.2.1(m)	Yes
2	Other	20% reduction goal	NTPUD Water Ordinance Chapter 8.2.2(a)	Yes
2	Landscape - Limit landscape irrigation to specific days	20% reduction goal	NTPUD Water Ordinance Chapter 8.2.2(b)(c)(d)	Yes
2	Other - Prohibit use of potable water for washing hard surfaces	20% reduction goal	NTPUD Water Ordinance Chapter 8.2.2(f)	Yes
2	Other water feature or swimming pool restriction	20% reduction goal	NTPUD Water Ordinance Chapter 8.2.2(g)	Yes
2	Other	20% reduction goal	NTPUD Water Ordinance Chapter 8.2.2(h)	Yes
2	CII - Lodging establishment must offer opt out of linen service	20% reduction goal	NTPUD Water Ordinance Chapter 8.2.2(i)	Yes
2	Expand Public Information Campaign	20% reduction goal	NTPUD Water Ordinance Chapter 8.2.2(j)(k)	Yes
3	Other	30% reduction goal	NTPUD Water Ordinance Chapter 8.2.3(a)(g)	Yes
3	Landscape - Limit landscape irrigation to specific days	30% reduction goal	NTPUD Water Ordinance Chapter 8.2.3(b)(c)(d)(e)	Yes
3	CII - Restaurants may only serve water upon request	30% reduction goal	NTPUD Water Ordinance Chapter 8.2.3(f)	Yes
4	Other	40% reduction goal	NTPUD Water Ordinance Chapter 8.2.4(a)(b)	Yes
4	Landscape - Prohibit all landscape irrigation	40% reduction goal	NTPUD Water Ordinance Chapter 8.2.4(c)	Yes
4	Other - Prohibit use of potable water for washing hard surfaces	40% reduction goal	NTPUD Water Ordinance Chapter 8.2.4(d)	Yes
4	Water Features - Restrict water use for decorative water features, such as fountains	40% reduction goal	NTPUD Water Ordinance Chapter 8.2.4(e)	Yes
5	Other	50% reduction goal	NTPUD Water Ordinance Chapter 8.2.5(a)	Yes
6	Other	60% reduction goal	NTPUD Water Ordinance Chapter 8.2.6(a)	Yes
6	Other	60% reduction goal	NTPUD Water Ordinance Chapter 8.2.6(a)	Yes
NOTES:				

Submittal Table 8-3: Supply Augmentation and Other Actions			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier <i>Drop down list</i> <i>These are the only categories that will be accepted by the WUEdata online submittal tool</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>
Add additional rows as needed			
1			
2			
3	Stored Emergency Supply	4 MG	District emergency supply withdrawals (includes Carnelian, Dollar Cove, and Main Systems)
4	Stored Emergency Supply	4 MG	District emergency supply withdrawals (includes Carnelian, Dollar Cove, and Main Systems)
5	Stored Emergency Supply	4 MG	District emergency supply withdrawals (includes Carnelian, Dollar Cove, and Main Systems)
6	Stored Emergency Supply	4 MG	District emergency supply withdrawals (includes Carnelian, Dollar Cove, and Main Systems)
NOTES: Source: NTPUD Emergency Response Plan (2005)			

Table 8-4 is not applicable for the UWMP 2020.

Submittal Table 10-1 Retail: Notification to Cities and Counties

City Name	60 Day Notice	Notice of Public Hearing
Add additional rows as needed		
County Name <small>Drop Down List</small>	60 Day Notice	Notice of Public Hearing
Add additional rows as needed		
Placer County	Yes	Yes
NOTES:		

Urban Water Supplier: North Tahoe Public Utilities District

Water Delivery Product (If delivering more than one type of product use Table O-1C)

Retail Potable Deliveries

Table O-1A: Recommended Energy Reporting - Water Supply Process Approach											
Enter Start Date for Reporting Period		12/10/2019				Urban Water Supplier Operational Control					
End Date		12/10/2020							Non-Consequential Hydropower (if applicable)		
<input type="checkbox"/> Is upstream embedded in the values reported?											
		Water Volume Units Used		Extract and Divert	Place into Storage	Conveyance	Treatment	Distribution	Total Utility	Hydropower	Net Utility
Volume of Water Entering Process		MG		69	0	0	312	381	381	0	381
Energy Consumed (kWh)		N/A		112701	0	0	717939	134552	965192	0	965192
Energy Intensity (kWh/vol.)		N/A		1633.4	0.0	0.0	2301.1	353.2	2533.3	0.0	2533.3
Quantity of Self-Generated Renewable Energy											
		0		kWh							
Data Quality (Estimate, Metered Data, Combination of Estimates and Metered Data)											
Combination of Estimates and Metered Data											
Data Quality Narrative:											
Energy consumption for treatment at National Avenue Water Treatment Plant is estimated as 88% of the total energy consumption; the remaining 12% is used for sewer pumps located on the same site.											
Narrative:											
Extraction and Diversion values assumed to be based on the Carnelian Well Facility, Park Well Facility, and Dollar Cove power and water produced. National Avenue Water Treatment Plant use is assumed to be in the total of the Treatment process. Distribution process values are based on the booster station pumping.											

SB X7-7 Table 0: Units of Measure Used in UWMP* (select one from the drop down list)
Million Gallons
<i>*The unit of measure must be consistent with Submittal Table 2-3</i>
NOTES:

SB X7-7 Table-1: Baseline Period Ranges

Baseline	Parameter	Value	Units
10- to 15-year baseline period	2008 total water deliveries	535	Million Gallons
	2008 total volume of delivered recycled water	-	Million Gallons
	2008 recycled water as a percent of total deliveries	0%	See Note 1
	Number of years in baseline period ^{1, 2}	10	Years
	Year beginning baseline period range	2001	
	Year ending baseline period range ³	2010	
5-year baseline period	Number of years in baseline period	5	Years
	Year beginning baseline period range	2006	
	Year ending baseline period range ⁴	2010	

¹ If the 2008 recycled water delivery is less than 10 percent of total water deliveries, then the 10-15year baseline period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater of total deliveries, the 10-15 year baseline period is a continuous 10- to 15-year period.

² The Water Code requires that the baseline period is between 10 and 15 years. However, DWR recognizes that some water suppliers may not have the minimum 10 years of baseline data.

³ The ending year for the 10-15 year baseline period must be between December 31, 2004 and December 31, 2010.

⁴ The ending year for the 5 year baseline period must be between December 31, 2007 and December 31, 2010.

NOTES:

SB X7-7 Table 2: Method for Population Estimates

Method Used to Determine Population
(may check more than one)



1. Department of Finance (DOF) or American Community Survey (ACS)



2. Persons-per-Connection Method



3. DWR Population Tool



4. Other
DWR recommends pre-review

NOTES:

SB X7-7 Table 3: Service Area Population

Year		Population
10 to 15 Year Baseline Population		
Year 1	2001	5,007
Year 2	2002	4,974
Year 3	2003	4,938
Year 4	2004	4,901
Year 5	2005	4,861
Year 6	2006	4,813
Year 7	2007	4,764
Year 8	2008	4,714
Year 9	2009	4,662
Year 10	2010	4,601
Year 11		
Year 12		
Year 13		
Year 14		
Year 15		
5 Year Baseline Population		
Year 1	2006	4,813
Year 2	2007	4,764
Year 3	2008	4,714
Year 4	2009	4,662
Year 5	2010	4,601
NOTES:		

SB X7-7 Table 4: Annual Gross Water Use *

Baseline Year <i>Fm SB X7-7 Table 3</i>		Volume Into Distribution System <i>This column will remain blank until SB X7-7 Table 4-A is completed.</i>	Deductions				Million Gallons	
			Exported Water	Change in Dist. System Storage (+/-)	Indirect Recycled Water <i>This column will remain blank until SB X7-7 Table 4-B is completed.</i>	Water Delivered for Agricultural Use	Process Water <i>This column will remain blank until SB X7-7 Table 4-D is completed.</i>	Annual Gross Water Use
10 to 15 Year Baseline - Gross Water Use								
Year 1	2001	523			-		-	523
Year 2	2002	547			-		-	547
Year 3	2003	519			-		-	519
Year 4	2004	535			-		-	535
Year 5	2005	494			-		-	494
Year 6	2006	520			-		-	520
Year 7	2007	538			-		-	538
Year 8	2008	535			-		-	535
Year 9	2009	509			-		-	509
Year 10	2010	484			-		-	484
Year 11	0	-			-		-	-
Year 12	0	-			-		-	-
Year 13	0	-			-		-	-
Year 14	0	-			-		-	-
Year 15	0	-			-		-	-
10 - 15 year baseline average gross water use								520
5 Year Baseline - Gross Water Use								
Year 1	2006	520			-		-	520
Year 2	2007	538			-		-	538
Year 3	2008	535			-		-	535
Year 4	2009	509			-		-	509
Year 5	2010	484			-		-	484
5 year baseline average gross water use								517
* Units of measure (AF, MG , or CCF) must remain consistent throughout the UWMP, as reported in Table 2-3.								
NOTES:								

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)

Complete one table for each source.

Name of Source Dollar Cove Meter

This water source is:

☐ The supplier's own water source

☒ A purchased or imported source

Baseline Year <i>Fm SB X7-7 Table 3</i>	Volume Entering Distribution System ¹	Meter Error Adjustment ² <i>Optional</i> (+/-)	Corrected Volume Entering Distribution System
--	--	--	--

10 to 15 Year Baseline - Water into Distribution System

Year 1	2001	29		29
Year 2	2002	29		29
Year 3	2003	29		29
Year 4	2004	26		26
Year 5	2005	23		23
Year 6	2006	25		25
Year 7	2007	29		29
Year 8	2008	32		32
Year 9	2009	32		32
Year 10	2010	25		25
Year 11	0			-
Year 12	0			-
Year 13	0			-
Year 14	0			-
Year 15	0			-

5 Year Baseline - Water into Distribution System

Year 1	2006	25		25
Year 2	2007	29		29
Year 3	2008	32		32
Year 4	2009	32		32
Year 5	2010	25		25

¹ **Units of measure** (AF, MG, or CCF) must remain consistent throughout the UWMP, as reported in Table 2-3.

² **Meter Error Adjustment** - See guidance in Methodology 1, Step 3 of Methodologies Document

NOTES:

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)

Complete one table for each source.

Name of Source National Ave Treatment Plant

This water source is:

<input checked="" type="checkbox"/>	The supplier's own water source			
<input type="checkbox"/>	A purchased or imported source			
Baseline Year <i>Fm SB X7-7 Table 3</i>		Volume Entering Distribution System ¹	Meter Error Adjustment ² <i>Optional</i> (+/-)	Corrected Volume Entering Distribution System
10 to 15 Year Baseline - Water into Distribution System				
Year 1	2001	386		386
Year 2	2002	387		387
Year 3	2003	439		439
Year 4	2004	455		455
Year 5	2005	434		434
Year 6	2006	445		445
Year 7	2007	440		440
Year 8	2008	456		456
Year 9	2009	438		438
Year 10	2010	431		431
Year 11	0			0
Year 12	0			0
Year 13	0			0
Year 14	0			0
Year 15	0			0
5 Year Baseline - Water into Distribution System				
Year 1	2006	445		445
Year 2	2007	440		440
Year 3	2008	456		456
Year 4	2009	438		438
Year 5	2010	431		431
¹ Units of measure (AF, MG, or CCF) must remain consistent throughout the UWMP, as reported in Table 2-3. ² Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document				
NOTES:				

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)
 Complete one table for each source.

Name of Source	Carnelian Well
This water source is:	
<input checked="" type="checkbox"/>	The supplier's own water source
<input type="checkbox"/>	A purchased or imported source

Baseline Year <i>Fm SB X7-7 Table 3</i>		Volume Entering Distribution System ¹	Meter Error Adjustment ² <i>Optional</i> (+/-)	Corrected Volume Entering Distribution System
10 to 15 Year Baseline - Water into Distribution System				
Year 1	2001	28		28
Year 2	2002	33		33
Year 3	2003	30		30
Year 4	2004	30		30
Year 5	2005	30		30
Year 6	2006	28		28
Year 7	2007	26		26
Year 8	2008	26		26
Year 9	2009	23		23
Year 10	2010	22		22
Year 11	0			0
Year 12	0			0
Year 13	0			0
Year 14	0			0
Year 15	0			0
5 Year Baseline - Water into Distribution System				
Year 1	2006	28		28
Year 2	2007	26		26
Year 3	2008	26		26
Year 4	2009	23		23
Year 5	2010	22		22
¹ Units of measure (AF, MG , or CCF) must remain consistent throughout the UWMP, as reported in Table 2-3. ² Meter Error Adjustmen t - See guidance in Methodology 1, Step 3 of Methodologies Document				
NOTES:				

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)

Complete one table for each source.

Name of Source	Park Well		
This water source is:			
<input checked="" type="checkbox"/>	The supplier's own water source		
<input type="checkbox"/>	A purchased or imported source		
Baseline Year <i>Fm SB X7-7 Table 3</i>	Volume Entering Distribution System ¹	Meter Error Adjustment ² <i>Optional</i> (+/-)	Corrected Volume Entering Distribution System

10 to 15 Year Baseline - Water into Distribution System				
Year 1	2001	80		80
Year 2	2002	98		98
Year 3	2003	21		21
Year 4	2004	24		24
Year 5	2005	7		7
Year 6	2006	22		22
Year 7	2007	43		43
Year 8	2008	21		21
Year 9	2009	16		16
Year 10	2010	6		6
Year 11	0			0
Year 12	0			0
Year 13	0			0
Year 14	0			0
Year 15	0			0
5 Year Baseline - Water into Distribution System				
Year 1	2006	22		22
Year 2	2007	43		43
Year 3	2008	21		21
Year 4	2009	16		16
Year 5	2010	6		6
¹ Units of measure (AF, MG , or CCF) must remain consistent throughout the UWMP, as reported in Table 2-3. ² Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document				
NOTES:				

SB X7-7 Table 5: Baseline Gallons Per Capita Per Day (GPCD)

Baseline Year <i>Fm SB X7-7 Table 3</i>		Service Area Population <i>Fm SB X7-7 Table 3</i>	Annual Gross Water Use <i>Fm SB X7-7 Table 4</i>	Daily Per Capita Water Use (GPCD)
10 to 15 Year Baseline GPCD				
Year 1	2001	5,007	523	286
Year 2	2002	4,974	547	301
Year 3	2003	4,938	519	288
Year 4	2004	4,901	535	299
Year 5	2005	4,861	494	278
Year 6	2006	4,813	520	296
Year 7	2007	4,764	538	309
Year 8	2008	4,714	535	311
Year 9	2009	4,662	509	299
Year 10	2010	4,601	484	288
<i>Year 11</i>	0	-	-	
<i>Year 12</i>	0	-	-	
<i>Year 13</i>	0	-	-	
<i>Year 14</i>	0	-	-	
<i>Year 15</i>	0	-	-	
10-15 Year Average Baseline GPCD				296
5 Year Baseline GPCD				
Baseline Year <i>Fm SB X7-7 Table 3</i>		Service Area Population <i>Fm SB X7-7 Table 3</i>	Gross Water Use <i>Fm SB X7-7 Table 4</i>	Daily Per Capita Water Use
Year 1	2006	4,813	520	296
Year 2	2007	4,764	538	309
Year 3	2008	4,714	535	311
Year 4	2009	4,662	509	299
Year 5	2010	4,601	484	288
5 Year Average Baseline GPCD				301
NOTES:				

SB X7-7 Table 6: Baseline GPCD

Summary

From Table SB X7-7 Table 5

10-15 Year Baseline GPCD	296
5 Year Baseline GPCD	301

NOTES:

SB X7-7 Table 7: 2020 Target Method*Select Only One*

Target Method		Supporting Tables
<input checked="" type="checkbox"/>	Method 1	SB X7-7 Table 7A
<input type="checkbox"/>	Method 2	SB X7-7 Tables 7B, 7C, and 7D
<input type="checkbox"/>	Method 3	SB X7-7 Table 7-E
<input type="checkbox"/>	Method 4	Method 4 Calculator <i>Located</i> <i>in the WUE Data Portal at</i> <i>wuedata.water.ca.gov</i> Resources <i>button</i>

NOTES:

SB X7-7 Table 7-A: Target Method 1	
20% Reduction	
10-15 Year Baseline GPCD	2020 Target GPCD
296	237
NOTES:	

SB X7-7 Table 7-F: Confirm Minimum Reduction for 2020 Target

5 Year Baseline GPCD <i>From SB X7-7 Table 5</i>	Maximum 2020 Target ¹	Calculated 2020 Target ²			Confirmed 2020 Target ⁴
		As calculated by supplier in this SB X7-7 Verification Form	Special Situations ³		
			Prorated 2020 Target	Population Weighted Average 2020 Target	
301	286	237			237

¹ **Maximum 2020 Target** is 95% of the 5 Year Baseline GPCD except for suppliers at or below 100 GPCD.

² **Calculated 2020 Target** is the target calculated by the Supplier based on the selected Target Method, see SB X7-7 Table 7 and corresponding tables for agency's calculated target. Supplier may only enter one calculated target.

³ **Prorated targets and population weighted target** are allowed for special situations only. These situations are described in Appendix P, Section P.3

4

Confirmed Target is the lesser of the Calculated 2020 Target (C5, D5, or E5) or the Maximum 2020 Target (Cell B5)

NOTES:

SB X7-7 Table 0: Units of Measure Used in 2020 UWMP*

(select one from the drop down list)

Million Gallons

**The unit of measure must be consistent throughout the UWMP, as reported in Submittal Table 2-3.*

NOTES:

SB X7-7 Table 2: Method for 2020 Population Estimate

Method Used to Determine 2020 Population
(may check more than one)



**1. Department of Finance (DOF) or
American Community Survey (ACS)**



2. Persons-per-Connection Method



3. DWR Population Tool



4. Other
DWR recommends pre-review

NOTES:

SB X7-7 Table 3: 2020 Service Area Population

2020 Compliance Year Population

2020	4,869
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NOTES:

SB X7-7 Table 4: 2020 Gross Water Use

Compliance Year 2020	2020 Volume Into Distribution System <i>This column will remain blank until SB X7-7 Table 4-A is completed.</i>	2020 Deductions					2020 Gross Water Use
		Exported Water *	Change in Dist. System Storage* (+/-)	Indirect Recycled Water <i>This column will remain blank until SB X7-7 Table 4-B is completed.</i>	Water Delivered for Agricultural Use*	Process Water <i>This column will remain blank until SB X7-7 Table 4-D is completed.</i>	
	381	-	-	-	-	-	381

* Units of measure (AF, MG , or CCF) must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3.

NOTES:

SB X7-7 Table 4-A: 2020 Volume Entering the Distribution System(s), Meter Error Adjustment

Complete one table for each source.

Name of Source	Dollar Cove		
This water source is (check one) :			
<input type="checkbox"/>	The supplier's own water source		
<input checked="" type="checkbox"/>	A purchased or imported source		
Compliance Year 2020	Volume Entering Distribution System ¹	Meter Error Adjustment ² Optional (+/-)	Corrected Volume Entering Distribution System
	26	-	26
¹ Units of measure (AF, MG , or CCF) must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3. ² Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document			
NOTES			

SB X7-7 Table 4-A: 2020 Volume Entering the Distribution System(s) Meter Error Adjustment

Complete one table for each source.

Name of Source	Carnelian Well		
This water source is (check one) :			
<input checked="" type="checkbox"/>	The supplier's own water source		
<input type="checkbox"/>	A purchased or imported source		
Compliance Year 2020	Volume Entering Distribution System ¹	Meter Error Adjustment ² Optional (+/-)	Corrected Volume Entering Distribution System
	23		23
¹ Units of measure (AF, MG , or CCF) must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3. ² Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document			
NOTES:			

SB X7-7 Table 4-A: 2020 Volume Entering the Distribution System(s), Meter Error Adjustment

Complete one table for each source.

Name of Source	Park Well		
-----------------------	-----------	--	--

This water source is (check one) :			
<input checked="" type="checkbox"/>	The supplier's own water source		
<input type="checkbox"/>	A purchased or imported source		
Compliance Year 2020	Volume Entering Distribution System ¹	Meter Error Adjustment ² <i>Optional</i> (+/-)	Corrected Volume Entering Distribution System
	20		20
¹ Units of measure (AF, MG , or CCF) must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3. ² Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document			
NOTES:			

SB X7-7 Table 4-A: 2020 Volume Entering the Distribution System(s), Meter Error Adjustment			
Complete one table for each source.			
Name of Source	National Avenue Water Treatment Plant		
This water source is (check one) :			
<input checked="" type="checkbox"/>	The supplier's own water source		
<input type="checkbox"/>	A purchased or imported source		
Compliance Year 2020	Volume Entering Distribution System ¹	Meter Error Adjustment ² <i>Optional</i> (+/-)	Corrected Volume Entering Distribution System
	312		312
¹ Units of measure (AF, MG , or CCF) must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3. ² Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document			
NOTES:			

SB X7-7 Table 4-B: 2020 Indirect Recycled Water Use Deduction (For use only by agencies that are deducting indirect recycled water)									
2020 Compliance Year	2020 Surface Reservoir Augmentation					2020 Groundwater Recharge			Total Deductible Volume of Indirect Recycled Water Entering the Distribution System
	Volume Discharged from Reservoir for Distribution System Delivery ¹	Percent Recycled Water	Recycled Water Delivered to Treatment Plant	Transmission/Treatment Loss ¹	Recycled Volume Entering Distribution System from Surface Reservoir Augmentation	Recycled Water Pumped by Utility ^{1,2}	Transmission/Treatment Losses ¹	Recycled Volume Entering Distribution System from Groundwater Recharge	
			-		-			-	-

¹ Units of measure (AF, MG , or CCF) must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3.

Suppliers will provide supplemental sheets to document the calculation for their input into "Recycled Water Pumped by Utility". The volume reported in this cell must be less than total groundwater pumped - See Methodology 1, Step 8, section 2.c.

NOTES: Not applicable because not deducting indirect recycled water.

Data from this table will not be entered into WUEdata.
Instead, the entire table will be uploaded to WUEdata as a separate upload in Excel format.

SB X7-7 Table 4-C: 2020 Process Water Deduction Eligibility

(For use only by agencies that are deducting process water) Choose Only One

<input type="checkbox"/>	Criteria 1- Industrial water use is equal to or greater than 12% of gross water use. Complete SB X7-7 Table 4-C.1
<input type="checkbox"/>	Criteria 2 - Industrial water use is equal to or greater than 15 GPCD. Complete SB X7-7 Table 4-C.2
<input type="checkbox"/>	Criteria 3 - Non-industrial use is equal to or less than 120 GPCD. Complete SB X7-7 Table 4-C.3
<input type="checkbox"/>	Criteria 4 - Disadvantaged Community. Complete SB x7-7 Table 4-C.4

NOTES: Not applicable because not deducting process water.

Data from this table will not be entered into WUEdata.
Instead, the entire table will be uploaded to WUEdata as a separate upload in
Excel format.

SB X7-7 Table 4-C.1: 2020 Process Water Deduction Eligibility *(For use only by agencies that are deducting process water using Criteria 1)*

Criteria 1

Industrial water use is equal to or greater than 12% of gross water use

2020 Compliance Year	2020 Gross Water Use Without Process Water Deduction	2020 Industrial Water Use	Percent Industrial Water	Eligible for Exclusion Y/N
	381		0%	NO

NOTES: Not applicable because not deducting process water.

Data from this table will not be entered into WUEdata.
Instead, the entire table will be uploaded to WUEdata as a separate upload in Excel format.

SB X7-7 Table 4-C.2: 2020 Process Water Deduction Eligibility (For use only by agencies that are deducting process water using Criteria 2)				
Criteria 2 Industrial water use is equal to or greater than 15 GPCD				
2020 Compliance Year	2020 Industrial Water Use	2020 Population	2020 Industrial GPCD	Eligible for Exclusion Y/N
		4,869	-	NO
NOTES: Not applicable because not deducting process water.				

Data from this table will not be entered into WUEdata.
Instead, the entire table will be uploaded to WUEdata as a separate upload in Excel format.

SB X7-7 Table 4-C.3: 2020 Process Water Deduction Eligibility

(For use

only by agencies that are deducting process water using Criteria 3)

Criteria 3

Non-industrial use is equal to or less than 120 GPCD

2020 Compliance Year	2020 Gross Water Use Without Process Water Deduction <i>Fm SB X7-7 Table 4</i>	2020 Industrial Water Use	2020 Non-industrial Water Use	2020 Population <i>Fm SB X7-7 Table 3</i>	Non-Industrial GPCD	Eligible for Exclusion Y/N
	381		381	4,869	214	NO

NOTES: Not applicable because not deducting process water.

Data from this table will not be entered into WUEdata.
Instead, the entire table will be uploaded to WUEdata as a separate upload in Excel format.

SB X7-7 Table 4-C.4: 2020 Process Water Deduction Eligibility *(For use only by agencies that are deducting process water using Criteria 4)*

Criteria 4

Disadvantaged Community. A "Disadvantaged Community" (DAC) is a community with a median household income less than 80 percent of the statewide average.

SELECT ONE

"Disadvantaged Community" status was determined using one of the methods listed below:

1. IRWM DAC Mapping tool <https://gis.water.ca.gov/app/dacs/>

☐

If using the IRWM DAC Mapping Tool, include a screen shot from the tool showing that the service area is considered a DAC.

2. 2020 Median Income

	California Median Household Income*		Service Area Median Household Income	Percentage of Statewide Average	Eligible for Exclusion? Y/N
<input type="checkbox"/>	2020	\$75,235		0%	YES
*California median household income 2015 -2019 as reported in US Census Bureau QuickFacts.					

NOTES: Not applicable because not deducting process water.

SB X7-7 Table 5: 2020 Gallons Per Capita Per Day (GPCD)		
2020 Gross Water <i>Fm SB X7-7 Table 4</i>	2020 Population <i>Fm SB X7-7 Table 3</i>	2020 GPCD
381	4,869	214
NOTES:		

SB X7-7 Table 9: 2020 Compliance

Actual 2020 GPCD ¹	Optional Adjustments to 2020 GPCD					2020 Confirmed Target GPCD ^{1, 2}	Did Supplier Achieve Targeted Reduction for 2020?
	Enter "0" if Adjustment Not Used			TOTAL Adjustments ¹	Adjusted 2020 GPCD ¹ <i>(Adjusted if applicable)</i>		
	Extraordinary Events ¹	Weather Normalization ¹	Economic Adjustment ¹				
214	-	-	-	-	214	237	YES

¹ All values are reported in GPCD

² **2020 Confirmed Target GPCD** is taken from the Supplier's SB X7-7 Verification Form Table SB X7-7, 7-F.

NOTES:

Water Code Section	Summary as Applies to UWMP	2020 Guidebook Location	2020 UWMP Location (Optional Column for Agency Review Use)
10608.20(e)	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	Chapter 5	Section 5
10608.22	Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5 year baseline. This does not apply if the suppliers base GPCD is at or below 100.	Section 5.7.2	Section 5.1
10608.24(a)	Retail suppliers shall meet their water use target by December 31, 2020.	Section 5.7	Section 5.3
10608.24(d)(2)	If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary events, it shall provide the basis for, and data supporting the adjustment.	Sections 5.2 and 5.5.7	N/A
10608.36	Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions.	Section 5.1	N/A
10608.4	Retail suppliers shall report on their progress in meeting their water use targets. The data shall be reported using a standardized form.	Section 5.8 and App E	Section 5.3 and Appendix B
10631(e)(1)	Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years.	Sections 9.2 and 9.3	Section 9.2
10631(e)(2)	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	Sections 9.1 and 9.3	N/A
10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets.	Chapter 10	Section 10.3
10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.	Section 10.2.1	Section 10.2
10621(f)	Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.	Sections 10.3.1 and 10.4	Section 10.4
10635(c)	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 60 days after the submission of the plan to DWR.	Sections 8.12, 10.4	Section 8.10 and Appendix E
10642	Provide supporting documentation that the urban water supplier made the plan and contingency plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan and contingency plan.	Sections 10.2.2, 10.3, and 10.5	Sections 10.2.2, 10.3, and 10.5 and Appendix E
10642	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Section 10.2	Section 10.2.1
10642	Provide supporting documentation that the plan and contingency plan has been adopted as prepared or modified.	Section 10.3.1	Section 10.3.1
10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Section 10.5	Section 10.4.3
10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Section 10.5	Section 10.4.4
10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Sections 10.4.1 and 10.4.2	Section 10.4.2 and 10.6
10645(a)	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Section 10.5	Section 10.5
10645(b)	Provide supporting documentation that, not later than 30 days after filing a copy of its water shortage contingency plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Section 10.5	Section 8.10 and Appendix E
10620(b)	Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.	Section 2.1	Section 2.1
10620(d)(2)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Section 2.5.2	Section 2.5.2
10642	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan and contingency plan.	Section 2.6	Section 2.5.2
10630.5	Each plan shall include a simple description of the supplier's plan including water availability, future requirements, a strategy for meeting needs, and other pertinent information.	Chapter 1	Chapter 1
10631(a)	Describe the water supplier service area.	Section 3.1	Sections 3.1 and 3.2
10631(a)	Describe the climate of the service area of the supplier.	Section 3.3	Section 3.3
10631(a)	Provide population projections for 2025, 2030, 2035, 2040 and optionally 2045.	Section 3.4	Section 3.4
10631(a)	Describe other social, economic, and demographic factors affecting the supplier's water management planning.	Section 3.4	Section 3.4
10631(a)	Describe the land uses within the service area.	Section 3.5	Section 3.1

Water Code Section	Summary as Applies to UWMP	2020 Guidebook Location	2020 UWMP Location (Optional Column for Agency Review Use)
10631(a)	Indicate the current population of the service area.	Sections 3.4 and 5.4	Section 3.4
10631(b)	Identify and quantify the existing and planned sources of water available for 2020, 2025, 2030, 2035, 2040 and optionally 2045.	Section 6.2.8	Section 6.9
10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	Section 6.2	Section 6.2
10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought.	Section 6.2	Section 7
10631(b)(2)	When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies.	Section 6.1	Section 6
10631(b)(3)	Describe measures taken to acquire and develop planned sources of water.	Section 6.1	Section 6.8
10631(b)(4)(A)	Indicate whether a groundwater sustainability plan or groundwater management plan has been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	Section 6.2.2	Section 6.2.2
10631(b)(4)(B)	Describe the groundwater basin.	Section 6.2.2	Section 6.2.1
10631(b)(4)(B)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the supplier has the legal right to pump.	Section 6.2.2	Section 6.2.2
10631(b)(4)(B)	For unadjudicated basins, indicate whether or not the department has identified the basin as a high or medium priority. Describe efforts by the supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions.	Section 6.2.3	Section 6.2.2
10631(b)(4)(C)	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	Section 6.2.4	Section 6.2.4
10631(b)(4)(D)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	Section 6.2	
10631(c)	Describe the opportunities for exchanges or transfers of water on a short-term or long- term basis.	Section 6.7	Section 6.7
10631(f)	Describe the expected future water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single- dry, and for a period of drought lasting 5 consecutive water years.	Section 6.8	Section 6.8
10631(g)	Describe desalinated water project opportunities for long-term supply.	Section 6.6	Section 6.8
10631(h)	Retail suppliers will include documentation that they have provided their wholesale supplier(s) - if any - with water use projections from that source.	Section 2.5.1	Section 2.4.5
10631(h)	Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.	Section 2.5.1	N/A
10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	Section 6.2	Section 6.5
10633(c)	Describe the recycled water currently being used in the supplier's service area.	Section 6.2	Section 6.5
10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	Section 6.2	Section 6.5
10633(e)	Describe the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	Section 6.2	Section 6.5
10633(f)	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	Section 6.2	Section 6.5
10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	Section 6.2	Section 6.5
10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	Section 4.2	Section 4.2
10631(d)(3)(A)	Report the distribution system water loss for for each of the 5 years preceding the plan update.	Section 4.3	Section 4.3
10631(d)(3)(C)	Retail suppliers shall provide data to show the distribution loss standards were met.	Section 4.2	Section 4.3
10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	Section 4.5	Section 4.5
10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Chapter 8	Section 8 and Appendix E
10632(a)(2)(A)	Provide the written decision-making process and other methods that the supplier will use each year to determine its water reliability.	Section 8.2	Section 8 and Appendix E
10632(a)(2)(B)	Provide data and methodology to evaluate the supplier's water reliability for the current year and one dry year pursuant to factors in the code.	Section 8.2	Section 8 and Appendix E
10632(a)(3)(A)	Define six standard water shortage levels of 10, 20, 30, 40, 50 percent shortage and greater than 50 percent shortage. These levels shall be based on supply conditions, including percent reductions in supply, changes in groundwater levels, changes in surface elevation, or other conditions. The shortage levels shall also apply to a catastrophic interruption of supply.	Section 8.3	Section 8 and Appendix E
10632(a)(3)(B)	Suppliers with an existing water shortage contingency plan that uses different water shortage levels must cross reference their categories with the six standard categories.	Section 8.3	Section 8 and Appendix E
10632(a)(4)(A)	Suppliers with water shortage contingency plans that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	Section 8.4	Section 8 and Appendix E
10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Section 8.4	Section 8 and Appendix E
10632(a)(4)(C)	Specify locally appropriate operational changes.	Section 8.4	Section 8 and Appendix E

Water Code Section	Summary as Applies to UWMP	2020 Guidebook Location	2020 UWMP Location (Optional Column for Agency Review Use)
10632(a)(4)(D)	Specify additional mandatory prohibitions against specific water use practices that are in addition to state- mandated prohibitions are appropriate to local conditions.	Section 8.4	Section 8 and Appendix E
10632(a)(4)(E)	Estimate the extent to which the gap between supplies and demand will be reduced by implementation of the action.	Section 8.4	Section 8 and Appendix E
10632(a)(5)(A)	Suppliers must describe that they will inform customers, the public and others regarding any current or predicted water shortages.	Section 8.5	Section 8 and Appendix E
10632(a)(5)(B) 10632(a)(5)(C)	Suppliers must describe that they will inform customers, the public and others regarding any shortage response actions triggered or anticipated to be triggered and other relevant communications.	Section 8.5, 8.6	Section 8 and Appendix E
10632(a)(7)(A)	Describe the legal authority that empowers the supplier to enforce shortage response actions.	Section 8.7	Section 8 and Appendix E
10632(a)(7)(B)	Provide a statement that the supplier will declare a water shortage emergency Water Code Chapter 3.	Section 8.7	Section 8 and Appendix E
10632(a)(7)(C)	Provide a statement that the supplier will coordinate with any city or county within which it provides water for the possible proclamation of a local emergency.	Section 8.7	Section 8 and Appendix E
10632(a)(8)(A)	Describe the potential revenue reductions and expense increases associated with activated shortage response actions.	Section 8.8	Section 8 and Appendix E
10632(a)(8)(B)	Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions.	Section 8.8	Section 8 and Appendix E
10632(a)(8)(C)	Describe the cost of compliance with Water Code Chapter 3.3: Excessive Residential Water Use During Drought.	Section 8.8	Section 8 and Appendix E
10632(a)(9)	Retail suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance.	Section 8.9	Section 8 and Appendix E
10632(a)(10)	Describe reevaluation and improvement procedures for monitoring and evaluation the water shortage contingency plan to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented.	Section 8.10	Section 8 and Appendix E
10632(b)	Analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.	Section 8.11	Section 8 and Appendix E
10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Section 7.4	Section 7.4
10634	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Chapter 7	Section 7.2
10635(a)	Assess the water supply reliability during normal, dry, and multiple dry water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years.	Section 7.3	Section 6.9
10635(b)	Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects.	Section 7.3	Section 7.5
10635(b)(1)	Include a description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts 5 consecutive years.	Section 7.3	Section 7.5
10635(b)(2)	Include a determination of the reliability of each source of supply under a variety of water shortage conditions.	Section 7.3	Section 7.2
10635(b)(3)	Include a comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.	Section 7.3	Section 7.5
10635(b)(4)	Include considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change condition, anticipated regulatory changes, and other locally applicable criteria.	Section 7.3	Section 4.5
10631.2(a)	The UWMP must include energy intensity information as stated in the code.	Section 6.4 and Appendix O	Section 6.10

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Appendix C. City and County Notification Letters and Public Hearing Notices



April 8, 2021

Placer County
175 Fulweiler
Auburn, CA 95603

Subject: North Tahoe Public Utility District 2020 Urban Water Management Plan Update

The North Tahoe Public Utility District is in the process of preparing and updating its 2020 Urban Water Management Plan (UWMP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of the North Tahoe Public Utility District's UWMP is required every five (5) years.

Water Code section 10621(b) requires an urban water supplier updating its UWMP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as North Tahoe Public Utility District's notice that it is preparing and updating its 2020 UWMP, to be adopted and submitted to the California Department of Water Resources before the July 1, 2021 deadline. North Tahoe Public Utility District will be adopting its Water Shortage Contingency Plan as part of the 2020 UWMP.

A copy of North Tahoe Public Utility District's draft 2020 UWMP will be available for review on the NTPUD website (ntpud.org) in spring of 2021, and the North Tahoe Public Utility District will subsequently hold noticed public hearings on the 2020 UWMP and Water Shortage Contingency Plan in advance of their proposed adoption.

The North Tahoe Public Utility District invites you to submit comments and consult with the North Tahoe Public Utility District regarding its 2020 UWMP update. The North Tahoe Public Utility District anticipates holding a public comment period in spring 2021, with a public hearing on June 8, 2021.

If you have any input for the matters contained in this notice letter, require additional information, or would like to set up a meeting to discuss North Tahoe Public Utility District's 2020 UWMP update, please contact me at 530-553-5430, or by email at jpomroy@ntpud.org.

Sincerely,

Joseph J. Pomroy, P.E.
Engineering and Operations Manager

PO Box 139, Tahoe Vista, CA 96148 • (530) 546-4212 • FAX (530) 546-2652 • 875 National Ave

e-mail: ntpud@ntpud.org • website: www.ntpud.org



April 8, 2021

Tahoe City Public Utility District
PO Box 5249
Tahoe City, CA 96145

Subject: North Tahoe Public Utility District 2020 Urban Water Management Plan Update

The North Tahoe Public Utility District is in the process of preparing and updating its 2020 Urban Water Management Plan (UWMP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of the North Tahoe Public Utility District's UWMP is required every five (5) years.

Water Code section 10621(b) requires an urban water supplier updating its UWMP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as North Tahoe Public Utility District's notice that it is preparing and updating its 2020 UWMP, to be adopted and submitted to the California Department of Water Resources before the July 1, 2021 deadline. North Tahoe Public Utility District will be adopting its Water Shortage Contingency Plan as part of the 2020 UWMP.

A copy of North Tahoe Public Utility District's draft 2020 UWMP will be available for review on the NTPUD website (ntpud.org) in spring of 2021, and the North Tahoe Public Utility District will subsequently hold noticed public hearings on the 2020 UWMP and Water Shortage Contingency Plan in advance of their proposed adoption.

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e-mail: ntpud@ntpud.org • website: www.ntpud.org



April 8, 2021

Incline Village General Improvement District
1220 Sweetwater Rd
Incline Village, NV 89451

Subject: North Tahoe Public Utility District 2020 Urban Water Management Plan Update

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April 8, 2021

Agate Bay Water Company
5424 Treeside Dr
Carmichael, CA 95608

Subject: North Tahoe Public Utility District 2020 Urban Water Management Plan Update

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e-mail: ntpud@ntpud.org • website: www.ntpud.org



April 8, 2021

Fulton Water Company
PO Box 1709
Carnelian Bay, CA 96140

Subject: North Tahoe Public Utility District 2020 Urban Water Management Plan Update

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April 8, 2021

Tahoe Truckee Unified School District
11603 Donner Pass Road
Truckee, CA 96161

Subject: North Tahoe Public Utility District 2020 Urban Water Management Plan Update

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e-mail: ntpud@ntpud.org • website: www.ntpud.org



April 8, 2021

North Tahoe Business Association
PO Box 1023
Kings Beach, CA 96143

Subject: North Tahoe Public Utility District 2020 Urban Water Management Plan Update

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Engineering and Operations Manager

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e-mail: ntpud@ntpud.org • website: www.ntpud.org



April 8, 2021

Tahoe Sierra Integrated Regional Water Management Group
1275 Meadow Crest Drive
South Lake Tahoe, CA 96150

Subject: North Tahoe Public Utility District 2020 Urban Water Management Plan Update

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e-mail: ntpud@ntpud.org • website: www.ntpud.org



April 8, 2021

Tahoe Water Suppliers Association
1220 Sweetwater Rd
Incline Village, NV 89451

Subject: North Tahoe Public Utility District 2020 Urban Water Management Plan Update

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e-mail: ntpud@ntpud.org • website: www.ntpud.org

**NOTICE OF PUBLIC REVIEW PERIOD AND
PUBLIC HEARING
ON THE NORTH TAHOE PUBLIC UTILITY
DISTRICT
2020 URBAN WATER MANAGEMENT PLAN**

Notice is hereby given that the North Tahoe Public Utility District (NTPUD) Board of Directors is considering the adoption of an Urban Water Management Plan. A copy of the 2020 Urban Water Management Plan (Plan) is available at the NTPUD office and on the NTPUD's website (www.ntpud.org).

On **May 11, 2021**, the NTPUD Board of Directors will hold a public hearing during the regular board meeting. Pursuant to Executive Order N-29-20, the meeting will be held via Zoom teleconference at the number listed below:

Zoom:
<https://us02web.zoom.us/j/89316776846>,
Meeting ID: 893 1677 6846
Telephone: (888) 475-4499 (Toll Free)

At **3:00 p.m.**, or as soon thereafter as possible, the NTPUD Board of Directors will receive public comment on the Plan.

Interested parties are invited to express their views during the public hearing in written or oral form or to submit written views prior to the time of the public hearing by regular mail at the address below or by email to mmoga@ntpud.org. All written comments must be received no later than 1:30 p.m. on Tuesday, May 11, 2021.

North Tahoe Public Utility District
PO Box 139
Tahoe Vista, CA 96148
530-546-4212
www.ntpud.org

Publication: April 23, 30, 2021
Ad #

**NOTICE OF PUBLIC REVIEW PERIOD AND
PUBLIC HEARING
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DISTRICT
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North Tahoe Public Utility District
PO Box 139
Tahoe Vista, CA 96148
530-546-4212
www.ntpud.org

Publication: May 21, 28, 2021 Ad #0000687495

Appendix D. Public Hearing and Adoption Documentation

Appendix to be included in Final UWMP.

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Appendix E. Water Shortage Contingency Plan

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Water Shortage Contingency Plan

North Tahoe Public Utilities District

Tahoe Vista, California
June 1, 2021



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1 Introduction

This Water Shortage Contingency Plan (WSCP) examines the District's contingency plan in the event of a declared water emergency or enactment of more stringent restrictions on water use.

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 amend portions of the California Water Code (CWC), including §10632, which is related to water shortage contingency planning. Among other changes, the amended CWC requires agencies to incorporate an annual water supply and demand assessment under its Urban Water Management Plan (UWMP). It also specifies the adoption of six standard water shortage levels. This WSCP discusses the District's compliance with new regulations, as outlined in §10632 (a)(2) and §10632.1 of the CWC, and steps taken to address an extended drought and water emergency.

2 Annual Water Supply and Demand Assessment

The new CWC §10632(a)(2) requires that urban water suppliers conduct an annual water supply and demand assessment (Annual Assessment). This chapter describes the procedures used to 1) conduct the Annual Assessment, and 2) prepare and submit an Annual Assessment Report to the state. In addition, this chapter outlines key inputs to conduct the Annual Assessment, the decision-making process for determining water supply reliability, and the ability/flexibility for the District to use shortage response actions not included in the WSCP, as applicable.

The District, in accordance with the provisions of the CWC, will determine if a supply shortage exists and declare any foreseen water shortage level based on the results of the Annual Assessment, which will then be included in the Annual Assessment Report submitted to the state. The evaluation is conducted by the District to determine if a shortage declaration is needed, and at what level. The Annual Assessment Report will document any anticipated shortage, any triggered shortage response actions, associated compliance and enforcement actions, and communication actions. Reasonable alternative actions can be used to address identified water shortages, provided that descriptions of alternative actions are submitted with the Annual Assessment Report.

2.1 Decision Making Process

Each year the District will use the following steps to determine, and subsequently report to the state, its water supply reliability.

- District will determine available local supplies and also total available supplies.
- District will review known infrastructure constraints (including water quality conditions limiting local sources).

- District reviews and estimates current and projected water demands.
- District compares supply and demand and makes a determination of the water supply reliability for the current year and one dry year.
- District prepares and submits Annual Assessment Report to the state.

Evaluation criteria for the District's supplies, demands, and water shortage levels will include local groundwater and surface water availability, storage, infrastructure constraints, and recent water demand trends.

2.2 Current and Projected Demands

The Annual Assessment will use the District's recent demand data and projections (adjusted by previous year active consumption) which considers demand, weather, population growth, and other influencing factors for the current year and following years.

2.3 Available and Projected Water Supply

The District will evaluate the current year available supply and one dry year available supply in its Annual Assessment. The available water supply evaluation will consider hydrological and regulatory conditions. Available supply from each water source will consider local surface water storage and emergency storage allocations, groundwater production from the previous year and potential projected groundwater production.

2.4 Infrastructure Constraints

The District's existing water supply infrastructure includes a water treatment plant, pipelines, storage tanks, pump stations, and groundwater wells. The District will evaluate existing water supply and capacities and any constraints for the current year and for one dry year. Infrastructure constraints may consider supply capabilities in the current year, such as shut-downs due to maintenance, construction impacts, and water quality impacts. Once constraints have been identified, the District will determine whether the total quantified water supply should be adjusted to account for these identified constraints.

3 Water Shortage Levels

Per District Water Ordinance, Section 8 (Water Conservation), the District has six stages available to declare depending on conditions (Table 3-1). Stages of water conservation measures, use requirements, and restrictions are described in detail in the Water Ordinance. Increasing stages correspond with increasing levels of required water conservation, use, and restrictions as formally declared by the Board at a publicly noticed meeting. Each increasing stage level also includes all conservation measures, use requirements, and restrictions of all previously declared lower level stages.

The District operates in Water Conservation Stage 1 under normal conditions, unless otherwise directed by the state or as otherwise determined by the District Board of Directors. The District Water Ordinance, Section 8 (Drought Conditions), enables the

Board to make such declarations. Customers are required to comply with the most current conservation stage declared by the District, or other government agencies, whichever is more restrictive.

Each step (beginning with Stage 1) implements increased conservation requirements. Reduction goals are summarized in Table 3-1 and described in detail below:

Table 3-1. Water Shortage Levels

Water Shortage Level	Percent Reduction
Stage 1: Standard Operating Condition	10
Stage 2: Drought Watch Condition	20
Stage 3: Board Declared Emergency Action	30
Stage 4: Drought Critical Condition	40
Stage 5: State and Board Declared Extreme Emergency Action	50
Stage 6: State and Board Declared Extreme Emergency Action	> 50

4 Shortage Response Actions

Shortage response actions included in this WSCP are a mix of prohibitions on end use, consumption reduction methods, supply augmentation, and operational change measures.

Table 5-1. Restrictions and Prohibitions on End Users – Retail Only

Stage	Restrictions and Prohibitions on End Users*	Additional Explanation or Reference (Optional)	Penalty, Charge, or Other Enforcement?
1	Landscape – Restrict or prohibit runoff from landscape irrigation		Yes
1	Other – Require automatic shut of hoses		Yes
1	Other – Prohibit use of potable water for washing hard surfaces		Yes
1	Water Features - Restrict water use for decorative water features such as fountains		Yes
1	Landscape - Limit landscape irrigation to specific times	Not within 48 hours of precipitation	Yes
1	Landscape – Other landscape restriction or prohibition	Not in public right-of-way	Yes
1	Landscape – Other landscape restriction or prohibition	New construction: Any inconsistent with Building Standards	Yes
1	CII - Restaurants may only serve water on request		Yes
1	CII - Lodging establishment must offer opt out of linen service		Yes

Table 5-1. Restrictions and Prohibitions on End Users – Retail Only

Stage	Restrictions and Prohibitions on End Users*	Additional Explanation or Reference (Optional)	Penalty, Charge, or Other Enforcement?
2	Other water feature or swimming pool restriction	No filling or refilling	Yes
2	Other – Customers must repair leaks, breaks, and malfunctions in a timely manner		Yes
2	Other	No FH use	Yes
2	Landscape – Limit landscape irrigation to specific times	Not during hottest part of day	Yes
2	Landscape – Limit landscape irrigation to specific days		Yes
3	Landscape – Prohibit all landscape irrigation		Yes
3	Landscape – Other landscape restriction or prohibition	With hand held only	Yes
3	Other	No new plantings	Yes
3	Other	Rationing	Yes

*These are the only categories that will be accepted by the WUEdata online submittal tool.

Notes:

See Water Ordinance, Chapter 8 (Attachment 8-1).

4.1 Stage 1: 10 Percent Reduction Goal

1. The customer shall maintain the private service lateral, from the water service connection, in good repair.
2. Any leak or abnormal use in plumbing and/or irrigation systems, including running toilets, or any leak in any receptacle used to store water for any purpose, shall be repaired when found; in any case leak shall be repaired within 10 days of District's notice to repair.
3. Irrigation resulting in application of, or runoff onto, sidewalks, walkways, roadways, parking lots, structures, any non-irrigated area, or adjacent properties is prohibited.
4. Any use of water that results in flooding or runoff into gutters, streets or onto adjacent property is prohibited.
5. Automatic shutoff valves or nozzles shall be used whenever a hose is used for cleaning or clearing of vehicles, walkways, patios, tennis courts, decks, driveways, parking areas, or other improved areas, whether paved or unpaved.
6. Automatic shutoff valves or nozzles shall be used whenever water is used in connection with construction activity.
7. Decorative water features that do not recirculate water are prohibited.
8. Written authorization from the District shall be obtained prior to use of any fire hydrant for any purpose other than fire suppression or emergency aid.

9. Water pressure shall not exceed 60 psi within any structure.
10. Irrigation systems shall be winterized and discontinued from operation by November 1st each year.
11. Any new irrigation system installed shall be equipped with rain sensing device halting irrigation during and within 48 hours after measurable precipitation.
12. New non-turf landscaping, including bedding plants and trees, shall be on drip, micro sprinkler, or micro sprayer irrigation systems. Overhead watering shall only be allowed for turf areas.
13. Landscaping may not be irrigated: (1) between the hours of 9:00 AM and 6:00 PM, (2) during, or within 48 hours after, measurable precipitation, and/or (3) when air temperature is less than 40 degrees Fahrenheit.

4.2 Stage 2: 20 Percent Reduction Goal

1. Water consumption by each customer, as measured by the District's meter, shall be reduced by 20 percent.
2. No irrigation shall occur on Saturday.
3. Properties with an even number street address may only irrigate on Monday, Wednesday, and Friday.
4. Properties with an odd number street address may only irrigate on Tuesday, Thursday, and Sunday.
5. Irrigation of non-turf areas that exclusively utilizes drip systems, including micro sprinklers and micro sprayers, or a hose with an automatic shutoff nozzle, shall be exempt from designated irrigation days.
6. Water shall not be applied to hard surfaces for any reason, except as required for pavement resurfacing or sealing, or health and safety reasons.
7. No filling or refilling of swimming pools.
8. Water consumption and allowed uses shall be reduced as specifically prescribed for individual customers based on historic: consumption, type of use, time of use, or any other relevant factors.
9. All visitor accommodations/businesses shall wash guest linens only on request and/or after checking out. A placard or notice stating such shall be displayed in each guest room.
10. All public entities shall display informational material, placards, and/or decals, provided by the District, in places visible to all customers.
11. The owner and/or manager of each hotel, motel, restaurant, convention center, and other visitor-serving facility shall display informational water conservation materials, placards, and/or decals, provided by the District, in places visible to all customers.

4.3 Stage 3: 30 Percent Reduction Goal

1. Water consumption by each customer, as measured by the District's meter, shall be reduced by 30 percent.
2. No irrigation shall occur on Saturday, Sunday, or Wednesday.
3. Properties with an even number street address may only irrigate on Monday and Thursday.
4. Properties with an odd number street address may only irrigate on Tuesday and Friday.
5. Irrigation of non-turf areas that exclusively utilizes drip systems, including micro sprinklers and micro sprayers, will be allowed only Monday through Friday, and shall be prohibited on Saturdays and Sundays.
6. All food service and drinking establishments shall serve drinking water only on request and shall provide a placard at each table, and/or language on their menu, stating such.
7. Other specific water reduction mandate, and/or use restrictions as defined and designated by the Board when Stage 3 action is declared.

4.4 Stage 4: 40 Percent Reduction Goal

1. Water consumption by each customer, as measured by the District's meter, shall be reduced by 40 percent.
2. The use of water for other than domestic and commercial non-irrigation use is prohibited.
3. Irrigation of landscaping of any type is prohibited, except that irrigation of public facilities may be permitted pursuant to review, conditioning, and approval by the District.
4. The application of water to hard surfaces is prohibited.
5. Use of decorative water features is prohibited.

4.5 Stage 5: 50 Percent Reduction Goal

Water consumption by each customer, as measured by the District's meter, shall be reduced by 50 percent.

4.6 Stage 6: Greater than 50 Percent Reduction Goal

The District may implement mandatory water rationing using rolling outages, or other methods, should the situation require. Affected customers will be notified via public outreach, local media, written notice posted at the property, mail, and/or personal contact.



5 Determining Water Shortage Reductions

The District's expected (targeted) savings are provided in Water Ordinance Chapter 8.

The District monitors how effective the combination of shortage response actions in each water shortage level is with meters. The District meters both water supplies entering the distribution system, and water consumed by individual customers. The District can compare this meter data with water use in prior months and during non-drought years to determine if it is achieving specific percentage goals for water consumption associated with the drought response levels. If the goals are not being met, the District can implement additional shortage response actions. The District is fully metered and reads all meters monthly.

Table 6-1. Stages of Water Shortage Contingency Plan – Consumption Reduction Methods

Stage	Consumption Reduction Methods by Water Supplier*	Additional Explanation or Reference (Optional)
1	Provide rebates on plumbing fixtures and devices	
1	Provide rebates for landscape irrigation efficiency	
1	Reduce system water loss	
2	Expand public information campaign	
2	Increase water waste patrols	
3	Moratorium or net zero demand increase on new connections	

*These are the only categories that will be accepted by the WUEdata online submittal tool.

Notes:

6 Penalties

Once an offense to the above noted water waste restrictions is confirmed, the District utilizes the below stepped system with increasing enforcement actions as required. The customer is given 5 days (with the exception between the 4th and Last Action, which is 2 days) to correct their water waste issue(s) before the District elevates the customer/property to the next step.

- Initial Engagement: Friendly “education based” letter (mailed 1st class) noting violation, potential for fines, and ultimately water will be shut off if not addressed.
- 2nd Action: Warning letter No. 1 (certified mail) with stronger message noting violation and potential for fines.
- 3rd Action: Warning letter No. 2 (certified mail) noting fines have begun (\$100/day).
- 4th Action: Warning letter No. 3 (Federal Express Next Day) noting fines have increased (\$250/day).
- Last Action: Water shut off.

The District's enforcement and patrols increases consistent with the severity of the water condition(s) and increasing stages of action.

7 Revenue and Expenditure Impacts

The District operates on two distinctly separated Water Enterprise accounting platforms. Each is addressed below.

7.1 Water Capital Funds

Capital is primarily funded through any grants received and a fixed flat rate line item on customer's bills, the "Water System Replacement Fees." As this "System Replacement Fee" is a fixed rate, with a steady revenue stream, any reduction in consumption billing does not affect capital. Capital also receives revenue through connection fees; however, these are typically a minor amount and do not warrant the effort of developing a separate drought-related rate structure.

7.2 Water Operations Funds

Annual operations expenses are funded by the customers through their monthly bills. The funds (bills) are primarily comprised of two components: a fixed base rate, and a consumption charge once the customer incurs overages above their monthly allowed (i.e., free of charge) consumption amount (depending on service meter size). The fixed base rate provides the large majority of revenue. This, combined with the rate structure with an allowed volume as part of the base rate, does not translate into the consumption component as being a major part of the water operations revenue stream. The District did notice a reduction in the consumption component revenue during the drought years of 2012 – 2016; however, it was not significant enough to warrant developing a separate drought-related rate structure to compensate for this reduction.

In all cases, the District maintains reserves to provide a buffer, allowing consistent attention to the District's systems in the event of variable revenue.

8 Catastrophic Supply Interruption Planning

The District has a number of elements in place in an effort to ensure a maintained supply. Together these provide: redundancy, support, and/or alternatives to engage as applicable in the event they are needed. These are described below.

8.1 Standby Generators

All of the District's water stations (supply sources and booster pumps) that rely on power to operate have either a permanent standby generator or transfer switch and plug for a portable unit.

8.2 Emergency Interties

The District has emergency interconnection capabilities with adjacent water systems. In the event of an emergency on either side, these may be activated to move where needed.

8.3 Mutual Aid Agreement

Established to formalize abilities to shift resources (Equipment, Personnel, Materials, Supplies, etc.) from one agency to the other as needed in the event of an emergency. A copy is provided in Appendix B.

8.4 Emergency Response Plan

The District's Emergency Response Plan (ERP) identifies the District's emergency planning, organization, and response policies. The ERP includes a concept of recovery operations, a hazard analysis, responsibilities, and departmentalized standard operating procedures for emergency response. Because several of the hazards identified in the ERP could result in a catastrophic interruption of water supplies, the ERP provides the actions that the District would implement to minimize the impacts of supply interruption, including emergency interconnections with Tahoe City Public Utility District, Incline Village General Improvement District, Fulton Water Company, and Agate Bay Water Company.

9 Legal Authorities

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

10 Monitoring and Reporting

The District monitors how effective the combination of shortage response actions in each water shortage level through metered customer demand data. The District's water supplies are metered prior to entering the distribution system and at individual customer connections. The District will compare meter data with water use in prior months and during non-drought years to determine specific percentage goals for water consumption

associated with the drought response levels have been achieved. If the goals are not being met, the District may choose to implement additional shortage response actions.

11 WSCP Refinement Procedures

The WSCP will be re-evaluated at least every five years in coordination with the urban water management plan update, but the frequency of the re-evaluations could increase based on the needs of the District. Re-evaluations will be based on lessons learned, new statutory requirements, continued local supply development, or other factors.

12 Special Water Feature Distinction

The District evaluated decorative and recreational water features separately from pools or spas. However, the District does not currently serve recycled water for use in recreational or decorative water features.

13 Communication Protocol

The District regularly engages in communication and outreach with the public on water supplies, water efficiency, and water conservation. However, effective communication plans are necessary should supply conditions change and the District is required to implement stages of the WSCP.

13.1 Strategies for Communication

During normal water supply conditions, the District will continue to promote water conservation tactics and water efficiency programs using standard ongoing communication protocols. When water shortage levels are triggered, the District will increase communication to reduce water use using methods that include measures within the District's conservation program and as outlined in Table 9-1.

Table 9-1. Communication Outline

Demand Reduction Target	Water Shortage Level					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Up to 10%	Up to 20%	Up to 30%	Up to 40%	Up to 50%	Over 50%
District Communications	Update messaging to reflect conditions, district response and needed actions from the public; coordinate with other agencies as appropriate	Update campaign and messaging to generate immediate actions/behaviors by public; coordinate with other agencies as appropriate	Update campaign and messages to raise awareness for more severe water-saving actions/behaviors by public; coordinate with other agencies as appropriate	Update campaign and messages to raise awareness for more severe and higher level water-saving actions/behaviors by public; coordinate with other agencies as appropriate	Update campaign and messages to reflect extreme or emergency condition and likely need to focus water use on health/safety need; coordinate with other agencies as appropriate	Update campaign and messages to reflect extreme or emergency condition and likely need to focus water use on health/safety need; coordinate with other agencies as appropriate
		Include increased conservation messaging on website and in standard outreach efforts.	Update elected officials, other key civic and business leaders of shortage	Conduct specialized outreach to reduce discretionary outdoor water use while minimizing landscape damage.	Promote available water assistance resources for vulnerable populations; specialized outreach to impacted industries	Promote available water assistance resources for vulnerable populations; specialized outreach to impacted industries
	Promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops	Actively promote available rebates, classes, and workshops
		Targeted outreach to high water users	Outreach to key HOA's building managers, landscape companies about restrictions and need for increased conservation	Specialized outreach and assistance to homeowners, landscape professionals, large-scale water users and high water users	Consider alternate emergency homepage	Implement emergency homepage
		Targeted outreach to specific customer classes	Targeted outreach to specific customer classes	Targeted outreach to specific customer classes	Targeted outreach to specific customer classes	Targeted outreach to specific customer classes

13.2 Catastrophic Communication

In the event of a natural disaster, infrastructure failure, or other situation that requires regional water use to be quickly prioritized for or limited to essential public health and safety needs, the District will immediately deploy or enhance appropriate communication strategies and tactics from WSCP Levels 1 through 6 as needed. They will consider additional strategies and tactics to reflect the need for urgent, emergency-driven water conservation.

14 Plan Adoption, Submittal, and Availability

A public hearing, conducted by the District, was held on May 11, 2021, as a video conference. Members of the public were able to participate via a webinar link or telephone connection to listen and/or view the meeting proceedings and provide public comments and input on the draft WSCP. Following adoption of the WSCP at the public Board meeting on June 8, 2021, the District will submit the plan to DWR and, no later than 30 days after filing the WSCP, the District will make the WSCP available to the public.

Appendix F. Water Ordinance

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CHAPTER 1

GENERAL

1.1 PURPOSE

The purpose of this Ordinance is to establish the rules, regulations, conditions of service, and rates for water service by the North Tahoe Public Utility District. The General Manager shall administer and enforce this Ordinance and may adopt and impose administrative rules or regulations to assisting in doing so. By applying for or receiving water service from the District, each customer, on its own behalf and behalf of its guests, tenants, employees and anyone else using water at the property, covenants and agrees to be bound by and to comply with all regulations of the District as may be in force at the time of application and as may subsequently be adopted by the District.

1.2 VARIANCES

The General Manager is authorized to consider and grant variances from the requirements of this Ordinance, including the Technical Specifications, upon application by any person. Variances shall only be allowed under the following circumstances: (1) the granting of the variance will not significantly adversely impact the operation and maintenance of District facilities, including but not limited to economic impacts, (2) the granting of the variance will not result in adverse public health or environmental consequences, (3) there is no other practical alternative available to the applicant which does not require the granting of a variance, and (4) the applicant has proposed to utilize the highest technological methodology available in design and construction so as to avoid or minimize adverse impacts on District facilities.

1.3 TECHNICAL SPECIFICATIONS

The General Manager shall adopt and amend the Technical Specifications. Any amendments to the Technical Specifications shall be incorporated by reference into this Ordinance upon their adoption.

1.4 DEFINITIONS

1.4.1 Accessory Dwelling Unit (ADU). An attached or a detached residential dwelling unit which provides complete independent living facilities for one or more persons. It shall include permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the single-family dwelling is situated. In the event that Placer County adopts an ordinance regulating ADUs as permitted by Government Code section 65852.2, accessory dwelling unit shall mean an ADU as defined in such ordinance.

1.4.2 Backflow. The reversal of the normal flow of water caused by either backpressure or backsiphonage.

1.4.3 Backflow Preventer. An assembly or means designed to prevent backflow.

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1.4.4 Backpressure. The presence of a pressure in any portion of the customer's service greater than the pressure at the service connection.

1.4.5 Backsiphonage. The flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply from any source other than its intended source caused by a reduction of pressure in the potable water supply system.

1.4.6 Contamination. An impairment of the quality of potable water by sewage, industrial fluids, waste fluids, compounds, or other materials to a degree which creates an actual or potential hazard to the public health through poisoning, toxicity, or the spread of disease. Contamination shall include any impairment prohibited by applicable law.

1.4.7 Cross-Connection. Any physical connection or arrangement or piping or fixtures between two otherwise separate piping systems one of which contains potable water and the other non-potable water or industrial fluids of questionable safety, through which, or because of which, backflow or backsiphonage may occur into the potable water system.

1.4.8 Cross-Connection Control. The installation of an approved backflow prevention assembly at the water service connection to any customer's premises.

1.4.9 Customer. The owner of a property, or his/her authorized agent, receiving water service from the District. Customer may include, as appropriate, the tenant of a property directly receiving service as permitted by this Ordinance.

1.4.10 District. The North Tahoe Public Utility District, a California public utility district authorized under Public Utilities Code, § 15501 et seq.

1.4.11 District Board or Board. Board of Directors of the North Tahoe Public Utility District, an elected body.

1.4.12 Enforcement Officer. A District employee designated to enforce this Ordinance.

1.4.13 Exempt ADU. An ADU where the District is precluded from requiring the installation of a new or separate connection for ADU under Government Code section 65852.2, as it may be amended.

1.4.14 Flow Restrictor. A device that reduces the rate of water flow, provided that flows remain sufficient for residents health and safety purposes.

1.4.15 Multi-Family Residential. Residential uses containing two or more residential units, including apartment buildings, duplexes, townhomes, motels, and hotels.

1.4.16 Parcel. A lot or other legal unit of real property as recognized by Placer County.

1.4.17 Pollution. Means the presence of any foreign substance (organic, inorganic, or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health, but which does adversely and unreasonably affect such waters for domestic use.

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1.4.18 Potable Water. Any water, which according to recognized standards, is safe for human consumption.

1.4.19 Pressure Reducing Valve. A valve device providing regulation of water pressure to limit the pressure for use within a structure.

1.4.20 Pressure Relief Valve. A valve device providing relief of surges in the system due to excessive pressure within or external to the structure.

1.4.21 Private Service Lateral. The portion of a customer's water distribution system that is past the water service connection.

1.4.22 Property. A parcel or group of adjacent parcels owned in common ownership if permitted by the District as set forth in Section 2.3.1.

1.4.23 Residential. A single family home or multi-family residential use.

1.4.24 Service Unit. The basic level of regular water service used for billing or similar purposes.

1.4.25 Uniform Plumbing Code (UPC). A code published and updated periodically by the International Association of Plumbing and Mechanical Officials as amended by the State of California incorporated into the California Building Standards Code. If further amended by Placer County or other applicable land use authority, the UPC shall include these amendments to the extent provided by applicable law.

1.4.26 Technical Specifications. The rules and regulations adopted by the General Manager regarding the Water System.

1.4.27 Water Service Connection. The terminal end of a service connection from the water system where the District loses jurisdiction and sanitary control over the water at the point of delivery to the Customer's private system. If a meter is installed at the end of the service connection, the water service connection shall mean the downstream end of the meter. For fire service lines, the water service connection shall mean the downstream end of the check valve. In other cases and subject to Section 5.1, the water service connection shall be at the parcel line.

1.4.28 Water System. The system owned and operated by the District to deliver potable water to customers at the applicable water service connection.

CHAPTER 2

CONDITIONS OF SERVICE

2.1 WATER SYSTEM OPERATION

2.1.1 Transfer of Title to Water. Title to water furnished by the District shall pass from the District to the customer at the water service connection. As such, full responsibility for the carriage, handling, storage, disposal and use of water and any related damage shall be the customer's sole and complete responsibility from the water service connection through the place of end of use. The District is not responsible for damage to the property if a leak or water damage occurs inside of the structure or at any place after the water service connection.

2.1.2 Interference with the Water System. No person shall interfere or tamper with any part of the water system, except as permitted in this Ordinance or by the General Manager. No person shall make or permit any unauthorized connection to the water system.

2.1.3 Water Pressure and Supply. The District assumes no responsibility for loss or damage due to lack of water or pressure, either high or low, and will furnish such quantities and pressures as are available in the water system. Without limiting the foregoing, the District does not and cannot guarantee that its water system will provide sufficient water quantities or pressure for fire protection purposes. No contract to provide a minimum water quantity or pressure is created by accepting service from District.

2.1.4 Service Interruption. The District reserves the right at any and all times to discontinue water delivery for the purpose of maintenance, repairs, and alterations to its water system. Wherever possible, advance notice of interruption of service will be given to all water users affected. In addition, District may experience unintentional or unexpected loss of water delivery. Any loss or damage suffered as a result of any service interruption shall be the customer's sole responsibility.

2.2 CUSTOMER'S PRIVATE SYSTEM

2.2.1 Service Lateral Maintenance. The customer shall maintain the private service lateral as necessary to receive service at the water service connection. This obligation shall include the installation and maintenance of a pressure relief valve or pressure reducing valve as required by the Technical Specifications.

2.2.2 Shutoff Valve. The customer shall install, maintain and use a customer's shutoff valve to turn water on and off for their convenience. Such valve shall be located downstream of the water service connection. If the District needs to turn off water to the customer's property, it may, but is not required to, do so at the shutoff valve.

2.2.3 Access to Facilities. By applying for and/or receiving water service from the District, each customer irrevocably licenses the District and its authorized employees, contractors and agents to enter upon the consumer's property at reasonable times for the purpose of reading, inspecting, testing, checking, repairing, maintaining or replacing the water system.

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2.2.4 Use of Water. Except with the prior written authorization of the District, no customer shall use, or permit the use of, any water furnished by the District on any property other than the customer's property, nor shall any customer resell or donate any water furnished by the District.

2.3 ADMINISTRATIVE PROVISIONS

2.3.1 Service Unit. All service to structures (including but not limited to ADUs) or other uses on the same parcel or contiguous parcels in the same ownership shall be a single service unit and shall have a single water service connection unless the District determines that a separate water service connection is necessary or advisable. The determination of what constitutes the same ownership, contiguous parcels, and a service unit shall rest solely with the District. Multiple structures on the same parcel being served with different points of connection shall constitute separate service units. In addition and upon written request by the property owner and approval by the District, a property owner may have more than one service unit on the same parcel or contiguous parcels of property. Notwithstanding the foregoing, in no event shall a separate meter or water service connection be required for an Exempt ADU.

2.3.2 Service Calls. Subject to the provisions of this Ordinance, customers may request a service call from the District. If the issue is or may potentially be the District's responsibility, the District will respond to provide assistance or determine responsibility for the issue.

2.3.3 Change of Accounts. In the event the name of an account is changed, or transferred, or there is a request to read the meter, there shall be a fee charged to the account as shown in the District's rate schedule.

CHAPTER 3

NEW OR MODIFIED SERVICES

3.1 NEW SERVICE

3.1.1 General Requirements. New services will be connected subject to the following conditions:

- (a) The property to be served is within the water service area of the District.
- (b) A District water main of adequate capacity and pressure, as solely determined by the District, exists in a publicly traveled right of way, or District easement abutting a principal boundary of the land to be served; or adequate mains, pumps and storage facilities, as solely determined by the District, are constructed in accordance with the Technical Specifications.
- (c) The customer shall apply for service. Applications for new service shall be in writing on forms provided by the District and signed by the customer or authorized agent. Applications shall be supported by such data as the District may require, such as a map or legal description of the property to be served, the date service is to begin and the names and billing address of the recorded owners responsible for payment. If the person making application is not

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the owner of the property, permission to bill this person must be provided to the District on a form provided by the District.

(d) The customer shall obtain a water connection permit from the District and construct all necessary facilities as identified on the permit in accordance with the Technical Specifications or other applicable law.

(e) The customer shall not have any outstanding amounts owed to the District on any water or sewer account.

3.1.2 Water Use Without Approved Application. A person taking possession of a premises and using water from an active water service connection without having made application to the District shall be held liable for the water delivered from the date of the last billing. If a proper application for water service and outstanding bills for service are not brought current within fourteen (14) days of notification by the District, the service may be discontinued by the District in accordance with Section 7.2.

3.1.3 Extension of Facilities. If the District water system must be extended to provide service at the water service extension, the applicant shall comply with this Section.

(a) Necessary Facilities. The extension facilities necessary to serve any parcel shall be determined solely by the District and may include oversizing subject to Subsection (e). These facilities may be designed by the District or a qualified agent of the applicant, and shall be installed in accordance with the Technical Specifications and other plans and specifications required by the District. Upon completion, inspection and acceptance of the facilities by the District, they shall be owned and operated by the District as a part of the District water system. The applicant shall install extension facilities utilizing a competent and experienced contractor, licensed in California, and approved by the District. The District reserves the right to construct, with its own personnel or by contract, all extension facilities including but not limited to storage facilities, pumping plants, taps of existing mains, and extensions involving complicated connections to, or interference with, the District's existing facilities.

(b) Location of Facilities. Extension facilities shall be located only on land owned by the District in fee, or in a public street or highway, or in an easement granted to the District and satisfactory to the District. The applicant will cause to be conveyed or granted to the District, without cost to the District, such lands and/or easements as the District determines to be necessary for the extension facilities. Lands shall be conveyed to the District in simple, free and clear of liens or encumbrances, except for such encumbrances of record that may be acceptable to the District. Easements shall be granted in such form as shall be satisfactory to the District.

(c) Costs and Expenses. The applicant shall be solely responsible for all costs and expenses. The applicant shall deposit with the District a sum equal to 125% of the estimated total cost of the construction of the extension facilities prior to final design and construction. If, upon completion of the work, the amount paid to or deposited with the District is less than said actual costs, the difference shall be paid to the District by the applicant prior to the commencement of service. Any amount paid or deposited in excess of said actual cost will be credited toward usage or refunded upon application.

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(d) Environmental Documentation. Whenever the District determines that an environmental document is necessary, the District will provide applicant with an estimate of the cost. The applicant will deposit an amount sufficient to cover sixty (60) days' of expenses with the District. The District's actual costs, including overhead expenses and legal and consultant fees, of preparing said report, and conducting hearings as necessary will be invoiced to the applicant monthly and shall be deducted from the deposit. The applicant shall pay such invoices and/or replenish the deposit. If the applicant fails to do so, the District may suspend or cease work and/or take any action necessary to recover the amounts owed. At the conclusion of the process, any remaining deposit amounts shall be returned to the applicant without interest.

(e) Reimbursement. In the event that the District requires the installation of any extension facilities larger than those necessary to serve the parcel or extension facilities that would have been required to serve adjacent or nearby parcels upon their development, the District and applicant may enter into a reimbursement agreement outlining the terms and conditions of reimbursement to the applicant.

3.2 ALTERED SERVICE

Customers shall notify the District and obtain a water connection permit, if necessary, whenever the use changes or new additional structures are built on parcels having existing water service. In such instances, the District may require a new or increased connection fee. A credit shall be provided for previously paid connection fee. No refund or credit shall be provided for situations where altered service results in a lower connection fee. The District may require the private service lateral, meter or other portion of the District water system be modified if necessary to comply with this Ordinance as a condition of approving any altered service.

CHAPTER 4

SPECIAL SERVICES

4.1 TEMPORARY SERVICE

4.1.1 General Temporary Service. Service which the District determines will be for less than one year and will not require installation of a permanent connection shall be provided upon payment of the total estimated cost of installing and removing the connection and a security deposit. Service charges and rates shall be in accordance with the billing procedures and rates contained within this Ordinance.

4.1.2 Service Through a Fire Hydrant. Temporary use of water from a fire hydrant must be authorized by the District, and a hydrant meter obtained from the District. A deposit equal to the value of the replacement cost of the hydrant meter will be paid to the District. Upon termination of the temporary service, if the District equipment is returned without damage, the deposit will be refunded less applicable charges. The customer must provide a hydrant wrench necessary to operate such hydrant.

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4.2 FIRE SERVICE

The District will provide water service for fire hydrants and other facilities used exclusively for fire protection at such pressure, and at such rates of flow, as may be available from time to time as a result of the operation of the water system. The District does not warrant or guarantee any pressure or range of pressures, or any flow or rate of flow. The District shall not be liable for any damage in any manner arising out of the non-availability of water, or water pressure, at any hydrant or facility used for fire protection purposes. All fire service systems shall be designed and installed in accordance with the Technical Specifications.

CHAPTER 5

METERS

5.1 METERED SERVICE

All services from the District water system shall be metered. Generally, each service unit shall be separately metered. Due to existing piping arrangements, this may not be possible. The District may elect to meter a group of customers, or parcels at the sole discretion of the District. For multi-family residential uses, the number of meters shall be at the discretion of the District. All new multi-family residential uses shall be individually metered by dwelling unit or master metered as determined by the District.

5.1.1 Location. Meters will be located immediately adjacent to or within the customer's parcel within the right of way. Exceptions to this requirement may be specifically authorized under such circumstances as the District may consider appropriate.

5.1.2 Change in Location of Meters. Meters moved for the convenience of the customer or to ensure compliance with this Ordinance or other applicable law or regulation will be relocated at the customer's expense. Meters moved for other reasons shall be moved at the District's expense.

5.1.3 Sealing. All meters will be sealed by the District at the time of installation, and no seal shall be altered or broken except by employees or authorized agents of the District.

5.1.4 Size of Meters. Meter size shall be determined by the District in its sole discretion.

5.1.5 Re-evaluation of Meter Size

(a) Requested by Customer. A customer may request a change in meter size based on changed conditions at the place of service or when historical usage indicates a change is warranted. The customer shall be responsible for any costs incurred in making the change.

(b) Required by District. The District may require a change in meter size when the historical usage indicates the meter is operating above or below the meter's rated design capacity. The customer shall be given written notice in advance of the change. The customer shall be responsible for any costs incurred in making the change.

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5.2 METER READING AND METER ACCURACY

5.2.1 Frequency of Meter Reading. Meters will be read, as practical, on a monthly basis. Additional readings will be made on commencement and termination of service, and as required by special circumstances. The fact that a meter is not read shall not preclude computation of a bill. The District may change the frequency of meter reading if a new frequency is determined to be more cost effective.

5.2.2 Meters That Cannot Be Read Due To An Obstruction. Where a meter cannot be read because of an obstruction, the customer will be notified and shall be required to remove the obstruction. If an obstruction is not removed within thirty (30) days of notification, service may be terminated.

5.2.3 Testing Meters. The District will test the accuracy of its meters upon the request of a customer. The customer may witness the test. If a meter is found to be working improperly, it will be repaired or replaced by the District.

(a) Adjustment for Meter Errors - Fast Meters. If a meter tested at the request of a customer is found to be more than two percent (2%) fast, the excess charges for the time service was rendered to the customer requesting the test, or for a period of six months, whichever shall be the lesser, shall be refunded to the customer. The cost of the test shall also be refunded.

(b) Adjustment for Meter Errors - Slow Meters. If a meter tested at the request of a customer is found to be more than ten (10%) percent slow in the case of Residential services, or more than five (5%) percent slow for other than Residential services, the District may bill the customer for the amount of the undercharge based on corrected meter readings for the period, not exceeding six months, that the meter was in use.

(c) Non-Registering Meters. If a meter is found to be not registering, the charges for service shall be based on the estimated consumption. Such estimates shall be made from previous consumption for a comparable period or by such other method as is determined by the District.

5.2.4 Excess Water Use. Where water meters are installed and available to be read, readings shall be analyzed to determine excess water usage within seven (7) calendar days of the meter reading date. If the usage is in the abnormal range as determined by the District, the customer shall be notified and the service turned off if the residence or business on the property is vacant. If contact of property owners or emergency shutoff of service has not been completed within this period, the property owner shall be responsible for all water used during the seven (7) day period, and only for the historical use thereafter, until the date of contact with the property owner or shutoff of service. When the property owner is contacted, all usage charges shall apply after the date of contact. This subsection, and any reductions in billing, shall not apply in situations where meters cannot be read due to adverse conditions or where meters are prevented from being read by conditions beyond the control of the District.

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5.2.5 Uncontrollable Loss of Water.

(a) Where a customer, through no fault of their own, has incurred excessively high water bills during one meter read cycle, relief may be granted by the District even though the water has passed through the water service connection. Relief is intended for situations where lines have frozen and broken, and the detection and correction of such a break could not have reasonably been accomplished in time to avoid the excessively high water usage. Only customers who have had uncontrollable loss of water greater than 100,000 gallons in one meter read cycle may request relief under this subsection.

(b) Request for relief must be in writing to the District. The General Manager will, to the greatest extent possible, confirm that the high overage was a result of an undetectable condition and was not a direct result of negligence or inattention of the property owner. The General Manager may decide to provide relief for some or all of the overage above 100,000 gallons. This decision may be appealed to the Board.

CHAPTER 6

BILLING

6.1 GENERAL

6.1.1 Water Service Charges. The District shall charge customers for water service at the rates set forth in Attachment A-1 of this Ordinance. Such fees and charges shall be adopted by ordinance or resolution. Any new or modified fees or charges shall be incorporated by reference into this Ordinance and Attachment A-1 by reference upon their effectiveness.

6.1.2 Connection Fees. The District shall charge applicants for connecting to the water system at the fees set forth in Attachment A-2 of this Ordinance. Such fees shall be adopted by ordinance or resolution. Any new or modified fees shall be incorporated by reference into this Ordinance and Attachment A-2 by reference upon their effectiveness.

6.1.3 Other Fees and Charges. Subject to any provisions set forth in this Ordinance or applicable law, the District shall charge applicants, customers or other persons for other services at the rates set forth in Attachment A-3 of this Ordinance. Such fees or charges shall be adopted by ordinance or resolution. Any new or modified fees or charges shall be incorporated by reference into this Ordinance and Attachment A-3 by reference upon their effectiveness.

6.2 BILLING FOR WATER SERVICE CHARGES

6.2.1 Bills. Those portions of the bill attributable to base charges or consumption shall begin on the first day of the billing period following the installation of the water meter as required under Section 5.1. Those portions of the bill attributable to water system replacement or capital improvements, if any, shall begin on the first day of the billing period following the payment of the connection fee and receipt of a water connection permit as required under Section 3.1. Basic water service is billed in arrears. Bills will be mailed or sent electronically at the beginning of each billing period to the address furnished to the District. The customer shall be responsible to keep

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the District advised of the address to which bills are to be mailed. Non-receipt of a bill shall not relieve a customer of any payment obligation to the District.

6.2.2 Payment. Bills shall be due and payable upon presentation. Payment shall be made to the District office. Bills shall become past due in thirty (30) days, and delinquent in sixty (60) days from the billing date, and may become a lien on the property (60) days after the billing date.

6.2.3 Delinquent Bills. In the event of delinquency in the payment of any rates, or charges, or installation charges thereof, or interest thereon, penalty and interests shall be imposed as set forth in Attachment A-3 of this Ordinance.

6.2.4 Responsibility for Payment

(a) Unless otherwise provided by law, all charges for water service shall be billed to the owner of the property making application for service. Upon written request of the owner, and approval by the District, charges for water service shall be billed to the person occupying the property provided, however, that in the event of delinquency, such charges shall be billed to the property owner and remain with the property. In such case, the owner shall be deemed the person receiving service under Public Utilities Code section 16472.1 and should charges remain delinquent, the District shall place a lien on the property.

(b) Should the property be sold and a delinquent bill exists on said property, the District will transfer those charges to any other open account under the name of the previous owner afforded such service. Should the property be sold and no other account is available to accommodate the transfer, the District may utilize whichever collection methods it wishes to recover the fees from the prior owner.

(c) Charges for sewer collection and water service provided by the District shall be billed upon the same bill and collected as one item.

CHAPTER 7

DISCONTINUANCE, DISCONNECTION, TERMINATION, AND ABANDONMENT OF SERVICE

7.1 DISCONTINUANCE OF SERVICE FOR NON-PAYMENT

7.1.1 Residential Customers. The District shall not discontinue service to residential customers for non-payment of bills. Rather, when a bill is delinquent, the District may install a flow restrictor to such water service connection. The District shall provide fourteen (14) days' written notice to the customer prior to doing so.

7.1.2 Non-Residential Customers. Service to non-residential customers may be discontinued for non-payment as provided in this section. However, service shall not be terminated during the pendency of any investigation into a customer dispute or complaint or when the customer has been granted an extension of time to pay the applicable bill.

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The following steps will be followed where an active service must be discontinued:

(a) Customer and/or owner of property will be noticed at least ten (10) days before the time and date for discontinuance. This ten-day period shall commence five (5) days after District mails customers and/or owner notice via mail. The notice shall in a form approved by the General Manager and District Counsel.

(b) A notice will be placed on the property at least 48 hours prior to discontinuance.

As an alternative to discontinuance of service to non-residential customers, the District may install a flow restrictor under the procedures set forth in Section 7.1.1.

7.2 DISCONTINUANCE OF SERVICE FOR OTHER REASONS

7.2.1 Grounds for Discontinuance. In addition to discontinuance for non-payment, the District reserves the right to discontinue water service or disconnect any water service connection for any of the following reasons:

(a) The customer fails to comply with this Ordinance or any of the District's rules, regulations or policies.

(b) The service is being furnished without a proper application or under a false or fraudulent application.

(c) The customer unlawfully tampered or interfered with the District's facilities.

(d) The District or a State or County public health officer finds that there exists a condition hazardous to the health and safety of the customer or any water user of the District.

(e) The customer fails, after notice from the District, to remove an obstruction that prevents the reading of the meter.

(f) The customer fails to maintain the facilities in a suitable condition that allows for reading of the meter.

(g) The customer does not meet the requirements of the District's water conservation provisions in this Ordinance.

7.2.2 Procedures for Discontinuance. Unless otherwise provided in this Ordinance, the District shall provide written notice of planned discontinuance or disconnection at least five (5) days in advance. In addition, the Placer County Health Department shall be advised of pending water shutoff. Notice shall not be required if a health and safety emergency necessitates immediate termination. In such event, the District shall provide whatever notice is practicable.

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7.3 REQUEST TO TURN OFF OR TURN ON CUSTOMER'S SERVICES

In the event of an emergency, as determined by the District, the District will, upon request, turn off or turn on the customer's service. A temporary turn off shall not exempt the customer from paying any applicable minimum monthly charge for water service.

7.4 TERMINATION/RECONNECTION OF SERVICES

Except as provided in Section 7.5, water service to an existing developed property may not be terminated. If all use requiring water at the property ceases then a service may be terminated. Termination of service shall include the removal of the water meter and capping of the private service lateral at the water main. Charges for service will cease effective the first day of the billing period following system disconnection. Any request to reconnect to the water system shall be processed as a new application for service.

7.5 OWNER REQUEST FOR TEMPORARY DISCONNECTION OF SERVICES

Owners may request a temporary disconnection and reconnection of water service where service will be discontinued for at least ninety (90) days. In such cases, the District may require that the structure be physically disconnected from the water service. Those portions of the bill attributable to base charges or consumption shall cease during the temporary disconnection period, effective the first day of the billing period following temporary disconnection. Those portions of the bill attributable to water system replacement or capital improvements, if any, shall continue to be charged during the temporary disconnection period. Any request to reconnect to the water system shall be processed as a reconnection and not a new application for service.

CHAPTER 8

WATER CONSERVATION

8.1 WATER CONSERVATION AND USE REQUIREMENTS

Customers shall not use water in a manner that is wasteful and without reasonable purpose. These requirements in this Chapter are to ensure the most efficient use of the water resources available to the District, and to enable the water system to be operated in the most cost-effective manner for the benefit of all the District customers.

8.2 WATER CONSERVATION ACTION STAGES

Stages of water conservation measures, use requirements, and restrictions are set forth in this Section. Increasing stages correspond with increasing levels of required water conservation, use, and restrictions as formally declared by the Board at a publicly noticed meeting.

The District shall operate in Water Conservation Stage 1 under normal conditions. The Board may declare other levels when conditions warrant.

Each increasing stage level also includes all conservation measures, use requirements, and restrictions of all previously declared lower level stages.

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Customers shall meet the most current conservation stage declared by the District, or other government agencies, whichever is more restrictive.

8.2.1 Stage 1: 10% Reduction Goal.

(a) The customer shall maintain the private service lateral, from the water service connection, in good repair.

(b) Any leak or abnormal use in plumbing and/or irrigation systems, including running toilets, or any leak in any receptacle used to store water for any purpose, shall be repaired when found; in any case leak shall be repaired within ten (10) days of District notice to repair.

(c) Irrigation resulting in application of, or runoff onto, sidewalks, walkways, roadways, parking lots, structures, any non-irrigated area, or adjacent properties is prohibited.

(d) Any use of water which results in flooding or runoff into gutters, streets or onto adjacent property is prohibited.

(e) Automatic shutoff valves or nozzles shall be used whenever a hose is used for cleaning or clearing of vehicles, walkways, patios, tennis courts, decks, driveways, parking areas, or other improved areas, whether paved or unpaved.

(f) Automatic shutoff valves or nozzles shall be used whenever water is used in connection with construction activity.

(g) Decorative water features which do not recirculate water are prohibited.

(h) Written authorization from the District shall be obtained prior to use of any fire hydrant for any purpose other than fire suppression or emergency aid.

(i) Water pressure shall not exceed 60 psi within any structure.

(j) Irrigation systems shall be winterized and discontinued from operation by November 1st each year.

(k) Any new irrigation system installed shall be equipped with rain sensing device halting irrigation during and within 48 hours after measurable precipitation.

(l) New non-turf landscaping, including bedding plants and trees, shall be on drip, micro sprinkler, or micro sprayer irrigation systems. Overhead watering only allowed for turf areas.

(m) Landscaping may not be irrigated: (1) between the hours of 9:00 AM and 6:00 PM, (2) during, or within 48-hours after, measurable precipitation, and/or (3) when air temperature is less than 40 degrees Fahrenheit.

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8.2.2 Stage 2: 20% Reduction Goal.

- (a) Water consumption by each customer, as measured by the District's meter, shall be reduced by twenty percent (20%).
- (b) No irrigation shall occur on Saturday.
- (c) Properties with even number street address may only irrigate on Monday, Wednesday, and Friday.
- (d) Properties with odd number street address may only irrigate on Tuesday, Thursday, and Sunday.
- (e) Irrigation of non-turf areas which exclusively utilizes drip systems, including micro sprinklers and micro sprayers, or a hose with an automatic shutoff nozzle, shall be exempt from designated irrigation days.
- (f) Water shall not be applied to hard surfaces for any reason, except as required for pavement resurfacing or sealing, or health and safety reasons.
- (g) Filling or refilling of swimming pools.
- (h) Water consumption and allowed uses shall be reduced as specifically prescribed for individual customers based on historic: consumption, type of use, time of use, or any other relevant factors.
- (i) All visitor accommodations businesses shall wash guest linens only upon request and/or after checking out. A placard or notice stating such shall be displayed in each guest room.
- (j) All public entities shall display informational material, placards, and/or decals, provided by the District, in places visible to all customers.
- (k) The owner and/or manager of each hotel, motel, restaurant, convention center, and other visitor-serving facility shall display informational water conservation materials, placards, and/or decals, provided by the District, in places visible to all customers.

8.2.3 Stage 3: 30% Reduction Goal.

- (a) Water consumption by each customer, as measured by the District's meter, shall be reduced by thirty percent (30%).
- (b) No irrigation shall occur on Saturday, Sunday, or Wednesday.
- (c) Properties with even number street address may only irrigate on Monday and Thursday.
- (d) Properties with odd number street address may only irrigate on Tuesday and Friday.

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(e) Irrigation of non-turf areas which exclusively utilizes drip systems, including micro sprinklers and micro sprayers will be allowed only Monday through Friday and shall be prohibited on Saturdays and Sundays.

(f) All food service and drinking establishments shall serve drinking water only upon request and shall provide a placard at each table, and/or language on their menu, stating such.

(g) Other specific water reduction mandate, and/or use restrictions, as defined and designated by the Board when Stage 3 action is declared.

8.2.4 Stage 4: 40% Reduction Goal.

(a) Water consumption by each customer, as measured by the District's meter, shall be reduced by forty percent (40%).

(b) The use of water for other than domestic and commercial non-irrigation use is prohibited.

(c) Irrigation of landscaping of any type is prohibited, except that irrigation of public facilities may be permitted pursuant to review, conditioning, and approval by the District.

(d) The application of water to hard surfaces is prohibited.

(e) Use of decorative water features is prohibited.

8.2.5 Stage 5: 50% Reduction Goal.

(a) Water consumption by each customer, as measured by the District's meter, shall be reduced by 50%.

8.2.6 Stage 6: Greater than 50% Reduction Goal.

The District may implement mandatory water rationing using rolling outages, or other methods, should the situation require. Affected customers will be notified via public outreach, local media, written notice posted at the property, mail, and/or personal contact.

CHAPTER 9

CONTROL OF BACKFLOW AND CROSS CONNECTIONS

9.1 GENERAL

No water service connection to any premises shall be installed or maintained by the District unless the public water supply is protected as required by State regulations and the requirements of this Ordinance.

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9.2 DISTRICT RESPONSIBILITY

The District shall be responsible for the protection of the water system from contamination or pollution due to the backflow of contaminants or pollutants through the water service connection. If, in the judgment of the District, an approved backflow prevention assembly is required on the customer's water service connection for the safety of the water system, the District shall give notice in writing to the customer to install an approved backflow prevention assembly. District shall not be responsible for any loss or damage directly or indirectly resulting from or caused by the proper, improper, or negligent installation, operation, use, repair or maintenance of, or interfering with, any protective device by any customer or any other person.

9.3 CUSTOMER RESPONSIBILITY

It shall be the responsibility of each customer at their own expense to furnish, install, and keep in good working order and safe condition, any and all protective devices. Once notified of the need to install a backflow prevention assembly, the customer shall immediately install such approved assembly at the customer's own expense; and failure, refusal or inability on the part of the customer to install, have tested and maintain the assembly shall constitute a ground for discontinuing water service to the premises until the requirements have been satisfactorily met.

Customer to maintain adequate heat source to backflow prevention assembly housing in order to prevent cold weather from affecting the operation of the assembly.

9.4 TESTING AND MAINTENANCE

Each backflow prevention assembly shall be tested annually to assure proper operation. In instances where a hazard is deemed great enough, testing may be required at more frequent intervals. The customer shall bear all costs of device testing. The cost of any maintenance required as a result of inspections or testing is the responsibility of the customer. Maintenance work shall be performed by the owner or the owner's representative. Records of inspections, testing or repairs shall be kept by the District and made available to the California Department of Health Services.

The District will notify the customer when tests are required and supply the necessary test forms and instructions. These forms will be completed by the certified backflow prevention tester and returned to the District by the date indicated. Testers shall be certified by the American Water Works Association, California-Nevada Section. Test procedures shall be those recommended by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California.

9.5 NON-COMPLIANCE

If, following an inspection and/or testing a device is found to be in non-compliance, the customer shall be notified and given fourteen (14) days to correct the deficiency after which time the inspection will be repeated.

The District shall cause discontinuance of water service if a backflow prevention device has failed to be tested properly or properly maintained or installed as required by the District.

CHAPTER 10

PRIVATE SERVICE LATERAL RELOCATIONS

10.1 GENERAL

The purpose of this Chapter is to establish regulations relative to the relocation of private service laterals to connect to relocated District water service mains.

10.2 RELOCATION OF PRIVATE SERVICE LATERAL

When the District relocates water service mains with the intention of disconnecting service through the original existing service mains it shall be the responsibility of the owners of all properties which have service provided through the original existing service mains to relocate their private service laterals to accept service through the relocated service mains at their sole expense and pursuant to the relocation schedule established by the District pursuant to the provisions of this Chapter. The District shall install appropriate meters at the property line at no cost to the property owner.

10.3 NOTICE AND HEARING REGARDING RELOCATION SCHEDULE

The relocation schedule to establish the timing of installation of relocated service mains, the timing of construction of relocated private service laterals and the timing of disconnection of service through original existing service mains shall be set by the Board at a public hearing. All affected property owners shall be notified by personally mailed notice to the property owners' address in the District files at least fifteen (15) days prior to the date of the public hearing.

At the public hearing the Board shall establish a relocation period giving the affected property owners at least two building seasons (May 1 through October 15), but ending on September 1 of the last season, to construct and have inspected new private service laterals between the use served and their property line served by the relocated service main. The relocation period shall include the season during which the relocated service main is constructed.

10.4 CONTINUING NOTICE DURING RELOCATION PERIOD

Between May 1 and May 15 of each building season during the relocation period the District shall review the status of construction of new private service laterals and shall give further notice of the relocation schedule to all property owners who have not at that time constructed and had inspected new private service laterals between the use served and their property line served by the relocated service main. Notice shall be given by personal mail to the property owners' address in the District files.

10.5 DISCONTINUANCE OF SERVICE FOR FAILURE TO RELOCATE PRIVATELY OWNED SERVICE LATERAL

At the end of the relocation period all services which have not had relocated private service laterals constructed and inspected between the use served and their property line served by the relocated service main shall be subject to disconnection. Disconnection shall be made only after ninety (90)

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days prior notice given in the same manner as disconnection to non-residential customers for failure to pay District service charges. In the event of disconnection, reconnection shall be made only after the construction and inspection of a new private service lateral between the use served and the property line served by the relocated service main and payment of any applicable reconnection charges, including service charges for the period during which service was disconnected. In the event that reconnection is not made within a period of one year following disconnection, service charges shall cease and reconnection shall require payment of a the full connection charge applicable to connection of a new use.

10.6 APPEAL BASED UPON SPECIAL CIRCUMSTANCE

Any property owner may petition the Board for an extension of the relocation period based upon special circumstances, provided that such petition shall be made at least ninety (90) days prior to the end of the relocation period. The Board may grant such an extension, and may condition such an extension upon payment of the District's estimated cost of maintaining the service main which was to be abandoned during the extension period.

CHAPTER 11

VIOLATIONS

11.1 GENERAL

11.1.1 In the event of a violation of any applicable laws of the State of California, this Ordinance, or any other District rules and regulations, the General Manager or designee shall notify the person or persons causing, allowing or committing such violation, in writing, specifying the violation, or upon the failure of such person to cease or prevent further violation, within a reasonable time depending on the severity of the violation after service of notice in the same manner as administrative citations.

11.1.2 The General Manager shall exercise his/her authority to disconnect the property from the public water system. However, in the event such violation results in a public health or safety hazard, the District may enter upon the property and perform such work, and expend such sums, as may be deemed necessary to abate such nuisance, and the reasonable value of the work done and the amounts so expended thereon shall be a charge to the property in violation. Charges shall include any legal fees incurred by the District. The District shall obtain an abatement warrant as necessary prior to doing so.

11.2 CHARGES FOR NON-COMPLIANCE

In addition to the other remedies set forth in this Chapter, the District may impose a non-compliance charge to reimburse the District for costs related to investigating, abating, and correcting non-compliance with this Ordinance. The charge shall be as set forth in Attachment A-3, as it may be amended by ordinance or resolution.

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11.3 ADMINISTRATIVE CITATIONS

11.3.1 Authority.

(a) Any person violating any provision of this Ordinance may be issued an administrative citation by an enforcement officer as provided in this Section. Customers shall be responsible for all violations at their property.

(b) A civil fine shall be assessed by means of an administrative citation issued by the General Manager or designee. Fines shall be assessed in the amounts specified by resolution of the Board or where no amount is specified, those amounts set forth in Government Code section 36900.

11.3.2 Service. Administrative citations may be served personally or by mail. Service by mail shall be sent to the responsible person's address as shown on public records or as known to the District. If the administrative citation is sent by certified mail and returned unsigned, then service shall be deemed effective by first class mail, provided the administrative citation sent by the first class mail is not returned.

11.3.3 Contents of Notice. Each administrative citation shall contain the following information:

(a) Date, approximate time and address or definite description of the location where the violation(s) was observed;

(b) The Ordinance section(s) or condition(s) violated and a description of the violation(s);

(c) A description of the action required to correct the violation(s);

(d) An order to the responsible person to correct the violation(s) by a correction date and an explanation of the consequences of failure to correct the violation(s);

(e) The amount of the fine for the violation(s);

(f) An explanation of how the fine shall be paid, the deadline by which it shall be paid, and the place to which the fine shall be paid;

(g) An order prohibiting the continuation or repeated occurrence of the Ordinance violation(s) described in the administrative citation;

(h) Identification of rights of appeal, including the time within which the administrative citation may be contested and the place to obtain a notice of appeal and request for hearing form to contest the administrative citation; and

(i) The name and signature of the enforcement officer and, if possible, the signature of the responsible person.

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11.3.4 Satisfaction of Administrative Citation. Upon receipt of an administrative citation, the responsible person shall do the following:

- (a) Remedy the violation(s) if the violation(s) is of such a nature that it can be remedied. If a nonemergency health or safety violation(s) is corrected before the correction date provided on the administrative citation, no fine shall be imposed;
- (b) Pay the fine to the District within fifteen (15) calendar days from the correction date on the administrative citation. Payment of a fine shall not excuse or discharge the failure to correct the violation(s) nor shall it bar further enforcement action by the District.

11.3.5 Appeal of Administrative Citation.

- (a) Any recipient of an administrative citation may appeal an administrative citation under the procedures set forth in this Section. In addition, requests for an appeal of an administrative citation shall be submitted with an advance deposit of the fine or an advance deposit hardship waiver request.
- (b) Appeals shall be heard by a hearing officer determined by the Board. The hearing officer shall establish rules for the conduct of such appeals but formal rules of evidence shall not apply. Hearings shall occur within sixty days of a valid appeal request unless otherwise agreed to by the District and appellant.
- (c) The hearing officer's decision shall be in writing.
 - (i) If the hearing officer determines that the administrative citation should be upheld, then the District shall retain the fine amount on deposit with the District.
 - (ii) If the hearing officer determines that the administrative citation should be upheld, and the fine has not been deposited pursuant to an advance deposit hardship waiver, the hearing officer shall set a fine payment schedule for the payment of the fine.
 - (iii) If the hearing officer determines that the administrative citation should be canceled and the fine was deposited with the District, then the District shall promptly refund the amount of the deposited fine.

11.3.6 Advance Deposit Hardship Waiver. Any person who intends to request a hearing to contest an administrative citation and who is financially unable to make the advance deposit of the fine may file a request for an advance deposit hardship waiver.

- (a) The request shall be filed with the Finance Department within five (5) days of the date of the issuance of the administrative citation.
- (b) The requirement of depositing the full amount of the fine as described in Section 11.3.4 shall be stayed unless or until the Chief Financial Officer makes a determination not to issue the advance deposit hardship waiver.

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(c) The Chief Financial Officer may waive the requirement for advance deposit only if the cited party submits to the Chief Financial Officer a declaration, under penalty of perjury, supported by evidence that shows to the Chief Financial Officer's reasonable satisfaction that such party is financially unable to deposit the total amount of the fine in advance of the hearing.

(d) If the Chief Financial Officer determines not to issue an advance deposit hardship waiver, the cited party shall remit the deposit to the District within five (5) days of the date of that decision or fifteen (15) days from the date of issuance of the administrative citation, whichever is later.

(e) The Chief Financial Officer shall list his or her reasons for granting or not granting an advance deposit hardship waiver in writing and serve it on the cited party. The Chief Financial Officer's decision is final.

11.3.7 Right to Judicial Review. Any person aggrieved by a decision of a hearing officer may obtain review of the decision by filing a petition for review with the Placer County Superior Court in accordance with the timelines and provisions set forth in the Government Code and/or Code of Civil Procedure, as applicable.

11.4 VIOLATIONS

11.4.1 Without limiting the other remedies in this Chapter, any violation of this Ordinance is declared unlawful and violators shall be liable for such remedies specified in Public Utilities Code section 16472.5.

11.4.2 Every day a violation of this Ordinance continues shall constitute a separate offense.

CHAPTER 12

APPEALS

12.1 GENERAL

The many variables applicable to the provision of water service requires that appeals be accepted by the District. In the event a customer wishes to dispute the applicability of any section or challenge any staff decision under this Ordinance, he or she shall follow these procedures unless a specific procedure is provided.

12.2 APPEALS

Requests for an appeal shall be directed to the General Manager in writing. The General Manager shall perform such investigative work as deemed necessary and respond to the customer within fourteen (14) days. The response shall contain information obtained by the investigation and the decision of the General Manager.

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12.2.1 Any person who is dissatisfied with a determination of the General Manager may, at any time within ten (10) days after such determination, appeal to the Board by giving written notice to the General Manager setting forth the determination with which the person is dissatisfied. The General Manager shall investigate and transmit to the Board a report upon the matter appealed. The Board shall cause written notice, as to the time and place fixed for hearing such appeal, to be given to all persons affected by such application at least ten (10) days prior to said appeal.

12.2.2 At the time and place ordered in the hearing, the Board shall consider the appeal. Except for appeals of corrective orders and suspension or termination of service, the appeal is an evaluative, and not an adversarial, process to determine the facts of the issue and the appropriate application of this Ordinance. The Board, appellant and General Manager may provide any information deemed relevant to the issue and the Board's consideration. The Board's decision at the conclusion of the hearing shall be final.

12.3 PAYMENT OF CHARGES PENDING APPEAL REFUNDS

For appeals related to the amount of charges, the appellant shall pay the disputed charges. After the appeal is heard the Board may order refunded to the person making the appeal such amount, if any, as the Board shall determine should be refunded.

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AMENDMENTS TO WATER ORDINANCE SINCE ADOPTION

(Amendments Incorporated Herein)

Ordinance 393	Master Water Amendment in Full	November 12, 2019
Ordinance 395	Sections: 1.4.13, 6.2.1, 7.4, 7.5, 11.2, 11.4	May 12, 2020

Appendix G. Mutual Aid Agreement

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TAHOE TRUCKEE AREA AGREEMENT FOR MUTUAL EMERGENCY AID

This Agreement for Mutual Aid is to benefit the participating agencies in the event of natural disasters, emergencies, or other assistance that may be requested. The participating agencies have confirmed that a mutual aid agreement would be beneficial.

This Agreement is made and entered into on the dates set forth below, by and between the public agencies set forth below.

WHEREAS, the participating agencies party to this Agreement maintain and operate wastewater and/or water treatment and distribution, collection, transportation and/or treatment facilities in the Lake Tahoe-Truckee areas; and

WHEREAS, the participating agencies have engaged in an informal policy of mutual cooperation wherein the resources of each were available to the other on an as-available basis for the purposes of minimizing environmental damage due to leakage from or destruction of such facilities and of promoting public health; and

WHEREAS, it is the desire of the participating agencies to execute a mutual aid agreement wherein the policy of mutual cooperation is formalized and expanded to meet projected needs of the participating agencies; and

WHEREAS, by becoming a participating agency under the terms of this Agreement, the governing body or board of the participating agency will be deemed to have read and agreed to be bound by the terms of this Agreement.

NOW, THEREFORE, the participating agencies hereto mutually agree as follows:

1. To furnish to each other personnel trained in the emergency operation and/or repair of wastewater and/or water treatment, distribution, collection, and/or transportation facilities, together with equipment, materials and supplies required for such operation and/or repair as may be necessary during emergency conditions, on and subject to the terms and conditions of this Agreement.
2. To provide such emergency aid within the ability of the participating agencies to this Agreement, provided, however, that no participating agency shall be required to deplete its own resources, personnel, services or facilities to the detriment of its normal responsibilities or the detriment of anticipated needs. No agency shall incur any liability or be found at fault for failure to furnish personnel, equipment, materials or supplies when such are available. In addition, each agency shall have the right, at the sole discretion of said agency, to order any personnel, equipment, materials or supplies furnished to another agency be returned to the furnishing agency, without any liability for said order.
3. That no response to an emergency aid request provided for in this Agreement will be made by any participating agency hereto unless such request is received through established communication channels and made by a previously designated responsible

official of the agency requesting such aid. The Manager of each participating agency shall be deemed a responsible official and shall have the authority to designate alternate responsible officials to other participating agencies. No such designation shall be effective until received, in writing, by the other participating agencies.

4. The personnel and equipment furnished by a participating agency (the "Assisting Agency") shall remain, at all times, under the direct supervision and control of the designated supervisory personnel of the Assisting Agency. In instances where only equipment, materials or supplies are provided by the Assisting Agency, the ownership of said equipment, materials or supplies shall remain with the Assisting Agency and said equipment, materials or supplies shall be returned to the Assisting Agency immediately upon request (unless to the extent that the materials or supplies are perishables and they have been used or exhausted in the emergency response).

Representatives of the participating agency receiving assistance from the Assisting Agency (the "Requesting Agency") shall suggest work assignments and schedules for the personnel of the Assisting Agency; however, the designated supervisory personnel of the Assisting Agency shall have the exclusive responsibility and authority for assigning work and establishing work schedules for the personnel of the Assisting Agency in conjunction with the Incident Command or the Requesting Agency. The designated supervisory personnel of the Assisting Agency shall maintain daily personnel time records, a log of equipment hours, be responsible for the operation and maintenance of the equipment, materials or supplies furnished by the Assisting Agency, and report work progress to the Requesting Agency.

5. Unless specifically instructed otherwise, the Requesting Agency shall have the responsibility of providing food and housing for the personnel of the Assisting Agency from the time of their arrival at the designated location to the time of their departure. However, Assisting Agency personnel and equipment should be, to the greatest extent possible, self-sufficient while working in the emergency or disaster area. The Requesting Agency may specify only self-sufficient personnel and resources in its request for assistance.
6. Should it be necessary to recover costs or in order to be reimbursed from outside sources, at the sole discretion and request of the Assisting Agency, the Requesting Agency shall pay the Assisting Agency monthly, on receipt of invoice, costs for the equipment, personnel, materials and supplies furnished. Equipment costs shall be reasonable and subject to each participating agency's established rates. If a participating agency does not have established rates, either actual cost or the most current Schedule of Equipment Rates set by the Federal Emergency Management Agency (FEMA) shall apply. Some participating agencies may require operators to accompany their equipment and therefore the rate may include operator labor costs. All labor will be billed at actual rate paid plus benefits. All expendable materials and supplies will be billed at cost.
7. Any controversy or claim arising out of or relating to this Agreement or the breach thereof, shall be settled by mutual agreement. If dispute cannot be settled by mutual agreement, then dispute shall be settled by arbitration in accordance with the Rules of the American Arbitration Association and judgment on the award rendered by the

arbitrator(s) may be entered in any court having jurisdiction thereof. Arbitration is binding and final.

8. The Assisting Agency and its workers' compensation insurer or self-insurer will be liable for any workers' compensation benefits payable on account of an injury or illness to an Assisting Agency employee occurring in the course of providing personnel assistance under this Agreement. The Assisting Agency and its property damage insurer or self-insurer will be liable for any damage to or destruction of any Assisting Agency equipment, material or supplies occurring in the course of furnishing the equipment, material or supplies under this Agreement. The Requesting Agency shall indemnify, defend, protect and hold harmless the Assisting Agency, and its officers, employees, and agents, from and against any Requesting Agency or third party liability, loss, claim, damage, expense, demand, and costs (including, but not limited to, attorney, expert witness and consultant fees, and litigation costs) of every nature arising out of the Assisting Agency's assistance provided under this Agreement, except when caused by the sole negligence or willful misconduct of the Assisting Agency or as otherwise provided or limited by law.
9. That each agency shall maintain coverage for liability, property damage, and worker's compensation for industrial injury or illness through insurance or self-insurance, including coverage for its equipment and employees when used by other agencies under this Agreement. Any participating agency to this Agreement shall have the right to evidence of such coverage upon request.
10. That this Agreement shall not operate to merge any of the participating agencies hereto, to subject any of the participating agencies hereto to the jurisdiction of any regulatory agency not having jurisdiction in the absence of this Agreement, or to require that any participating agency cooperate with or report to any agency not a party to this Agreement.
11. That this Agreement shall become effective as to each participating agency upon execution by that agency and shall remain in full force and effect as to each participating agency until a participating agency terminates its participation in the Agreement. Any participating agency may terminate its rights and obligations under this Agreement by giving all other participating agencies thirty (30) days prior written notice, however such termination shall not affect the rights and obligations of the remaining participating agencies hereto or any rights and obligations of the withdrawing participating agency occurring prior to the effective date of termination.

IN WITNESS WHEREOF, the participating agencies hereto have caused this Agreement to be executed as of the days and years set forth below.

ALPINE SPRINGS COUNTY WATER DISTRICT

Date:_____ By:_____

Attest:_____

DOUGLAS COUNTY SEWER IMPROVEMENT DISTRICT. NO. 1

Date:_____ By:_____

Attest:_____

DOUGLAS COUNTY UTILITIES

Date:_____ By:_____

Attest:_____

EDGWOOD WATER COMPANY

Date:_____ By:_____

Attest:_____

GLENBROOK WATER COOPERATIVE

Date:_____ By:_____

Attest:_____

INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT

Date:_____ By:_____

Attest:_____

KINGSBURY GENERAL IMPROVEMENT DISTRICT

Date:_____ By:_____

Attest:_____

LAKE SIDE PARK ASSOCIATION

Date:_____ By:_____

Attest:_____

NORTH TAHOE PUBLIC UTILITY DISTRICT

Date:_____ **By:**_____

Attest:_____

NORTHSTAR COMMUNITY SERVICE DISTRICT

Date:_____ **By:**_____

Attest:_____

ROUND HILL GENERAL IMPROVEMENT DISTRICT

Date:_____ **By:**_____

Attest:_____

SOUTH TAHOE PUBLIC UTILITY DISTRICT

Date:_____ **By:**_____

Attest:_____

SQUAW VALLEY PUBLIC SERVICE DISTRICT

Date:_____ **By:**_____

Attest:_____

TAHOE CITY PUBLIC UTILITY DISTRICT

Date:_____ **By:**_____

Attest:_____

TAHOE DOUGLAS SEWER DISTRICT

Date:_____ **By:**_____

Attest:_____

TAHOE - TRUCKEE SANITATION AGENCY

Date:_____ **By:**_____

Attest:_____

TRUCKEE SANITARY DISTRICT

Date:_____ **By:**_____

Attest:_____