CITY OF MOUNTAIN VIEW 2020 URBAN WATER MANAGEMENT PLAN

APPENDICES

June 8, 2021

Appendix A

Urban Water Management Planning Act (California Water Code Division 6, Part 2.6)

WATER CODE - WAT
DIVISION 6. CONSERVATION, DEVELOPMENT, AND UTILIZATION OF STATE WATER RESOURCES [10000 - 12999] *(Heading of Division 6 amended by Stats. 1957, Ch. 1932.)*

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 - 10657]
(Part 2.6 added by Stats. 1983, Ch. 1009, Sec. 1.)

CHAPTER 1. General Declaration and Policy [10610 - 10610.4]
(Chapter 1 added by Stats. 1983, Ch. 1009, Sec. 1.)

10610.

This part shall be known and may be cited as the "Urban Water Management Planning Act."
(Added by Stats. 1983, Ch. 1009, Sec. 1.)

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.
(Amended by Stats. 2018, Ch. 14, Sec. 18. (SB 606) Effective January 1, 2019.)

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.
(Amended by Stats. 2018, Ch. 14, Sec. 19. (SB 606) Effective January 1, 2019.)

CHAPTER 2. Definitions [10611 - 10618]

(Chapter 2 added by Stats. 1983, Ch. 1009, Sec. 1.)

10611.

Unless the context otherwise requires, the definitions of this chapter govern the construction of this part.
(Added by Stats. 1983, Ch. 1009, Sec. 1.)

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.
(Added by renumbering Section 10612 by Stats. 2018, Ch. 14, Sec. 20. (SB 606) Effective January 1, 2019.)

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.
(Amended by Stats. 1995, Ch. 854, Sec. 3. Effective January 1, 1996.)

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.
(Added by Stats. 2018, Ch. 14, Sec. 21. (SB 606) Effective January 1, 2019.)

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.
(Added by Stats. 1983, Ch. 1009, Sec. 1.)

10614.

"Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.
(Added by Stats. 1983, Ch. 1009, Sec. 1.)

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.
(Amended by Stats. 1995, Ch. 854, Sec. 4. Effective January 1, 1996.)

10616.

"Public agency" means any board, commission, county, city and county, city, regional agency, district, or other public entity.
(Added by Stats. 1983, Ch. 1009, Sec. 1.)

10616.5.

'Recycled water" means the reclamation and reuse of wastewater for beneficial use.
(Added by Stats. 1995, Ch. 854, Sec. 5. Effective January 1, 1996.)

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.
(Amended by Stats. 1996, Ch. 1023, Sec. 428. Effective September 29, 1996.)

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.
(Added by Stats. 2018, Ch. 14, Sec. 22. (SB 606) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 14, Sec. 23. (SB 606) Effective January 1, 2019.)

CHAPTER 3. Urban Water Management Plans [10620 - 10645]
(Chapter 3 added by Stats. 1983, Ch. 1009, Sec. 1.)

ARTICLE 1. General Provisions [10620 - 10621]
(Article 1 added by Stats. 1983, Ch. 1009, Sec. 1.)

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.
(Amended by Stats. 2018, Ch. 14, Sec. 24. (SB 606) Effective January 1, 2019.)

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.
(Amended by Stats. 2019, Ch. 239, Sec. 7. (AB 1414) Effective January 1, 2020.)

ARTICLE 2. Contents of Plans [10630 - 10634]
(Article 2 added by Stats. 1983, Ch. 1009, Sec. 1.)

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.
(Amended by Stats. 2018, Ch. 14, Sec. 26. (SB 606) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 14, Sec. 27. (SB 606) Effective January 1, 2019.)

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).

(Amended by Stats. 2019, Ch. 239, Sec. 8. (AB 1414) Effective January 1, 2020.)

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.

(Added by Stats. 2005, Ch. 727, Sec. 2. Effective January 1, 2006.)

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.

(Amended by Stats. 2018, Ch. 14, Sec. 29. (SB 606) Effective January 1, 2019.)

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 decisionmaking 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.

(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 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.
(Repealed and added by Stats. 2018, Ch. 14, Sec. 32. (SB 606) Effective January 1, 2019.)

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.
(Amended by Stats. 2019, Ch. 239, Sec. 9. (AB 1414) Effective January 1, 2020.)

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.
(Added by Stats. 2018, Ch. 14, Sec. 34. (SB 606) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 14, Sec. 35. (SB 606) Effective January 1, 2019.)

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.
(Added by Stats. 2015, Ch. 681, Sec. 1. (SB 664) Effective January 1, 2016.)

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.
(Amended by Stats. 2009, Ch. 534, Sec. 2. (AB 1465) Effective January 1, 2010.)

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.
(Added by Stats. 2001, Ch. 644, Sec. 3. Effective January 1, 2002.)

ARTICLE 2.5. Water Service Reliability [10635- 10635.]
(Article 2.5 added by Stats. 1995, Ch. 854, Sec. 11.)

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.

(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.

(d) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.

(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.
(Amended by Stats. 2018, Ch. 14, Sec. 36. (SB 606) Effective January 1, 2019.)

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

(Article 3 added by Stats. 1983, Ch. 1009, Sec. 1.)

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.
(Amended by Stats. 2018, Ch. 14, Sec. 37. (SB 606) Effective January 1, 2019.)

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.
(Amended by Stats. 2018, Ch. 14, Sec. 38. (SB 606) Effective January 1, 2019.)

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.

(Amended by Stats. 2018, Ch. 14, Sec. 39. (SB 606) Effective January 1, 2019.)

10643.

An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.
(Added by Stats. 1983, Ch. 1009, Sec. 1.)

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.
(Amended by Stats. 2018, Ch. 14, Sec. 40. (SB 606) Effective January 1, 2019.)

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.
(Amended by Stats. 2018, Ch. 14, Sec. 41. (SB 606) Effective January 1, 2019.)

CHAPTER 4. Miscellaneous Provisions [10650 - 10657]
(Chapter 4 added by Stats. 1983, Ch. 1009, Sec. 1.)

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.
(Amended by Stats. 2018, Ch. 14, Sec. 42. (SB 606) Effective January 1, 2019.)

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.
(Amended by Stats. 2018, Ch. 14, Sec. 43. (SB 606) Effective January 1, 2019.)

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.
(Amended by Stats. 1995, Ch. 854, Sec. 16. Effective January 1, 1996.)

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.
(Amended by Stats. 2018, Ch. 14, Sec. 44. (SB 606) Effective January 1, 2019.)

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.
(Amended by Stats. 2018, Ch. 14, Sec. 45. (SB 606) Effective January 1, 2019.)

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.
(Added by Stats. 1983, Ch. 1009, Sec. 1.)

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.
(Amended by Stats. 2018, Ch. 14, Sec. 46. (SB 606) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 14, Sec. 47. (SB 606) Effective January 1, 2019

Appendix B

Water Conservation Act of 2009 (California Water Code Division 6, Part 2.55)

WATER CODE - WAT
DIVISION 6. CONSERVATION, DEVELOPMENT, AND UTILIZATION OF STATE WATER RESOURCES [10000 - 12999] *(Heading of Division 6 amended by Stats. 1957, Ch. 1932.)*

PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION [10608 - 10609.42]
(Part 2.55 added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1.)

CHAPTER 1. General Declarations and Policy [10608 - 10608.8]
(Chapter 1 added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1.)

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.
(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

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.
(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

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.
(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

CHAPTER 2. Definitions [10608.12- 10608.12.]
(Chapter 2 added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1.)

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.

(Amended by Stats. 2019, Ch. 497, Sec. 285. (AB 991) Effective January 1, 2020.)

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

(Chapter 3 added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1.)

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.
(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

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.
(Amended by Stats. 2019, Ch. 497, Sec. 286. (AB 991) Effective January 1, 2020.)

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.
(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

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).
(Amended by Stats. 2010, Ch. 328, Sec. 234. (SB 1330) Effective January 1, 2011.)

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.

(Amended by Stats. 2010, Ch. 257, Sec. 1. (AB 2277) Effective January 1, 2011.)

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.

(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

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.
(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

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.
(Amended by Stats. 2019, Ch. 239, Sec. 1. (AB 1414) Effective January 1, 2020.)

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.
(Added by Stats. 2018, Ch. 14, Sec. 7. (SB 606) Effective January 1, 2019.)

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.
(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

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.
(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

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.
(Amended by Stats. 2014, Ch. 463, Sec. 1. (AB 2067) Effective January 1, 2015.)

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.
(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

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.
(Amended by Stats. 2010, Ch. 328, Sec. 235. (SB 1330) Effective January 1, 2011.)

CHAPTER 4. Agricultural Water Suppliers [10608.48- 10608.48.]
(Chapter 4 added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1.)

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.

(Amended by Stats. 2018, Ch. 15, Sec. 6. (AB 1668) Effective January 1, 2019.)

CHAPTER 5. Sustainable Water Management [10608.50- 10608.50.]

(Chapter 5 added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1.)

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.
(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

CHAPTER 6. Standardized Data Collection [10608.52- 10608.52.]
(Chapter 6 added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1.)

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.
(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

CHAPTER 7. Funding Provisions [10608.56 - 10608.60]
(Chapter 7 added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1.)

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).
(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

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.
(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

CHAPTER 8. Quantifying Agricultural Water Use Efficiency [10608.64- 10608.64.]

(Chapter 8 added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1.)

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.

(Added by Stats. 2009, 7th Ex. Sess., Ch. 4, Sec. 1. (SB 7 7x) Effective February 3, 2010.)

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

(Chapter 9 added by Stats. 2018, Ch. 15, Sec. 7.)

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.

(Amended by Stats. 2019, Ch. 497, Sec. 287. (AB 991) Effective January 1, 2020.)

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.
(Added by Stats. 2018, Ch. 15, Sec. 7. (AB 1668) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 15, Sec. 7. (AB 1668) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 15, Sec. 7. (AB 1668) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 15, Sec. 7. (AB 1668) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 15, Sec. 7. (AB 1668) Effective January 1, 2019.)

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).
(Added by Stats. 2018, Ch. 15, Sec. 7. (AB 1668) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 15, Sec. 7. (AB 1668) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 15, Sec. 7. (AB 1668) Effective January 1, 2019.)

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)).
(Added by Stats. 2018, Ch. 15, Sec. 7. (AB 1668) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 15, Sec. 7. (AB 1668) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 15, Sec. 7. (AB 1668) Effective January 1, 2019.)

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.

(Amended by Stats. 2019, Ch. 239, Sec. 2. (AB 1414) Effective January 1, 2020.)

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.

(Added by Stats. 2018, Ch. 453, Sec. 4. (SB 875) Effective September 17, 2018. Section operative January 1, 2019, by its own provisions.)

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.

(Amended by Stats. 2019, Ch. 239, Sec. 3. (AB 1414) Effective January 1, 2020.)

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.

(Amended by Stats. 2019, Ch. 239, Sec. 4. (AB 1414) Effective January 1, 2020.)

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.

(Added by Stats. 2019, Ch. 239, Sec. 5. (AB 1414) Effective January 1, 2020.)

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.
(Amended by Stats. 2019, Ch. 239, Sec. 6. (AB 1414) Effective January 1, 2020.)

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.
(Added by Stats. 2019, Ch. 203, Sec. 1. (SB 134) Effective January 1, 2020.)

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.
(Added by Stats. 2018, Ch. 14, Sec. 12. (SB 606) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 14, Sec. 13. (SB 606) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 14, Sec. 14. (SB 606) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 14, Sec. 15. (SB 606) Effective January 1, 2019.)

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.
(Added by Stats. 2018, Ch. 14, Sec. 16. (SB 606) Effective January 1, 2019.)

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.

(Added by Stats. 2018, Ch. 14, Sec. 17. (SB 606) Effective January 1, 2019.)

CHAPTER 10. Countywide Drought and Water Shortage Contingency Plans [10609.40 - 10609.42]

(Chapter 10 added by Stats. 2018, Ch. 15, Sec. 8.)

10609.40.

The Legislature finds and declares both of the following:

(a) Small water suppliers and rural communities are often not covered by established water shortage planning requirements. Currently, most counties do not address water shortages or do so minimally in their general plan or the local hazard mitigation plan.

(b) The state should provide guidance to improve drought planning for small water suppliers and rural communities.

(Added by Stats. 2018, Ch. 15, Sec. 8. (AB 1668) Effective January 1, 2019.)

10609.42.

(a) No later than January 1, 2020, the department, in consultation with the board and other relevant state and local agencies and stakeholders, shall use available data to identify small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability. The department shall notify counties and groundwater sustainability agencies of those suppliers or communities that may be at risk within its jurisdiction, and may make the information publicly accessible on its Internet Web site.

(b) The department shall, in consultation with the board, by January 1, 2020, propose to the Governor and the Legislature recommendations and guidance relating to the development and implementation of countywide drought and water shortage contingency plans to address the planning needs of small water suppliers and rural communities. The department shall recommend how these plans can be included in county local hazard mitigation plans or otherwise integrated with complementary existing planning processes. The guidance from the department shall outline goals of the countywide drought and water shortage contingency plans and recommend components including, but not limited to, all of the following:

(1) Assessment of drought vulnerability.
(2) Actions to reduce drought vulnerability.
(3) Response, financing, and local communication and outreach planning efforts that may be implemented in times of drought.
(4) Data needs and reporting.
(5) Roles and responsibilities of interested parties and coordination with other relevant water management planning efforts.

(c) In formulating the proposal, the department shall utilize a public process involving state agencies, cities, counties, small communities, small water suppliers, and other stakeholders.

(Added by Stats. 2018, Ch. 15, Sec. 8. (AB 1668) Effective January 1, 2019.)

Appendix C

Urban Water Management Plan Completion Checklist

Subject	Code Section	Summary as Applies to UWMP	2020 UWMP Location	Table, Figure, Appendix
Summary	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.	Executive Summary	
Plan Preparation	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.	Ch 1.4 - Coordination & Outreach	Appendix F - Letters
Plan Preparation	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.	Ch 1.5 - Adoption & Submittal	Appendix G - Resolution
Plan Preparation	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.	Ch 1.4 - Coordination & Outreach	Appendix F - Letters
Plan Adoption, Submittal, and Implementation	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.	Ch 1.4 - Coordination & Outreach	Appendix F - Letters
Plan Adoption, Submittal, and Implementation	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.	Ch 1.4 - Coordination & Outreach	Appendix F - Letters
Plan Adoption, Submittal, and Implementation	10642	Provide supporting documentation that the plan and contingency plan has been adopted as prepared or modified.	Ch 1.4 - Coordination & Outreach	Appendix G - Resolution
Plan Adoption, Submittal, and Implementation	10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets	Ch 1.5 - Adoption & Submittal	Appendix G - Resolution
Plan Adoption, Submittal, and Implementation	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.	Ch 1.4 - Coordination & Outreach	Appendix F - Letters
Plan Adoption, Submittal, and Implementation	10621(f)	Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.	Ch 1.5 - Adoption & Submittal	
Plan Adoption, Submittal, and Implementation	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.	Ch 1.4 - Coordination & Outreach	Appendix F - Letters

Subject	Code Section	Summary as Applies to UWMP	2020 UWMP Location	Table, Figure, Appendix
Plan Adoption, Submittal, and Implementation	10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Ch 1.4 - Coordination & Outreach	
Plan Adoption, Submittal, and Implementation	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.	Ch 1.4 - Coordination & Outreach	Appendix F - Letters
Plan Adoption, Submittal, and Implementation	10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Ch 1.5 - Adoption & Submittal	
Plan Adoption, Submittal, and Implementation	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.	Ch 1.5 - Adoption & Submittal	
Plan Adoption, Submittal, and Implementation	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.	Ch 1.5 - Adoption & Submittal	
System Description	10631(a)	Describe the water supplier service area.	Ch 2 - Service Area	
System Description	10631(a)	Describe the climate of the service area of the supplier.	Ch 2.4 - Climate	
System Description	10631(a)	Indicate the current population of the service area.	Ch 2.3 - Population & Employment	
System Description	10631(a)	Provide population projections for 2025, 2030, 2035, 2040 and optionally 2045.	Ch 2.3 - Population & Employment	Table 2-1
System Description	10631(a)	Describe other social, economic, and demographic factors affecting the supplier's water management planning.	Ch 2.2 - Demographics	
System Description	10631(a)	Describe the land uses within the service area.	Ch 2.1 - Land Use	
System Water Use	10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	Ch 4 - Water Demand	Table 4-1 Table 4-4
System Water Use	10631(d)(3)(A)	Report the distribution system water loss for each of the 5 years preceding the plan update.	Ch 4.1.2 - Water Loss	Table 4-2

Subject	Code Section	Summary as Applies to UWMP	2020 UWMP Location	Table, Figure, Appendix
System Water Use	10631(d)(3)(C)	Retail suppliers shall provide data to show the distribution loss standards were met.	Ch 4.1.2 - Water Loss	
System Water Use	10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	Ch 4.3.4 - Lower-Income Household	Table 4-5
Baselines and Targets	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.	Ch 4.2 - 2020 Target	
Baselines and Targets	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.	NA	
Baselines and Targets	10608.4	Retail suppliers shall report on their progress in meeting their water use targets. The data shall be reported using a standardized form.	Ch 4.2 - 2020 Target	Appendix E - SBX7-7 Tables
Baselines and Targets	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.	Ch 4.2 - 2020 Target	Appendix E - SBX7-7 Tables
Baselines and Targets	10608.24(a)	Retail suppliers shall meet their water use target by December 31, 2020.	Ch 4.2 - 2020 Target	Appendix E - SBX7-7 Tables
Baselines and Targets	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.	NA	
System Supplies	10631(b)	Identify and quantify the existing and planned sources of water available for 2020, 2025, 2030, 2035, 2040 and optionally 2045.	Ch 5.6 - Projected Water Supply Production	Table 5-4
System Supplies	10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	Ch 5.3 - Local Groundwater	
System Supplies	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.	Ch 6 - Water Supplly Reliability	
System Supplies	10631(b)(2)	When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies.	Ch 3 - Water System	

Subject	Code Section	Summary as Applies to UWMP	2020 UWMP Location	Table, Figure, Appendix
System Supplies	10631(b)(3)	Describe measures taken to acquire and develop planned sources of water.	Ch 6 - Water Supplly Reliability	
System Supplies	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.	Ch 5.3 - Local Groundwater	Appendix J - GWMP
System Supplies	10631(b)(4)(B)	Describe the groundwater basin.	Ch 5.3 - Local Groundwater	
System Supplies	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.	Ch 5.3 - Local Groundwater	
System Supplies	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.	Ch 5.3 - Local Groundwater	
System Supplies	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	Ch 5.3 - Local Groundwater	Table 5-1
System Supplies	10631(b)(4)(D)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	Ch 6.7.2 - Supply and Demand Assessment	Table 6-2, Table 6-3, Table 6-4
System Supplies	10631(c)	Describe the opportunities for exchanges or transfers of water on a short-term or long- term basis.	Ch 6.6 - Transfers & Exchanges	
System Supplies	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.	Ch 6 - Water Supplly Reliability	
System Supplies	10631(g)	Describe desalinated water project opportunities for long-term supply.	Ch 6.6 - Desalination	
System Supplies	10631(h)	Retail suppliers will include documentation that they have provided their wholesale supplier(s) - if any - with water use projections from that source.	Ch 1.4 - Coordination & Outreach	

Subject	Code Section	Summary as Applies to UWMP	2020 UWMP Location	Table, Figure, Appendix
System Supplies	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.	NA	
System Supplies (Recycled Water)	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.	Ch 5.4.1 - Wastewater Treatment	
System Supplies (Recycled Water)	10633(c)	Describe the recycled water currently being used in the supplier's service area.	Ch 5.4 - Recycled Water	
System Supplies (Recycled Water)	10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	Ch. 5.4.3 - Feasibility Study	
System Supplies (Recycled Water)	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.	Ch 5.4.4 - Current and Projected Recycled Water	Table 5-4
System Supplies (Recycled Water)	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.	Ch 5.4.6 - Enouraging Recycled Water Use	
System Supplies (Recycled Water)	10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	Ch 5.4.7 - Recycled Water Oplimization	
Water Supply Reliability Assessment	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	Ch 6.3 - Water Quality Impacts	
Water Supply Reliability Assessment	10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Ch 5 & 6	
Water Supply Reliability Assessment	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.	Ch 6.8 - Water Service Reliability Assessment	

Subject	Code Section	Summary as Applies to UWMP	2020 UWMP Location	Table, Figure, Appendix
Water Supply Reliability Assessment	10635(b)	Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects.	Ch 6.7.3 - Drought Risk Assessment	Table 6-5
Water Supply Reliability Assessment	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.	Ch 6.7 - Water Service Reliability Assessment	
Water Supply Reliability Assessment	10635(b)(2)	Include a determination of the reliability of each source of supply under a variety of water shortage conditions.	Ch 6 - Water Supplly Reliability	
Water Supply Reliability Assessment	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.	Ch 6.7 - Water Service Reliability Assessment	Table 6-3
Water Supply Reliability Assessment	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.	Ch 6 - Water Supplly Reliability	
Demand Management Measures	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. The description will address specific measures listed in code.	Ch 7 - Water Conservation	
Demand Management Measures	10631(e)(2)	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	NA	
Water Shortage Contingency Planning	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Ch 8 - Water Shortage Contingency Plan	
Water Shortage Contingency Planning	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.	Ch 8.12 - Reevalution	
Water Shortage Contingency Planning	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.	Ch 8.1 - Decision-Making Process	

Subject	Code Section	Summary as Applies to UWMP	2020 UWMP Location	Table, Figure, Appendix
Water Shortage Contingency Planning	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.	Ch 8.1 - Decision-Making Process	
Water Shortage Contingency Planning	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.	Ch 8.2 - Stages of Action	Table 8-1
Water Shortage Contingency Planning	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.	Ch 8.2 - Stages of Action	Table 8-1
Water Shortage Contingency Planning	10632(a)(4)(A)	Suppliers with water shortage contingency plans that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	Ch 6 - Water Supplly Reliability	
Water Shortage Contingency Planning	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Ch 8.3 - Demand Reduction	
Water Shortage Contingency Planning	10632(a)(4)(C)	Specify locally appropriate operational changes.	Ch 6 - Water Supplly Reliability	
Water Shortage Contingency Planning	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.	Ch 8.3 - Demand Reduction	
Water Shortage Contingency Planning	10632(a)(4)(E)	Estimate the extent to which the gap between supplies and demand will be reduced by implementation of the action.	Ch 8.3 - Demand Reduction	
Water Shortage Contingency Planning	10632(a)(5)(A)	Suppliers must describe that they will inform customers, the public and others regarding any current or predicted water shortages.	Ch 8 - Water Shortage Contingency Plan	
Water Shortage Contingency Planning	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.	Ch 8 - Water Shortage Contingency Plan	

Subject	Code Section	Summary as Applies to UWMP	2020 UWMP Location	Table, Figure, Appendix
Water Shortage Contingency Planning	10632(a)(7)(A)	Describe the legal authority that empowers the supplier to enforce shortage response actions.	Ch 8 - Water Shortage Contingency Plan	
Water Shortage Contingency Planning	10632(a)(7)(B)	Provide a statement that the supplier will declare a water shortage emergency Water Code Chapter 3.	Ch 8 - Water Shortage Contingency Plan	
Water Shortage Contingency Planning	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.	Ch 8 - Water Shortage Contingency Plan	
Water Shortage Contingency Planning	10632(a)(8)(A)	Describe the potential revenue reductions and expense increases associated with activated shortage response actions.	Ch 8 - Water Shortage Contingency Plan	
Water Shortage Contingency Planning	10632(a)(8)(B)	Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions.	Ch 8 - Water Shortage Contingency Plan	
Water Shortage Contingency Planning	10632(a)(8)(C)	Describe the cost of compliance with Water Code Chapter 3.3: Excessive Residential Water Use During Drought.	Ch 8 - Water Shortage Contingency Plan	
Water Shortage Contingency Planning	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.	Ch 8 - Water Shortage Contingency Plan	
Water Shortage Contingency Planning	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.	Ch 8 - Water Shortage Contingency Plan	
Energy Intensity	10631.2(a)	The UWMP must include energy intensity information as stated in the code.	Ch 5.7 - Energy Intensity	

Appendix D

Department of Water Resources Guidebook Tables

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 *
Add additional rows as needed			
CA4310007	City of Mountain View	17,543	10,037
	TOTAL	17,543	10,037
**** Units of measure (AF, CCF, MG)*** *must remain consistent throughout the UWMP as reported in Table 2-3.*			
NOTES:			

Submittal Table 2-2: Plan Identification			
Select Only One	**Type of Plan**		**Name of RUWMP or Regional Alliance** *if applicable* (select from drop down list)
☑	**Individual UWMP**		
	☐	Water Supplier is also a member of a RUWMP	
	☐	Water Supplier is also a member of a Regional Alliance	
☐	**Regional Urban Water Management Plan (RUWMP)**		
NOTES:			

Submittal 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
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	AF
**** 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
Add additional rows as needed
San Francisco Public Utilities Commission
Santa Clara Valley Water District
Palo Alto Regional Water Quality Control Plant
NOTES:

Submittal Table 3-1 Retail: Population - Current and Projected						
Population Served	2020	2025	2030	2035	2040	2045*(opt)*
	79,772	91,810	98,080	104,350	110,630	116,900
NOTES: Excludes residents within the municipal boundaries of Mountain View that receive water from California Water Service Company.						

Submittal Table 4-1 Retail: Demands for Potable and Non-Potable[1] 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	2,689
Multi-Family		Drinking Water	3,063
Commercial	Includes Institutional	Drinking Water	1,062
Industrial		Drinking Water	303
Landscape		Drinking Water	2,367
Other	Construction	Drinking Water	7
		TOTAL	9,489

[1] *Recycled water demands are NOT reported in this table. Recycled water demands are reported in Table 6-4.*

[2] *Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.*

NOTES:

Submittal Table 4-2 Retail: Use for Potable and Non-Potable[1] Water - Projected						
Use Type	Additional Description (as needed)	Projected Water Use[2] *Report To the Extent that Records are Available*				
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		2025	2030	2035	2040	2045 (opt)
Add additional rows as needed						
Single Family		2,632	2,573	2,523	2,482	2,445
Multi-Family		3,569	3,873	4,191	4,520	4,854
Commercial	Includes institutional	1,672	1,719	1,771	1,826	1,885
Industrial		457	473	490	508	526
Landscape		2,468	2,614	2,759	2,905	3,051
Losses		800	835	868	903	938
Other	Construction	12	13	14	15	16
TOTAL		11,610	12,100	12,616	13,159	13,715

[1] *Recycled water demands are NOT reported in this table. Recycled water demands are reported in Table 6-4.*

[2] *Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.*

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 *From Tables 4-1R and 4-2 R*	9,489	11,610	12,100	12,616	13,159	13,715
Recycled Water Demand[1] *From Table 6-4*	420	448	448	448	448	448
Optional Deduction of Recycled Water Put Into Long-Term Storage[2]						
TOTAL WATER USE	9,909	12,058	12,548	13,064	13,607	14,163

[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]
07/2019	272
07/2018	345
07/2017	350
07/2016	788
07/2015	408
[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:	

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)*	Yes
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.	Chapter 4.3.3 - Demand Model Scenarios and Results
Are Lower Income Residential Demands Included In Projections? *Drop down list (y/n)*	Yes
NOTES: Projections account for plumbing code water savings. Active conservation measure savings is not included.	

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	*1995*	*2004*	*180*	*146*
5 Year	*2006*	*2010*	*158*	

**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 **From** **SB X7-7 2020 Compliance Form** *Retail Supplier or Regional Alliance Only*				
2020 GPCD				
Actual 2020 GPCD*	2020 TOTAL Adjustments*	Adjusted 2020 GPCD* *(Adjusted if applicable)*	2020 Confirmed Target GPCD*	Did Supplier Achieve Targeted Reduction for 2020? Y/N
112	*0*	*112*	*146*	*Yes*
**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)*				
NOTES:				

Submittal Table 6-1 Retail: Groundwater Volume Pumped						
☐	Supplier does not pump groundwater. The supplier will not complete the table below.					
☐	All or part of the groundwater described below is desalinated.					
Groundwater Type ***Drop Down List*** *May use each category multiple times*	Location or Basin Name	2016*	2017*	2018*	2019*	2020*
Add additional rows as needed						
Alluvial Basin	Santa Clara Valley Groundwater Basin - Santa Clara Subbasin (DWR 2-9.02)	117	138	165	249	190
	TOTAL	117	138	165	249	190
**** Units of measure (AF, CCF, MG)*** *must remain consistent throughout the UWMP as reported in Table 2-3.*						
NOTES:						

Submittal Table 6-2 Retail: Wastewater Collected Within Service Area in 2020						
☐	There is no wastewater collection system. The supplier will not complete the table below.					
	Percentage of 2020 service area covered by wastewater collection system *(optional)*					
	Percentage of 2020 service area population covered by wastewater collection system *(optional)*					
Wastewater Collection			**Recipient of Collected Wastewater**			
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? *Drop Down List*	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? *Drop Down List*	Is WWTP Operation Contracted to a Third Party? *(optional)* *Drop Down List*
City of Mountain View	Metered	7,732	City of Palo Alto	Palo Alto Regional Water Control Plant	No	No
Total Wastewater Collected from Service Area in 2020:		7,732				
**** 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

☑	**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 ***Drop down list***	Does This Plant Treat Wastewater Generated Outside the Service Area? ***Drop down list***	Treatment Level ***Drop down list***	**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:	Palo Alto Regional Water Quality Control Plant
Name of Supplier Operating the Recycled Water Distribution System:	City of Mountain View
Supplemental Water Added in 2020 (volume) *Include units*	0 AF
Source of 2020 Supplemental Water	

Beneficial Use Type *Insert additional rows if needed.*	**Potential** Beneficial Uses of Recycled Water (Describe)	Amount of **Potential** Uses of Recycled Water (Quantity) *Include volume units* [1]	General Description of 2020 Uses	Level of Treatment *Drop down list*	2020 [1]	2025 [1]	2030 [1]	2035 [1]	2040 [1]	2045 [1] (opt)
Agricultural irrigation										
Landscape irrigation (exc golf courses)				Tertiary	276	358	358	358	358	358
Golf course irrigation				Tertiary	87	87	87	87	87	87
Commercial use				Tertiary	3	3	3	3	3	3
Industrial use										
Geothermal and other energy production										
Seawater intrusion barrier										
Recreational impoundment			Water stored in open pond before irrigation golf course and park	Tertiary	53					
Wetlands or wildlife habitat										
Groundwater recharge (IPR)										
Reservoir water augmentation (IPR)										
Direct potable reuse										
Other (Construction)			Construction		1					
				Total:	420	448	448	448	448	448
				2020 Internal Reuse						

[1] ***Units of measure (AF, CCF, MG)*** *must remain consistent throughout the UWMP as reported in Table 2-3.*

NOTES: Mountain View is currently updating the Recycled Water Feasibility Study, which will provide updated estimates of future recycled water potential.

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]
Insert additional rows as needed.		
Agricultural irrigation		
Landscape irrigation (exc golf courses)	711	276
Golf course irrigation	243	87
Commercial use	28	3
Industrial use	13	
Geothermal and other energy production		
Seawater intrusion barrier		
Recreational impoundment		53
Wetlands or wildlife habitat		
Groundwater recharge (IPR)		
Reservoir water augmentation (IPR)		
Direct potable reuse		
Other (Construction)		1
Total	995	420

[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			
☑	Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
Chapter 5.4.4	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			
Advanced treatment	Improve water quality	2024	TBD
Feasibility study projects	Improve and expand existing system	TBD	TBD
		Total	0
***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.*			
NOTES: Mountain View is studying system expansion, but has not yet allocated funding.			

Submittal Table 6-7 Retail: Expected Future Water Supply Projects or Programs						
☐	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.					
☐	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 *Drop Down List*	Expected Increase in Water Supply to Supplier* *This may be a range*
	Drop Down List (y/n)	*If Yes, Supplier Name*				
Add additional rows as needed						
New Groundwater Well	No		Construction of new groundwater well.	2025-2029	Average Year	1,456
***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	San Francisco Public Utilities Commission	8,747	Drinking Water	
Purchased or Imported Water	Santa Clara Valley Water District	1,099	Drinking Water	
Groundwater (not desalinated)	Santa Clara Valley Groundwater Basin	190	Drinking Water	
Recycled Water	Palo Alto Regional Water Quality Control Plant	420	Recycled Water	
	Total	10,456		0
***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.*				
NOTES: SFPUC supply guarantee is 13,957 AFY.				

Submittal Table 6-9 Retail: Water Supplies — Projected

Water Supply	Additional Detail on Water Supply	Projected Water Supply * Report To the Extent Practicable									
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		**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)
Add additional rows as needed											
Purchased or Imported Water	San Francisco Public Utilities Commission	10,154		10,644		11,160		11,703		12,259	
Purchased or Imported Water	Santa Clara Valley Water District	1,176		1,176		1,176		1,176		1,176	
Groundwater (not desalinated)	Santa Clara Valley Basin	280		280		280		280		280	
Recycled Water	Palo Alto Regional Water Quality Control Plant	448		448		448		448		448	
	Total	12,058	0	12,548	0	13,064	0	13,607	0	14,163	0

***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.*

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**	
		☑	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location ____Table 6-2 and Table 6-3_____
		☐	Quantification of available supplies is provided in this table as either volume only, percent only, or both.
		Volume Available *	**% of Average Supply**
Average Year			100%
Single-Dry Year			
Consecutive Dry Years 1st Year			
Consecutive Dry Years 2nd Year			
Consecutive Dry Years 3rd Year			
Consecutive Dry Years 4th Year			
Consecutive Dry Years 5th Year			
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.			
***Units of measure (AF, CCF, MG**) must remain consistent throughout the UWMP as reported in Table 2-3.*			
NOTES:			

Submittal Table 7-2 Retail: Normal Year Supply and Demand Comparison					
	2025	2030	2035	2040	2045 *(Opt)*
Supply totals (*autofill from Table 6-9)*	12,058	12,548	13,064	13,607	14,163
Demand totals *(autofill from Table 4-3)*	12,058	12,548	13,064	13,607	14,163
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*	9,646	10,038	10,451	10,886	11,330
Demand totals*	12,058	12,548	13,064	13,607	14,163
Difference	(2,412)	(2,510)	(2,613)	(2,721)	(2,833)
***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.*					
NOTES:					

Submittal Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison						
		2025*	2030*	2035*	2040*	2045* (Opt)
First year	Supply totals	9,646	10,038	10,451	10,886	11,330
	Demand totals	12,058	12,548	13,064	13,607	14,163
	Difference	(2,412)	(2,510)	(2,613)	(2,721)	(2,833)
Second year	Supply totals	9,198	10,038	10,451	10,886	11,330
	Demand totals	12,058	12,548	13,064	13,607	14,163
	Difference	(2,860)	(2,510)	(2,613)	(2,721)	(2,833)
Third year	Supply totals	9,646	10,038	10,451	10,886	11,330
	Demand totals	12,058	12,548	13,064	13,607	14,163
	Difference	(2,412)	(2,510)	(2,613)	(2,721)	(2,833)
Fourth year	Supply totals	9,646	10,038	10,451	10,886	11,330
	Demand totals	12,058	12,548	13,064	13,607	14,163
	Difference	(2,412)	(2,510)	(2,613)	(2,721)	(2,833)
Fifth year	Supply totals	9,646	10,038	10,451	10,886	11,330
	Demand totals	12,058	12,548	13,064	13,607	14,163
	Difference	(2,412)	(2,510)	(2,613)	(2,721)	(2,833)
Sixth year *(optional)*	Supply totals					
	Demand totals					
	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:						

Submittal Table 7-5: Five-Year Drought Risk Assessment Tables to address Water Code Section 10635(b)

2021	Total
Total Water Use	10,737
Total Supplies	10,737
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	0
WSCP - use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%

2022	Total
Total Water Use	11,067
Total Supplies	11,067
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	0
WSCP - use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%

2023	Total
Total Water Use	11,398
Total Supplies	9,118
Surplus/Shortfall w/o WSCP Action	(2,280)
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	0
WSCP - use reduction savings benefit	2,280
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	20%

2024	Total
Total Water Use	11,760
Total Supplies	9,408
Surplus/Shortfall w/o WSCP Action	(2,352)
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	0
WSCP - use reduction savings benefit	2,352
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	20%

2025	Total
Total Water Use	12,058
Total Supplies	9,646
Surplus/Shortfall w/o WSCP Action	(2,412)
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	0
WSCP - use reduction savings benefit	2,412
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	20%

Submittal Table 8-1
Water Shortage Contingency Plan Levels

Shortage Level	Percent Shortage Range	Shortage Response Actions (*Narrative description*)
1	Up to 10%	Crosswalks with Mountain View Stage 1 (up to 10%) Level 1 and Stage 1 include voluntary water shortage actions and increasing water conservation outreach to achieve demand reductions.
2	Up to 20%	Crosswalks with Mountain View Stage 2 (11-25%) Level 2 and Stage 2 initiate mandatory water use restrictions and requirements, focusing on limiting outdoor water use, fixing leaks within 5 days, and requiring water-conserving devices such as restaurant
3	Up to 30%	Crosswalks with Mountain View Stage 3 (26-40%) Level 3 and Stage 3 require further restrictions, including enforcement of filling swimming pools with potable water, require commercial car washes to recirculate water, and require leaks to be fixed within three days.
4	Up to 40%	Crosswalks with Mountain View Stage 3 (26-40%) Refer to the description above provided for Level 3.
5	Up to 50%	Crosswalks with Mountain View Stage 4 (>40%) Level 5 and Stage 4 restrict all outdoor irrigation use, except for special cases (such as fire prevention) and maintenance of public spaces. Water leaks must be repaired within 24 hours.
6	>50%	Crosswalks with Mountain View Stage 4 (>40%) Refer to the description above provided for Stage 4. The City may consider modifying the City Code to intensify or add new water use restrictions if warranted.

NOTES: City of Mountain View has crosswalked the water shortage stages with the required standard level (see Table 8-1 in Chapter 8).

Submittal Table 8-2: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions ***Drop down list*** *These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.*	How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only*** *Drop Down List*
Add additional rows as needed				
1	Expand Public Information Campaign	0-10%	Expand public outreach to promote existing programs and request voluntary conservation.	No
1	Offer Water Use Surveys	0-1%	Offerred under normal supply conditions. Expand outreach to increase participation.	No
1	Provide Rebates on Plumbing Fixtures and Devices	0-1%	Offerred under normal supply conditions. Expand outreach to increase participation.	No
1	Provide Rebates for Landscape Irrigation Efficiency	0-1%	Offerred under normal supply conditions. Expand outreach to increase participation.	No
1	Provide Rebates for Turf Replacement	0-1%	Offerred under normal supply conditions. Expand outreach to increase participation.	No
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	0-1%	Required under normal supply conditions. Expand outreach to increase compliance.	Yes
1	Other - Require automatic shut of hoses	0-1%	Required under normal supply conditions. Expand outreach to increase compliance.	Yes
1	CII - Restaurants may only serve water upon request	0-1%	Required under normal supply conditions. Expand outreach to increase compliance.	Yes
1	CII - Other CII restriction or prohibition	0-1%	Use of potable water in single-pass cooling systems.	Yes
2	Other - Prohibit use of potable water for washing hard surfaces	0-1%	Except by bucket or when necessary to alleviate safety or sanitary hazards.	Yes
2	Landscape - Limit landscape irrigation to specific times	0-5%	Prohibited between 9:00 am and 5:00 pm.	Yes
2	Landscape - Limit landscape irrigation to specific days	5-25%	One (1) to three (3) days per week.	Yes
2	Landscape - Other landscape restriction or prohibition	0-5%	Watering or irrigating during a rain event.	Yes
2	Landscape - Other landscape restriction or prohibition	5-10%	Irrigation time limited to 15 minutes per zone. Does not apply to drip irrigation or high-efficiency sprinkler nozzles.	Yes

2	Landscape - Other landscape restriction or prohibition	5-15%	As an alternative to the standard stage 2 watering restrictions, large landscape water customers with a dedicated irrigation meter and those eligible and participating in the City's Landscape Water Budget Program may elect to reduce irrigation water use below the customer's Landscape Water Budget by a percentage as determined by the director and posted by the City.	Yes
2	Water Features - Restrict water use for decorative water features, such as fountains	0-1%	Except as needed to maintain aquatic life.	Yes
2	CII - Commercial kitchens required to use pre-rinse spray valves	0-1%		Yes
2	CII - Lodging establishment must offer opt out of linen service	0-1%		Yes
2	CII - Other CII restriction or prohibition	0-1%	Construction or installation of a new commercial car wash system or commercial laundry system that does not utilize water-recirculation technologies.	Yes
2	Other - Prohibit use of potable water for construction and dust control	0-1%	When recycled water is readily available.	Yes
3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	0-1%	At-home washing allow by use of a hand-held bucket.	Yes
3	Other water feature or swimming pool restriction	0-1%	Filling swimming pools or spas with potable water.	Yes
4	Landscape - Prohibit all landscape irrigation	up to 30%	Except for maintenance of: existing landscape necessary for fire protection; existing landscape for soil erosion; plant materials identified to be rare or essential to the well-being of protected species; landscape within active public parks and playing fields, day-care centers, golf course greens and school grounds. Provided that such irrigation does not exceed one (1) day per week and does not occur between 9:00 a.m. and 5:00 p.m.	Yes
NOTES: Most water shortage savings are achieved through limiting irrigation. During the last drought, Mountain View declared a Stage 2 drought and limited irrigation to 2-days per week. The resulting water savings 29% compared to pre-drought levels.				

Submittal Table 10-1 Retail: Notification to Cities and Counties		
City Name	60 Day Notice	Notice of Public Hearing
Add additional rows as needed		
NA		
County Name *Drop Down List*	60 Day Notice	Notice of Public Hearing
Add additional rows as needed		
Santa Clara County	Yes	Yes

NOTES: Mountain View does not serve water outside the municipal boundaries. Several neighboring cities were notified as a courtesy, but none required as part of the UWMP Act.

Appendix E

Water Conservation Act of 2009 Compliance Tables (SB X7-7 Tables)

SB X7-7 Table 0: Units of Measure Used in 2020 UWMP* *(select one from the drop down list)*
Acre Feet
**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: Excludes properties within the City that are served by Califonia Water Service Company.	

SB X7-7 Table 3: 2020 Service Area Population	
2020 Compliance Year Population	
2020	79,772
NOTES:	

SB X7-7 Table 4: 2020 Gross Water Use							
Compliance Year 2020	**2020 Volume Into Distribution System** *This column will remain blank until SB X7-7 Table 4-A is completed.*	**2020 Deductions**					**2020 Gross Water Use**
		Exported Water *	**Change in Dist. System Storage*** (+/-)	**Indirect Recycled Water** *This column will remain blank until SB X7-7 Table 4-B is completed.*	**Water Delivered for Agricultural Use***	**Process Water** *This column will remain blank until SB X7-7 Table 4-D is completed.*	
	10,037			-		-	**10,037**

*** 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	Groundwater
This water source is *(check one)* **:**	
☑	The supplier's own water source
☐	A purchased or imported source

Compliance Year 2020	Volume Entering Distribution System [1]	Meter Error Adjustment [2] *Optional (+/-)*	Corrected Volume Entering Distribution System
	190	-	190

[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	San Francisco Public Utilities Commission
This water source is *(check one)* **:**	
☐	The supplier's own water source
☑	A purchased or imported source

Compliance Year 2020	Volume Entering Distribution System [1]	Meter Error Adjustment [2] *Optional (+/-)*	Corrected Volume Entering Distribution System
	8,747		8,747

[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	Valley Water
This water source is *(check one)* **:**	
☐	The supplier's own water source
☑	A purchased or imported source

Compliance Year 2020	Volume Entering Distribution System [1]	Meter Error Adjustment [2] *Optional (+/-)*	Corrected Volume Entering Distribution System
	1,099		1,099

[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 5: 2020 Gallons Per Capita Per Day (GPCD)		
2020 Gross Water *Fm SB X7-7 Table 4*	**2020 Population** *Fm SB X7-7 Table 3*	**2020 GPCD**
10,037	79,772	**112**
NOTES:		

SB X7-7 Table 9: 2020 Compliance

Actual 2020 GPCD[1]	Optional Adjustments to 2020 GPCD (Enter "0" if Adjustment Not Used)			TOTAL Adjustments[1]	Adjusted 2020 GPCD [1] *(Adjusted if applicable)*	2020 Confirmed Target GPCD [1, 2]	**Did Supplier Achieve Targeted Reduction for 2020?**
	Extraordinary Events[1]	Weather Normalization[1]	Economic Adjustment[1]				
112	-	-	-	-	112	146	**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:

Appendix F

Example Notification Letters and Public Hearing Notices

CITY OF MOUNTAIN VIEW

PUBLIC WORKS DEPARTMENT • PUBLIC SERVICES DIVISION
231 North Whisman Road • Post Office Box 7540 • Mountain View • California • 94039-7540
650-903-6329 • Fax 650-962-8079

March 8, 2021

«FIRST» «LAST» **VIA E-MAIL**

«GROUP»
«*EMAIL_lower*»

NOTICE OF PREPARATION OF URBAN WATER MANAGEMENT PLAN UPDATE

Dear «FIRST_lower»: «LAST_lower»:

The Urban Water Management Plan Act (California Water Code §10610-10656) requires the City of Mountain View to update its Urban Water Management Plan (UWMP) every five years. The UWMP evaluates Mountain View's water supply and demand, and provides a blueprint for meeting the community's long-term water supply objectives.

Included in this process, the City of Mountain View will jointly update its Water Shortage Contingency Plan (WSCP). The WSCP addresses potential water shortage vulnerability and drought risks for Mountain View's water supply.

We are currently reviewing our UWMP and WSCP, which were last updated in 2016, and invite you to participate in this process. Proposed revisions will be made available for public review and a public hearing will be held this spring. If you have any questions about the update process, please contact:

Emily Yarsinske
Water Resources Technician
Phone: (650) 903-6078
Email: emily.yarsinske@mountainview.gov

Sincerely,

Elizabeth Flegel
Water Resources Manager

cc: APWD-Au, USM, WRT

CITY OF MOUNTAIN VIEW

PUBLIC WORKS DEPARTMENT • PUBLIC SERVICES DIVISION
231 North Whisman Road • Post Office Box 7540 • Mountain View • California • 94039-7540
650-903-6329 • Fax 650-962-8079

May 11, 2021

«FIRST» «LAST» «SUFFIX» **VIA E-MAIL**
«TITLE»
«GROUP»
«EMAIL_lower»

NOTICE OF PUBLIC HEARING FOR THE 2020 URBAN WATER MANAGEMENT PLAN AND WATER SHORTAGE CONTINGENCY PLAN

Dear «FIRST_lower» «LAST_lower»:

California Water Code requires the City of Mountain View to review and update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every five years. The UWMP evaluates Mountain View's water supply and demand, and provides a blueprint for meeting the community's long-term water supply objectives. The WSCP addresses potential water shortage vulnerability and drought risks for Mountain View's water supply, and is included as a chapter of the UWMP.

The proposed 2020 Urban Water Management Plan and Water Shortage Contingency Plan will be available for review one week prior to the hearing. The City Council will hold a public hearing to consider proposed revisions and updates to its UWMP and WSCP on Tuesday, May 25, 2021, 5:30 p.m. For more information, please visit *www.mountainview.gov/uwmp*.

Sincerely,

Elizabeth Flegel
Water Resources Manager

cc: APWD-Au, USM, WRT

CITY OF MOUNTAIN VIEW

NOTICE OF PUBLIC HEARING
CITY COUNCIL

NOTICE IS HEREBY GIVEN that Tuesday, the 25th day of May, 2021. The Mountain View City Council will hold a public hearing on the following item:

Revisions to the City of Mountain View's 2020 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The UWMP evaluates Mountain View's water supply and demand, and provides a blueprint for meeting the community's long-term water supply objectives. The WSCP addresses potential water shortage vulnerability and drought risks for Mountain View's water supply, and is included as a chapter of the UWMP. Mountain View's UWMP and WSCP were previously updated in 2016. The proposed updates will be available for review online at www.mountainview.gov/uwmp.

Please call (650) 903-6078 if you have any questions about the UWMP update process.

This meeting will be conducted in accordance with State of California Executive Order N-29-20, dated March 17, 2020. All members of the City Council will participate in the meeting by video conference with no physical meeting location. This meeting will be broadcast live at mountainview.legistar.com, on YouTube at MountainView.gov/YouTube, and on Comcast Channel 26. The meeting agenda will be available beginning on Thursday, May 20, at mountainview.legistar.com. Members of the public wishing to provide comments to the City Council may send an e-mail to city.council@mountainview.gov or sign up to provide comments during the video conference meeting beginning on Thursday, May 20, 2021, at mountainview.gov/cc_speakers or call 669-900-9128 during the meeting and enter Webinar ID 937 0204 7911.

Interested parties may appear and be heard. Written statements may be submitted to the City Clerk, P.O. Box 7540, Mountain View, California, 94039. Legal challenges may be limited to those issues or objections raised at the public hearing orally or in written correspondence delivered to the City Clerk at, or prior to, the public hearing.

Heather Glaser, MMC
City Clerk

NOTICE OF PUBLIC HEARING CITY COUNCIL

NOTICE IS HEREBY GIVEN that Tuesday, the 25th day of May, 2021. The Mountain View City Council will hold a public hearing on the following item:

Revisions to the City of Mountain View's 2020 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The UWMP evaluates Mountain View's water supply and demand, and provides a blueprint for meeting the community's long-term water supply objectives. The WSCP addresses potential water shortage vulnerability and drought risks for Mountain View's water supply, and is included as a chapter of the UWMP. Mountain View's UWMP and WSCP were previously updated in 2016. The proposed updates will be available for review at www.mountainview.gov/uwmp one week prior to the hearing.

Please call (650) 9036078 if you have any questions about the UWMP update process.

This meeting will be held online. For detailed information on how to attend, watch and submit public comments to virtual City Council meetings, Click Here.

Heather Glaser, MMC, City Clerk

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AVISO DE AUDIENCIA PÚBLICA CONCEJO DE LA CIUDAD

POR LA PRESENTE SE DA AVISO que el martes, 25 de mayo de 2021. El Concejo de la Ciudad de Mountain View celebrará una audiencia pública sobre el siguiente tema:

Revisiones al Plan de Gestión del Agua Urbana 2020 (UWMP - por sus siglas en inglés) de la ciudad de Mountain View y al Plan de Contingencia para la Escasez de Agua (WSCP - por sus siglas en inglés). El UWMP evalúa el suministro y la demanda de agua de Mountain View y proporciona un plan para cumplir con los objetivos de suministro de agua a largo plazo de la comunidad. El WSCP aborda la vulnerabilidad potencial a la escasez de agua y los riesgos de sequía para el suministro de agua de Mountain View, y se incluye como un capítulo del UWMP. El UWMP y el WSCP de Mountain View se actualizaron previamente en 2016. Las actualizaciones propuestas estarán disponibles para su revisión en línea en www.mountainview.gov/uwmp.

Por favor, llame al (650) 903-6078 si tiene alguna pregunta sobre el proceso de actualización del UWMP.

Esta reunión se celebrará en línea. Para obtener información detallada sobre cómo asistir, ver y enviar comentarios públicos a las reuniones virtuales del Concejo de la Ciudad, haga Clic Aquí.

Heather Glaser, MMC, Secretaria de la Ciudad

LEARN MORE

Appendix G

Resolutions Adopting the 2020 Urban Water Management Plan and Water Shortage Contingency Plan

CITY OF MOUNTAIN VIEW
RESOLUTION NO. 18567
SERIES 2021

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MOUNTAIN VIEW ADOPTING THE 2020 URBAN WATER MANAGEMENT PLAN

WHEREAS, the California Urban Water Management Planning Act (California Water Code Section 10610, *et seq.*) require that urban water suppliers providing water to more than 3,000 customers or supplying more than 3,000 acre-feet of water per year prepare and update every five years thereafter an Urban Water Management Plan; and

WHEREAS, the City is an urban water supplier serving approximately 18,000 water customers and supplying over 10,000 acre-feet of water annually; and

WHEREAS, the City's last Urban Water Management Plan was prepared in 2016; and

WHEREAS, an updated Urban Water Management Plan must be adopted by the City Council by July 1, 2021 and filed with the California Department of Water Resources within 30 days of adoption; and

WHEREAS, the City has prepared and circulated a draft 2020 Urban Water Management Plan for public review and properly noticed a public hearing regarding said plan held by the City Council on May 25, 2021; and

WHEREAS, the Mountain View City Council considered the 2020 Urban Water Management Plan, Council report, and all public testimony on May 25, 2021;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Mountain View to:

1. Adopt the Mountain View 2020 Urban Water Management Plan.

2. Authorize the Public Works Director, or designee, to file the 2020 Urban Water Management Plan with the California Department of Water Resources, the California State Library, and the County of Santa Clara, no later than 30 days after adoption as described in Section 10644(a) of the California Water Code; and

3. Authorize the Public Works Director to implement the 2020 Urban Water Management Plan in accordance with State law.

4. Find and determine that adoption of the 2020 Urban Water Management Plan under California Water Code Section 10652 does not constitute a project under the California Environmental Quality Act (CEQA), and no environmental assessment is required.

The foregoing Resolution was regularly introduced and adopted at a Regular Meeting of the City Council of the City of Mountain View, duly held on the 8th day of June 2021, by the following vote:

AYES: Councilmembers Abe-Koga, Hicks, Lieber, Matichak, Showalter, Vice Mayor Ramirez, and Mayor Kamei

NOES: None

ABSENT: None

ATTEST:

HEATHER GLASER, MMC
CITY CLERK

APPROVED:

ELLEN KAMEI
MAYOR

I do hereby certify that the foregoing Resolution was passed and adopted by the City Council of the City of Mountain View at a Regular Meeting held on the 8th day of June 2021, by the foregoing vote.

City Clerk
City of Mountain View

EF-EY/EP/1/RESO
702-06-08-21r

CITY OF MOUNTAIN VIEW
RESOLUTION NO. 18568
SERIES 2021

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MOUNTAIN VIEW ADOPTING THE WATER SHORTAGE CONTINGENCY PLAN

WHEREAS, the California Urban Water Management Planning Act (California Water Code Section 10610, *et seq.*) require that urban water suppliers providing water to more than 3,000 customers or supplying more than 3,000 acre-feet of water per year prepare and update every five years thereafter an Urban Water Management Plan; and

WHEREAS, the California Urban Water Management Planning Act requires that urban water suppliers include a Water Shortage Contingency Plan as part of its Urban Water Management Plan, which must be adopted by the City Council by July 1, 2021; and

WHEREAS, the City is an urban water supplier serving approximately 18,000 water customers and supplying over 10,000 acre-feet of water annually; and

WHEREAS, the City's last Urban Water Management Plan, which included a Water Shortage Contingency Plan, was prepared in 2016; and

WHEREAS, recent amendments to the Urban Water Management Planning Act require the Water Shortage Contingency Plan to be adopted by the City Council and filed with the California Department of Water Resources within 30 days of adoption; and

WHEREAS, the City has prepared and circulated a draft Water Shortage Contingency Plan for public review and properly noticed a public hearing regarding said plan held by the City Council on May 25, 2021; and

WHEREAS, the Water Shortage Contingency Plan is included as a chapter of the Urban Water Management Plan; and

WHEREAS, the Mountain View City Council considered the Water Shortage Contingency Plan, Council report, and all public testimony on May 25, 2021;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Mountain View to:

1. Adopt the Mountain View Water Shortage Contingency Plan.

2. Authorize the Public Works Director, or designee, to file the Water Shortage Contingency Plan with the California Department of Water Resources and make the Water Shortage Contingency Plan available to the public and County of Santa Clara no later than 30 days after adoption as described in Section 10632(a)(10) and 10644(b) of the California Water Code.

3. Authorize the Public Works Director to implement the Water Shortage Contingency Plan in accordance with State law.

4. Find and determine that adoption of the Water Shortage Contingency Plan under California Water Code Section 10652 does not constitute a project under the California Environmental Quality Act (CEQA), and no environmental assessment is required.

- - - - - - - - - - -

The foregoing Resolution was regularly introduced and adopted at a Regular Meeting of the City Council of the City of Mountain View, duly held on the 8th day of June 2021, by the following vote:

AYES: Councilmembers Abe-Koga, Hicks, Lieber, Matichak, Showalter, Vice Mayor Ramirez, and Mayor Kamei

NOES: None

ABSENT: None

ATTEST:

HEATHER GLASER, MMC
CITY CLERK

APPROVED:

ELLEN KAMEI
MAYOR

I do hereby certify that the foregoing Resolution was passed and adopted by the City Council of the City of Mountain View at a Regular Meeting held on the 8th day of June 2021, by the foregoing vote.

City Clerk
City of Mountain View

EF-EY/EP/1/RESO
702-06-08-21r-1

Appendix H

BAWSCA Regional Water Demand and Conservation Projection Report: Plumbing Code Excerpts

APPENDIX E. KEY ASSUMPTIONS FOR THE DSS MODEL

This section presents the methodology used to determine passive water savings, information regarding national and state plumbing codes, and key inputs and assumptions used in the DSS Model including fixture replacement and estimates.

E.1 National Plumbing Code

The Energy Policy Act of 1992, as amended in 2005, mandates that only fixtures meeting the following standards can be installed in new buildings:

- Toilet – 1.6 gal/flush maximum
- Urinals – 1.0 gal/flush maximum
- Showerhead – 2.5 gal/min at 80 pounds per square inch (psi)
- Residential faucets – 2.2 gal/min at 60 psi
- Public restroom faucets – 0.5 gal/min at 60 psi
- Dishwashing pre-rinse spray valves – 1.6 gal/min at 60 psi

Replacement of fixtures in existing buildings is also governed by the Federal Energy Policy Act, which mandates that only devices with the specified level of efficiency (as shown above) can be sold as of 2006. The net result of the plumbing code is that new buildings will have more efficient fixtures and old inefficient fixtures will slowly be replaced with new, more efficient models. The national plumbing code is an important piece of legislation and must be carefully taken into consideration when analyzing the overall water efficiency of a service area.

In addition to the plumbing code, the U.S. Department of Energy regulates appliances, such as residential clothes washers, further reducing indoor water demands. Regulations to make these appliances more energy efficient have driven manufactures to dramatically reduce the amount of water these machines use. Generally, front loading washing machines use 30 to 50% less water than conventional models (which are still available).

In this analysis, the DSS Model forecasts a gradual transition to high efficiency clothes washers (using 12 gallons or less) so that by the year 2025 that will be the only type of machine available for purchase. In addition to the industry becoming more efficient, rebate programs for washers have been successful in encouraging customers to buy more water efficient models. Given that machines last about 10 years, eventually all machines on the market will be the more water efficient models. Energy Star washing machines have a water factor of 6.0 or less – the equivalent of using 3.1 cubic feet (or 23.2 gallons) of water per load. The maximum water factor for residential clothes washers under current federal standards is 9.5. The water factor equals the number of gallons used per cycle per cubic foot of capacity. Prior to the year 2000, the water factor for a typical new residential clothes washer was about 12. In March 2015, the federal standard reduced the maximum water factor for top- and front-loading machines to 8.4 and 4.7, respectively. In 2018, the maximum water factor for top-loading machines was further reduced to 6.5. For commercial washers, the maximum water factors were reduced in 2010 to 8.5 and 5.5 for top- and front-loading machines, respectively. Beginning in 2015, the maximum water factor for Energy Star certified washers was 3.7 for front-loading and 4.3 for top-loading machines. In 2011, the U.S. Environmental Protection Agency estimated that Energy Star washers comprised more that 60% of the residential market and 30% of the commercial market (Energy Star, 2011). A new Energy Star compliant washer uses about two-thirds less water per cycle than washers manufactured in the 1990s.

E.2 State Plumbing Code

This section describes California state codes applicable to each member agency service area water use.

California State Law – AB 715

Plumbing codes for toilets, urinals, showerheads, and faucets were initially adopted by California in 1991, mandating the sale and use of ultra-low flush toilets (ULFTs) using 1.6 gpf, urinals using 1 gpf, and low-flow showerheads and faucets. AB 715 led to an update to California Code of Regulations Title 20 (see below) mandating that all toilets and urinals sold and installed in California as of January 1, 2014 must be high efficiency versions having flush ratings that do not exceed 1.28 gpf (toilets) and 0.5 gpf (urinals).

California State Laws – SB 407 and SB 837

SB 407 addresses plumbing fixture retrofits on resale or remodel. The DSS Model carefully considers the overlap with SB 407, the plumbing code (natural replacement), CALGreen, AB 715 and rebate programs (such as toilet rebates). SB 407 (enacted in 2009) requires that properties built prior to 1994 be fully retrofitted with water conserving fixtures by the year 2017 for single family residential houses and 2019 for multifamily and commercial properties. SB 407 program length is variable and continues until all the older high flush toilets have been replaced in the service area. The number of accounts with high flow fixtures is tracked to make sure that the situation of replacing more high flow fixtures than actually exist does not occur. Additionally, SB 407 conditions issuance of building permits for major improvements and renovations upon retrofit of non-compliant plumbing fixtures. SB 837 (enacted in 2011) requires that sellers of real estate property disclose on their Real Estate Transfer Disclosure Statement whether their property complies with these requirements. Both laws are intended to accelerate the replacement of older, low efficiency plumbing fixtures, and ensure that only high efficiency fixtures are installed in new residential and commercial buildings.

2019 CALGreen and 2015 CA Code of Regulations Title 20 Appliance Efficiency Regulations

Fixture characteristics in the DSS Model are tracked in new accounts, which are subject to the requirements of the 2019 California Green Building Code and 2015 California Code of Regulations Title 20 Appliance Efficiency Regulations adopted by the California Energy Commission (CEC) on September 1, 2015. The CEC 2015 appliance efficiency standards apply to the following new appliances, if they are sold in California: showerheads, lavatory faucets, kitchen faucets, metering faucets, replacement aerators, wash fountains, tub spout diverters, public lavatory faucets, commercial pre-rinse spray valves, urinals, and toilets. The DSS Model accounts for plumbing code savings due to the effects these standards have on showerheads, faucets, aerators, urinals, and toilets.

- Showerheads – July 2016: 2.0 gpm; July 2018: 1.8 gpm
- Wall Mounted Urinals – January 2016: 0.125 gpf (pint)
- Lavatory Faucets and Aerator – July 2016: 1.2 gpm at 60 psi
- Kitchen Faucets and Aerator – July 2016: 1.8 gpm with optional temporary flow of 2.2 gpm at 60 psi
- Public Lavatory Faucets – July 2016: 0.5 gpm at 60 psi

In summary, the controlling law for **toilets** is Assembly Bill 715. This bill requires high efficiency toilets (1.28 gpf) to be exclusively sold in California beginning January 1, 2014. The controlling law for wall-mounted urinals is the 2015 CEC efficiency regulations requiring that ultra-high efficiency pint **urinals** (0.125 gpf) be exclusively sold in California beginning January 1, 2016. This is an efficiency progression for urinals from AB 715's requirement of high efficiency (0.5 gpf) urinals starting in 2014.

Standards for **residential clothes washers** fall under the regulations of the U.S. Department of Energy. In 2018, the maximum water factor for standard top-loading machines was reduced to 6.5.

Showerhead flow rates are regulated under the 2015 California Code of Regulations Title 20 Appliance Efficiency Regulations adopted by the CEC, which requires the exclusive sale in California of 2.0 gpm showerheads at 80 psi as of July 1, 2016 and 1.8 gpm showerheads at 80 psi as of July 1, 2018. The WaterSense specification applies to showerheads that have a maximum flow rate of 2.0 gpm or less. This represents a 20% reduction in showerhead flow rate over the current federal standard of 2.5 gpm, as specified by the Energy Policy Act of 1992.

Faucet flow rates have likewise been recently regulated by the 2015 CEC Title 20 regulations. This standard requires that the residential faucets and aerators manufactured on or after July 1, 2016 be exclusively sold in California at 1.2 gpm at 60 psi; and public lavatory and kitchen faucets/aerators sold or offered for sale on or after July 1, 2016 be 0.5 gpm at 60 psi and 1.8 gpm at 60 psi (with optional temporary flow of 2.2 gpm), respectively. Previously, all faucets had been regulated by the 2010 California Green Building Code at 2.2 gpm at 60 psi.

E.3 Key Baseline Potable Demand Inputs, Passive Savings Assumptions, and Resources

The following table presents the key assumptions and references that are used in the DSS Model in determining projected demands with plumbing code savings. The assumptions having the most dramatic effect on future demands are the natural replacement rate of fixtures; how residential or commercial future use is projected; and the percent of estimated real water losses.

Table E-1. List of Key Assumptions

Parameter	Model Input Value, Assumptions, and Key References
Model Start Year for Analysis	2019
Model End Year	2045
Non-Revenue Water	Based on individual billing
Population Projection Source	Provided by and verified by individual agencies
Employment Projection Source	Provided by and verified by individual agencies
Number of Water Accounts for Start Year	Provided by and verified by individual agencies
Avoided Cost of Water $/AF	Provided by and verified by individual agencies

Table E-2. Key Assumptions Resources

Parameter	Resource
Residential End Uses	Key Reference: CA DWR Report "California Single Family Water Use Efficiency Study," (DeOreo, 2011 – Page 28, Figure 3: Comparison of household end-uses) and AWWA Research Foundation (AWWARF) Report "Residential End Uses of Water, Version 2 - 4309" (DeOreo, 2016). Table 2-A. Water Consumption by Water-Using Plumbing Products and Appliances - 1980-2012. PERC Phase 1 Report. Plumbing Efficiency Research Coalition. 2013. http://www.map-testing.com/content/info/menu/perc.html Model Input Values are found in the "End Uses" section of the DSS Model on the "Breakdown" worksheet.
Non-Residential End Uses, percent	Key Reference: AWWARF Report "Commercial and Institutional End Uses of Water" (Dziegielewski, 2000 – Appendix D: Details of Commercial and Industrial Assumptions, by End Use). Santa Clara Valley Water District Water Use Efficiency Unit. "SCVWD CII Water Use and Baseline Study." February 2008. Model Input Values are found in the "End Uses" section of the DSS Model on the "Breakdown" worksheet.
Efficiency Residential Fixture Current Installation Rates	U.S. Census, Housing age by type of dwelling plus natural replacement plus rebate program (if any). Key Reference: GMP Research, Inc. (2019). 2019 U.S. WaterSense Market Penetration Industry Report Key Reference: Consortium for Efficient Energy (www.cee1.org). Model Input Values are found in the "Codes and Standards" green section of the DSS Model by customer category fixtures.
Water Savings for Fixtures, gal/capita/day	Key Reference: AWWARF Report "Residential End Uses of Water, Version 2 - 4309" (DeOreo, 2016). Key Reference: CA DWR Report "California Single Family Water Use Efficiency Study" (DeOreo, 2011 – Page 28, Figure 3: Comparison of household end-uses). WCWCD supplied data on costs and savings; professional judgment was made where no published data was available. Key Reference: California Energy Commission, Staff Analysis of Toilets, Urinals and Faucets, Report # CEC-400-2014-007-SD, 2014. Model Input Values are found in the "Codes and Standards" green section on the "Fixtures" worksheet of the DSS Model.
Non-Residential Fixture Efficiency Current Installation Rates	Key Reference: 2010 U.S. Census, Housing age by type of dwelling plus natural replacement plus rebate program (if any). Assume commercial establishments built at same rate as housing, plus natural replacement. California Energy Commission, Staff Analysis of Toilets, Urinals and Faucets, Report # CEC-400-2014-007-SD, 2014. Santa Clara Valley Water District Water Use Efficiency Unit. "SCVWD CII Water Use and Baseline Study." February 2008. Model Input Values are found in the "Codes and Standards" green section of the DSS Model by customer category fixtures.

Parameter	Resource
Residential Frequency of Use Data, Toilets, Showers, Faucets, Washers, Uses/user/day	Key Reference: AWWARF Report "Residential End Uses of Water, Version 2 - 4309" (DeOreo, 2016). Summary values can be found in the full report: http://www.waterrf.org/Pages/Projects.aspx?PID=4309 Key Reference: California Energy Commission, Staff Analysis of Toilets, Urinals and Faucets, Report # CEC-400-2014-007-SD, 2014. Key Reference: Alliance for Water Efficiency, The Status of Legislation, Regulation, Codes & Standards on Indoor Plumbing Water Efficiency, January 2016. Model Input Values are found in the "Codes and Standards" green section on the "Fixtures" worksheet of the DSS Model and confirmed in each "Service Area Calibration End Use" worksheet by customer category.
Non-Residential Frequency of Use Data, Toilets, Urinals, and Faucets, Uses/user/day	Key References: Estimated based on AWWARF Report "Commercial and Institutional End Uses of Water" (Dziegielewski, 2000 – Appendix D: Details of Commercial and Industrial Assumptions, by End Use). Key Reference: California Energy Commission, Staff Analysis of Toilets, Urinals and Faucets, Report # CEC-400-2014-007-SD, 2014. Fixture uses over a 5-day work week are prorated to 7 days. Non-residential 0.5gpm faucet standards per Table 2-A. Water Consumption by Water-Using Plumbing Products and Appliances - 1980-2012. PERC Phase 1 Report. Plumbing Efficiency Research Coalition, 2012. http://www.map-testing.com/content/info/menu/perc.html Model Input Values are found in the "Codes and Standards" green section on the "Fixtures" worksheet of the DSS Model and confirmed in each "Service Area Calibration End Use" worksheet by customer category.
Natural Replacement Rate of Fixtures (percent per year)	Residential Toilets 2%-4%
	Non-Residential Toilets 2%-3%
	Residential Showers 4% (corresponds to 25-year life of a new fixture)
	Residential Clothes Washers 10% (based on 10-year washer life). Key References: "Residential End Uses of Water" (DeOreo, 2016) and "Bern Clothes Washer Study, Final Report" (Oak Ridge National Laboratory, 1998).
	Residential Faucets 10% and Non-Residential Faucets 6.7% (every 15 years). CEC uses an average life of 10 years for faucet accessories (aerators). A similar assumption can be made for public lavatories, though no hard data exists and since CII fixtures are typically replaced less frequently than residential, 15 years is assumed. CEC, Analysis of Standards Proposal for Residential Faucets and Faucet Accessories, a report prepared under CEC's Codes and Standards Enhancement Initiative, Docket #12-AAER-2C, August 2013.
	Model Input Value is found in the "Codes and Standards" green section on the "Fixtures" worksheet of the DSS Model.
Residential Future Water Use	Increases Based on Population Growth and Demographic Forecast
Non-Residential Future Water Use	Increases Based on Employment Growth and Demographic Forecast

Fixture Estimates

Determining the current level of efficient fixtures in a service area while evaluating the passive savings in the DSS Model is part of the standard process and is called "initial fixture proportions." As described earlier in Section 2.2, MWM reconciled water efficient fixtures and devices installed within the BAWSCA service area and estimated the number of outstanding inefficient fixtures.

MWM used the DSS Model to perform a saturation analysis for toilets, urinals, showerheads, faucets, and clothes washers. The process included a review of age of buildings from census data, number of rebates per device, and assumed natural replacement rates. MWM presumed the fixtures that were nearing saturation and worth analysis would include residential toilets and residential clothes washers as both have been included in recommended conservation practices for over two decades.

In 2014, the Water Research Foundation updated its 1999 Residential End Uses of Water Study (DeOreo, 2016). Water utilities, industry regulators, and government planning agencies consider it the industry benchmark for single family home indoor water use. This Demand Study incorporates recent study results which reflect the change to the profile of water use in residential homes including adoption of more water efficient fixtures over the past 20 years (1999-2019). Residential End Uses of Water Study results were combined with BAWSCA historical rebate and billing data to enhance and verify assumptions made for all customer accounts, including saturation levels on the above-mentioned plumbing fixtures.

The DSS Model presents the estimated current and projected proportions of these fixtures by efficiency level within each member agency service area. These proportions were calculated by:

- Using standards in place at the time of building construction;
- Taking the initial proportions of homes by age (corresponding to fixture efficiency levels);
- Adding the net change due to natural replacement; and
- Adding the change due to rebate measure minus the "free rider effect[15]."

Further adjustments were made to initial proportions to account for the reduction in fixture use due to lower occupancy and based on field observations. The projected fixture proportions do **not** include any future active conservation measures implemented by member agencies. More information about the development of initial and projected fixture proportions can be found in the DSS Model "Codes and Standards" section.

The DSS Model is capable of modeling multiple types of fixtures, including fixtures with different designs. For example, currently toilets can be purchased that flush at a rate of 0.8 gallons per flush (gpf), 1.0 gpf or 1.28 gpf. The 1.6 gpf and higher toilets still exist but can no longer be purchased in California. Therefore, they cannot be used for replacement or new installation of a toilet. So, the DSS Model utilizes fixture replacement rates to determine what type of fixture should be used for a new construction installation or replacement. The replacement of the fixtures is listed as a percentage within the DSS Model. A value of 100% would indicate that all the toilets installed would be of one particular flush volume. A value of 75% means that three out of every four toilets installed would be of that particular flush volume. All the Fixture Model information and assumptions were carefully reviewed and accepted by BAWSCA staff.

The DSS Model provides inputs and analysis of the number, type and replacement rates of fixtures for each customer category (e.g., single family toilets, commercial toilets, residential clothes washing machines). For example, the DSS Model incorporates the effects of the 1992 Federal Energy Policy Act and AB 715 on toilet fixtures. A DSS Model feature determines the "saturation" of 1.6 gpf toilets as the 1992 Federal Energy Policy Act was in effect from 1992 to 2014 for 1.6 gpf toilet replacements. AB 715 now applies for the replacement of

[15] It is important to note that in water conservation program management the "free rider effect" occurs when a customer applies for and receives a rebate on a targeted high efficiency fixture that they would have purchased even without a rebate. In this case, the rebate was not the incentive for their purchase but a "bonus." Rebate measures are designed to target those customers needing financial incentive to install the more efficient fixture.

toilets at 1.28 gpf. Further consideration and adjustments were made to replacement rates to account for the reduction in fixture use and wear due to lower occupancy and based on field observations.

E.4 Present Value Analysis and the Utility and Community Perspective

Present value analysis using present day dollars and a real discount rate of 3% is used to discount costs and benefits to the base year. From this analysis, benefit-cost ratios of each measure are computed. When measures are put together in programs, the model is set up to avoid double counting savings from multiple measures that act on the same end use of water. For example, multiple measures in a program may target toilet replacements. The model includes assumptions to apportion water savings between the multiple measures.

Economic analysis can be performed from several different perspectives, based on which party is affected. For planning water use efficiency programs for utilities, perspectives most commonly used for benefit-cost analyses are the "utility" perspective and the "community" perspective. The "utility" benefit-cost analysis is based on the benefits and costs to the water provider. The "community" benefit-cost analysis includes the utility benefit and costs together with account owner/customer benefits and costs. These include customer energy and other capital or operating cost benefits plus costs of implementing the measure, beyond what the utility pays.

The utility perspective offers two advantages. First, it considers only the program costs that will be directly borne by the utility. This enables the utility to fairly compare potential investments for saving versus supplying increased quantities of water. Second, revenue shifts are treated as transfer payments, which means program participants will have lower water bills and non-participants will have slightly higher water bills so that the utility's revenue needs continue to be met. Therefore, the analysis is not complicated with uncertainties associated with long-term rate projections and retail rate design assumptions. It should be noted that there is a significant difference between the utility's savings from the avoided cost of procurement and delivery of water and the reduction in retail revenue that results from reduced water sales due to water use efficiency. This budget impact occurs slowly and can be accounted for in water rate planning. Because it is the water provider's role in developing a water use efficiency plan that is vital in this study, the utility perspective was primarily used to evaluate elements of this report.

The community perspective is defined to include the utility and the customer costs and benefits. Costs incurred by customers striving to save water while participating in water use efficiency programs are considered, as well as benefits received in terms of reduced energy bills (from water heating costs) and wastewater savings, among others. Water bill savings are not a customer benefit in aggregate for reasons described previously. Other factors external to the utility, such as environmental effects, are often difficult to quantify or are not necessarily under the control of the utility. They are therefore frequently excluded from economic analyses, including this one.

E.5 Present Value Parameters

The time value of money is explicitly considered. Typically, the costs to save water occur early in the planning period whereas the benefits usually extend to the end of the planning period. A long planning period of over 30 years is often used because costs and benefits that occur beyond 50 years have very little influence on the total present value of the costs and benefits. The value of all future costs and benefits is discounted to the first year in the DSS Model (the base year), at the real interest rate of 3.01%. The DSS Model calculates this real interest rate, adjusting the current nominal interest rate (assumed to be approximately 6.1%) by the assumed rate of inflation (3.0%). The formula to calculate the real interest rate is: (nominal interest rate – assumed rate of inflation)/ (1 + assumed rate of inflation). Cash flows discounted in this manner are herein referred to as "Present Value" sums.

E.6 Assumptions About Measure Costs

Appendix F presents the assumptions and inputs used in the DSS Model to evaluate each water conservation measure. Assumptions regarding the following variables were made for each measure:

- **Targeted Water User Group End Use –** Water user group (e.g., single family residential) and end use (e.g., indoor or outdoor water use)
- **Utility Unit Cost –** Cost of rebates, incentives, and contractors hired by BAWSCA and BAWSCA member agencies to implement measures
- **Retail Customer Unit Cost –** Cost for implementing measures that is paid by retail customers (i.e., remainder of a measure's cost that is not covered by a rebate or incentive)
- **Utility Administration and Marketing Cost –** The cost to the utility for staff time, general expenses, and overhead needed to implement and administer the measure, including consultant contract administration, marketing, and participant tracking. The unit costs vary greatly according to the type of customer and implementation method. For example, a measure might cost a different amount for a single family account than a multifamily account. Rebate program costs are different than costs to develop and enforce an ordinance requirement or a direct installation program. Typically, water utilities incur increased costs with achieving higher market saturation, such as more surveys per year. The model calculates the annual costs based on the number of participants each year.

Costs are determined for each of the measures based on industry knowledge, past experience and data provided by BAWSCA staff, Valley Water, SFPUC staff and the member agencies. Costs may include incentive costs, usually determined on a per-participant basis; fixed costs, such as marketing; variable costs, such as the costs to staff the measures and to obtain and maintain equipment; and a one-time set-up cost. The set-up cost is for measure design by staff or consultants, any required pilot testing, and preparation of materials that are used in marketing the measure. Measure costs are estimated each year through 2045. Costs are spread over the time period depending on the length of the implementation period for the measure and estimated voluntary customer participation levels.

Lost revenue due to reduced water sales is not included as a cost because the water use conservation measures evaluated herein generally take effect over a long span of time that is sufficient to enable timely rate adjustments, if necessary, to meet fixed cost obligations and savings on variable costs such as energy and chemicals.

E.7 Assumptions about Measure Savings

Data necessary to forecast water savings of measures include specific data on water use, demographics, market penetration, and unit water savings. Savings normally develop at a measured and predetermined pace, reaching full maturity after full market penetration is achieved. This may occur three to seven years after the start of implementation, depending upon the implementation schedule. For every water use efficiency activity or replacement with more efficient devices, there is a useful life. The useful life is called the "Measure Life" and is defined to be how long water use conservation measures stay in place and continue to save water. It is assumed that measures implemented because of codes, standards, or ordinances (e.g., toilets) would be "permanent" and not revert to an old inefficient level of water use if the device needed to be replaced. However, some measures that are primarily behavior-based, such as residential surveys, are assumed to need to be repeated on an ongoing basis to retain the water savings (e.g., homeowners move away, and the new homeowners may have less efficient water using practices). Surveys typically have a measure life on the order of five years.

E.8 Assumptions about Avoided Costs

The estimated avoided cost of water was provided by BAWSCA staff and can be found in each BAWSCA member agency's specific DSS Model. The avoided cost of water or water production operational cost is $7.75/ccf as per information from Andree Johnson at BAWSCA on April 2, 2020 based on FY 2030-31 rates from SFPUC's Wholesale Rate Projections for the 10-year horizon. Given that there are no projections beyond the 2031 mark, the 2031 data value was selected.

Appendix I

Valley Water Groundwater Conditions Report

Groundwater Condition

REPORT | SANTA CLARA COUNTY

April 2021

SUMMARY

This report summarizes current (March 2021) groundwater storage, recharge, pumping, and level conditions for the Santa Clara Subbasin (which includes the Santa Clara Plain and Coyote Valley groundwater management areas) and the Llagas Subbasin. Overall, countywide groundwater storage and water levels are in good condition. Table 1 summarizes current conditions.

Current groundwater levels are in the normal range, but water levels have declined in most index wells to below their 5-year averages due to recent dry conditions. Total storage at the end of 2021 is still projected to be in the lower part of Stage 1 (Normal) of Valley Water's Water Shortage Contingency Plan.

- January to March managed recharge is 74% to 111% of the five-year average.
- January to February pumping is 83% to 129% of the five-year average.
- Groundwater index well water levels for March 2021 range from 7 feet lower to 18 feet lower than the average of the previous five-years of March readings. Note that water levels were not measured in March 2020 due to COVID-19 restrictions.

Table 1. Summary of Current Groundwater Conditions

	Santa Clara Subbasin		Llagas Subbasin
	Santa Clara Plain	Coyote Valley	
March 2021 managed recharge estimate (AF)	3,700	1,000	1,400
YTD 2021 managed recharge estimate (AF)	10,600	3,000	3,700
YTD 2021 managed recharge as % of 5-year average	96%	74%	111%
February 2021 pumping estimate (AF)	4,900	580	2,000
YTD 2021 pumping estimate (AF)	10,250	1,150	4,000
YTD 2021 pumping as % of 5-year average	129%	83%	120%
GW index well level compared to last March 2020	NA	NA	NA
GW index level compared to March 5-year average	18 feet lower	7 feet lower	15 feet lower

AF = acre-feet.
YTD = Year-to-date

Contact Us For questions, contact **Roger Pierno** at **(408) 630-2738**

Valley Water
Clean Water • Healthy Environment • Flood Protection

Groundwater Recharge

- Figures 1, 2, and 3 show the cumulative managed recharge for 2021 compared to the average of the last five years (2016 – 2020).
- The cumulative managed recharge through March is lower for the Santa Clara Plain and Coyote Valley and higher for the Llagas Subbasin compared to the averages of January to March managed recharge of the previous five years.
- The monthly managed recharge depends on many factors, including water demand and availability, regulatory needs, groundwater storage, and facility maintenance.

Figure 1. Estimated Cumulative Managed Recharge in the Santa Clara Plain

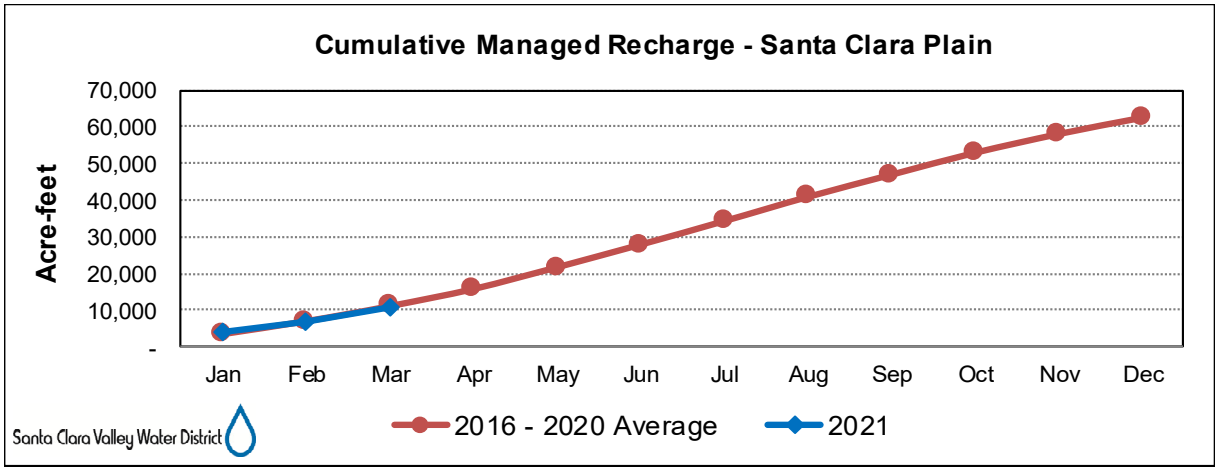


Figure 2. Estimated Cumulative Managed Recharge in the Coyote Valley

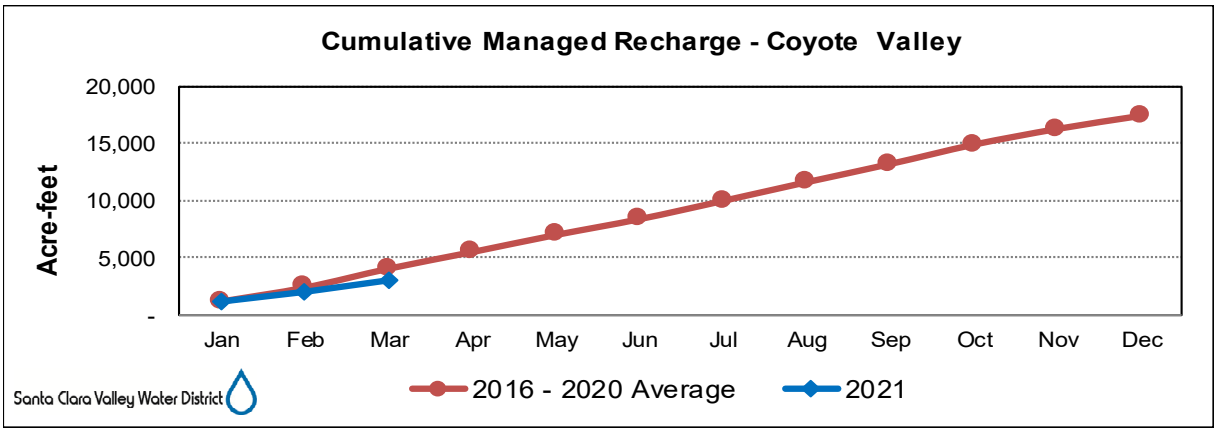
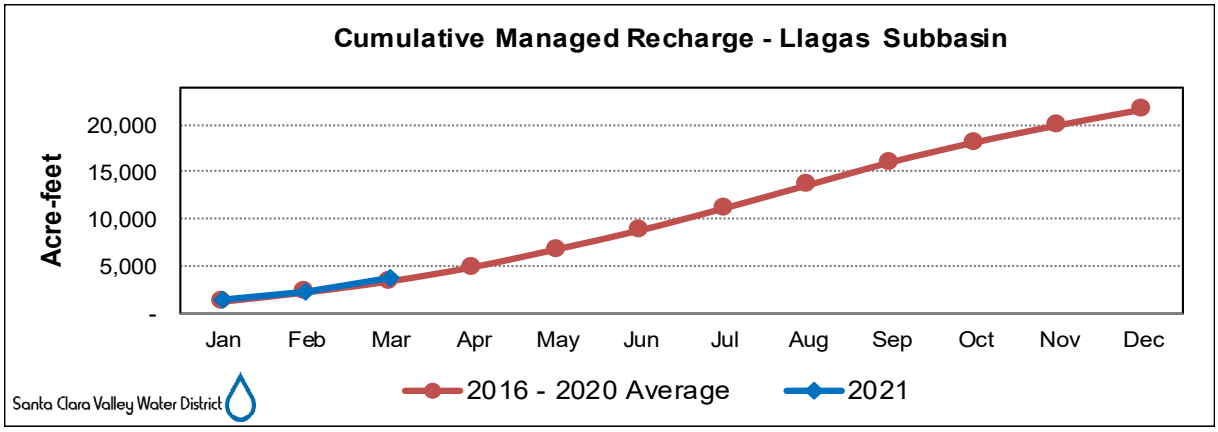


Figure 3. Estimated Cumulative Managed Recharge in the Llagas Subbasin



Groundwater Pumping

- Figures 4, 5, and 6 show the cumulative groundwater pumping for 2021 compared to the average of the last five years (2016 – 2020).
- Pumping for January and February 2021 is an estimated number based on retailers' pumping data from the new water zones that took effect in July 2020.
- 2021 cumulative pumping is higher than average pumping of the previous five years in the Santa Clara Plain and the Llagas Subbasin and lower in the Coyote Valley.

Figure 4. Estimated Cumulative Santa Clara Plain Pumping

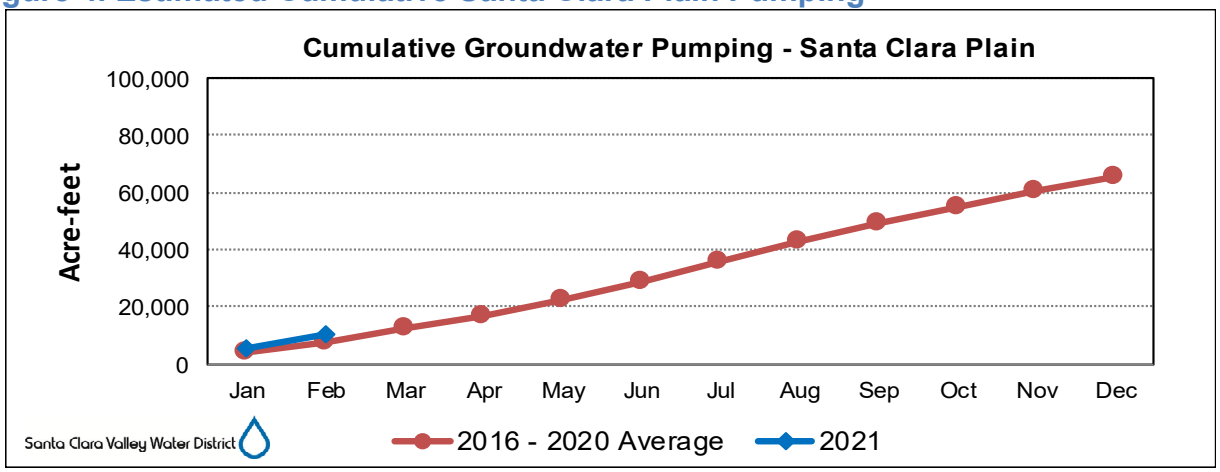


Figure 5. Estimated Cumulative Coyote Valley Pumping

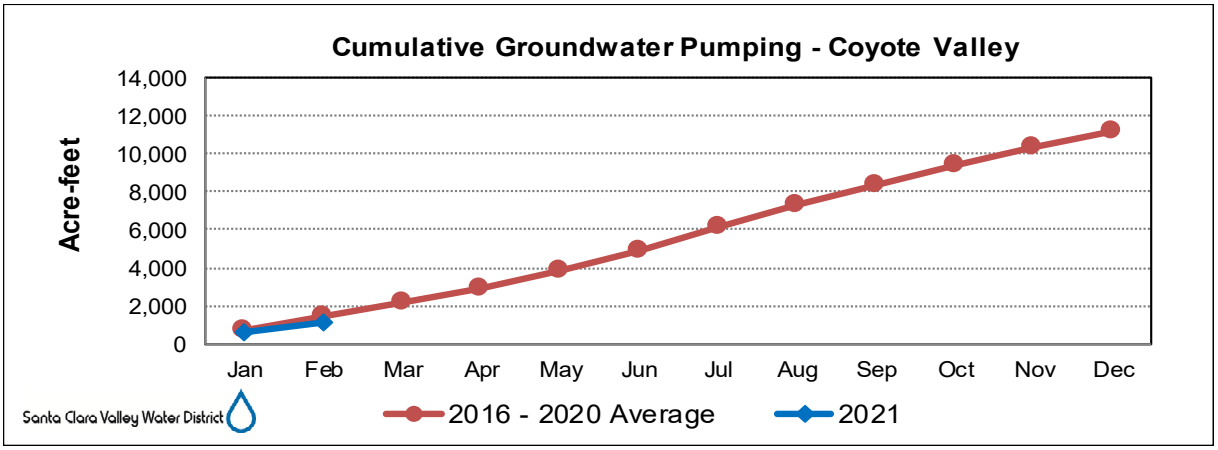
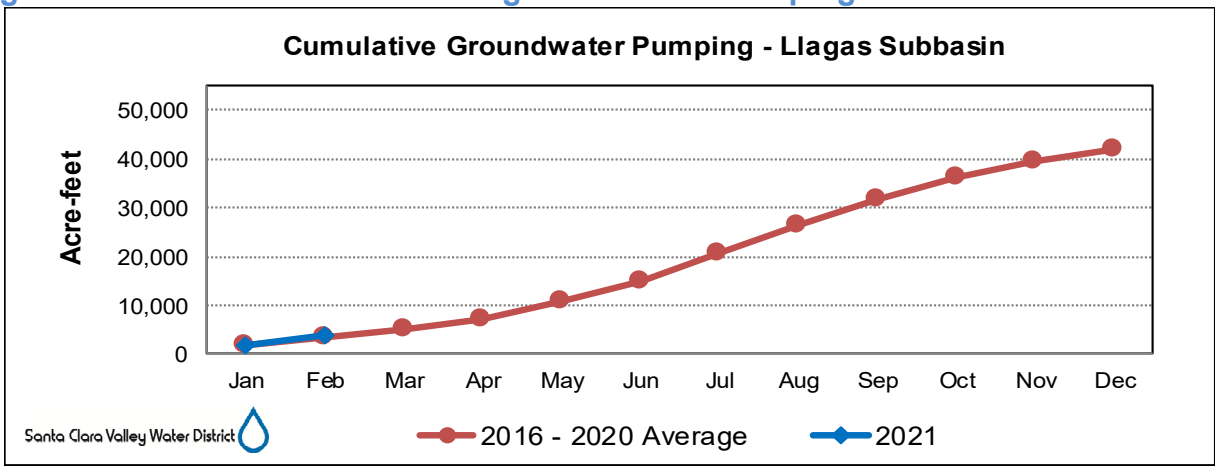


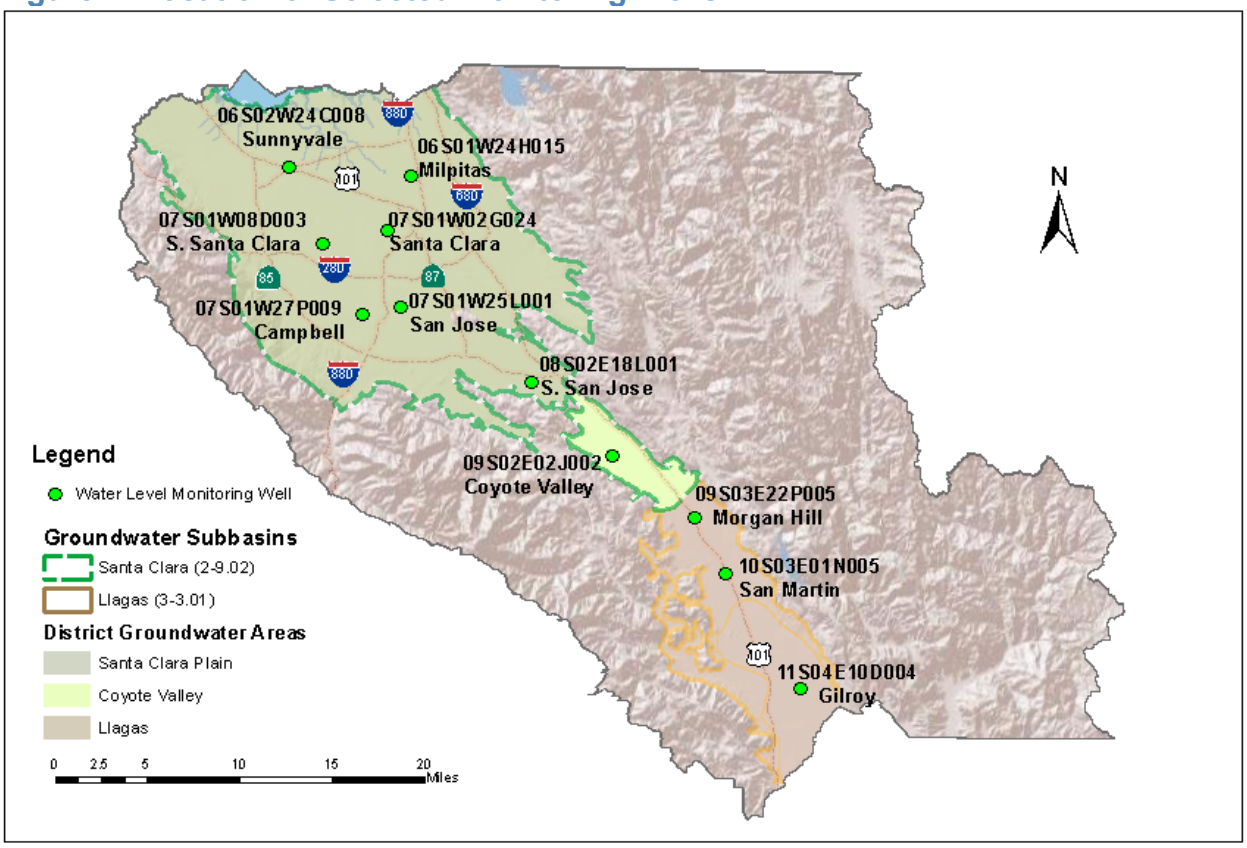
Figure 6. Estimated Cumulative Llagas Subbasin Pumping



Groundwater Levels

Current groundwater level conditions are summarized using eleven monitoring wells distributed across the sub-basins, as shown in Figure 7.

Figure 7. Location of Selected Monitoring Wells

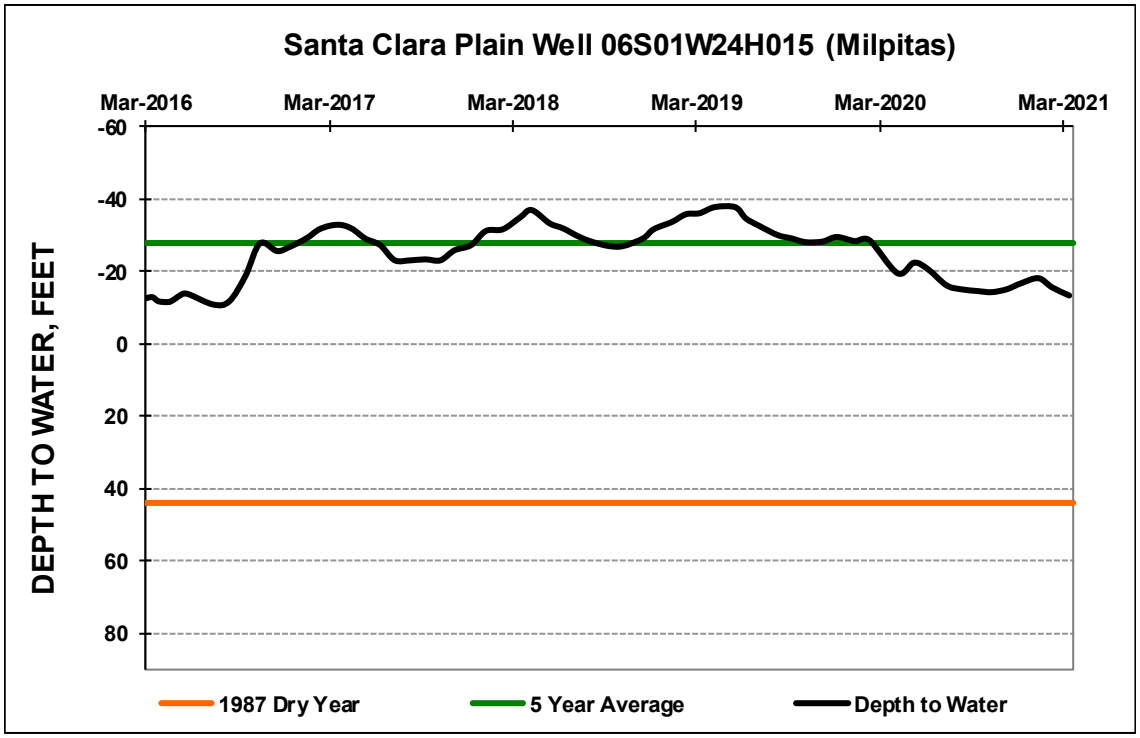


In Figures 8 through 18, hydrographs with March 2021 water levels from these eleven wells are compared to water levels from (i) February 2021, (ii) March 2020, (iii) March 2004 (a normal year), (iv) the prior five-year (2016-2020) average of March measurements, and (v) March 1987 (a dry year).

These hydrographs show that the March 2021 groundwater levels were:

i. Higher than February 2021 levels in five wells by 2 to 9 feet, lower in five wells by 1 to 4 feet, and the same in one well.
ii. Water levels were not measured in March 2020 due to COVID-19 restrictions so there is no comparison to last March.
iii. Higher in three wells by 3 to 15 feet and lower in seven wells by 3 to 31 feet compared to March 2004 (a normal year); one well does not have a 2004 water level,
iv. Higher in one well by 6 feet, lower in ten wells by 3 to 25 feet, as compared to the average of the previous five-years of March readings, and
v. Higher in seven wells by 39 to 113 feet and lower in four wells by 1 to 9 feet, as compared to March 1987 (a dry year).

Figure 8. Milpitas Well Hydrograph



A measured value at Milpitas for 2004 is not available for comparison. Between March 1998 and October 2006, this well was flowing artesian and not measured. In October 2006, the well was modified to allow measurement of artesian pressures.

Figure 9. Sunnyvale Well Hydrograph

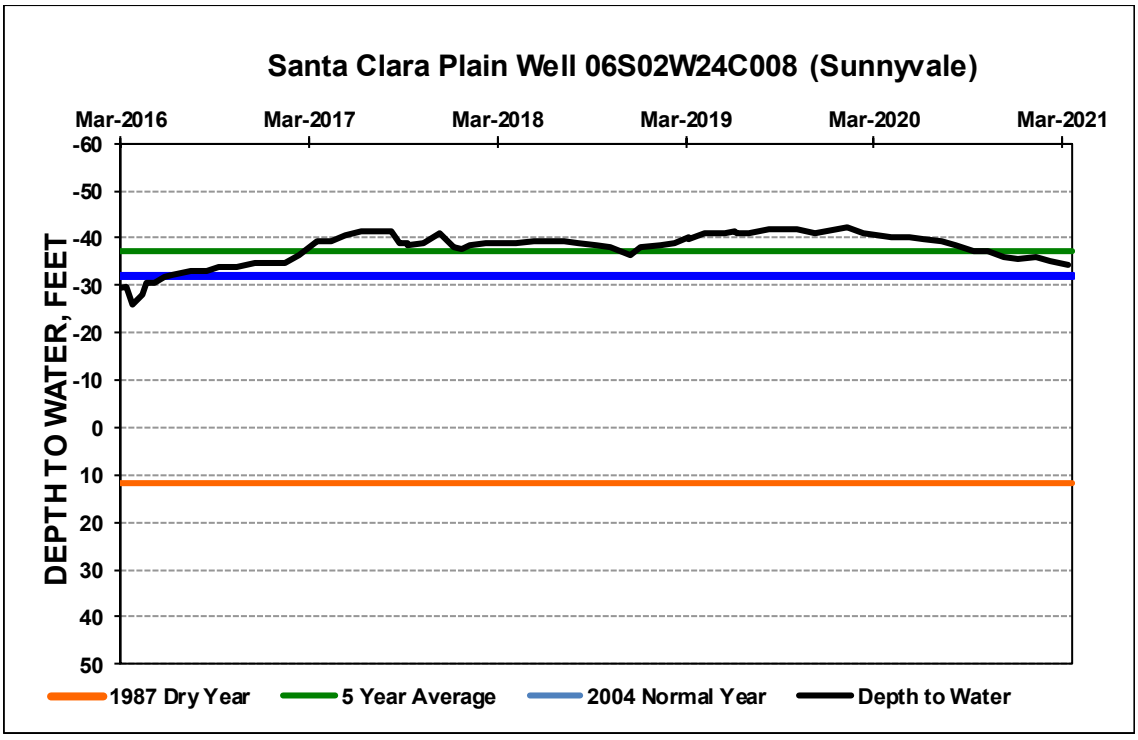


Figure 10. San Jose Well Hydrograph (Index Well for the Santa Clara Plain)

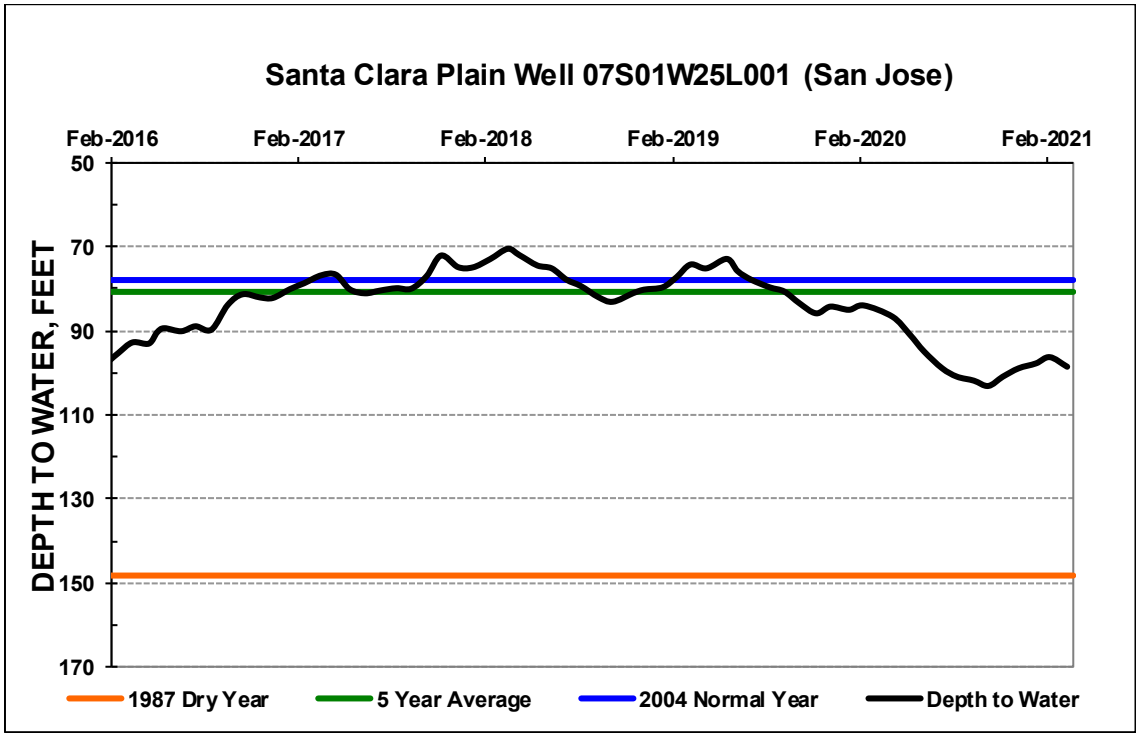


Figure 11. Santa Clara Well Hydrograph

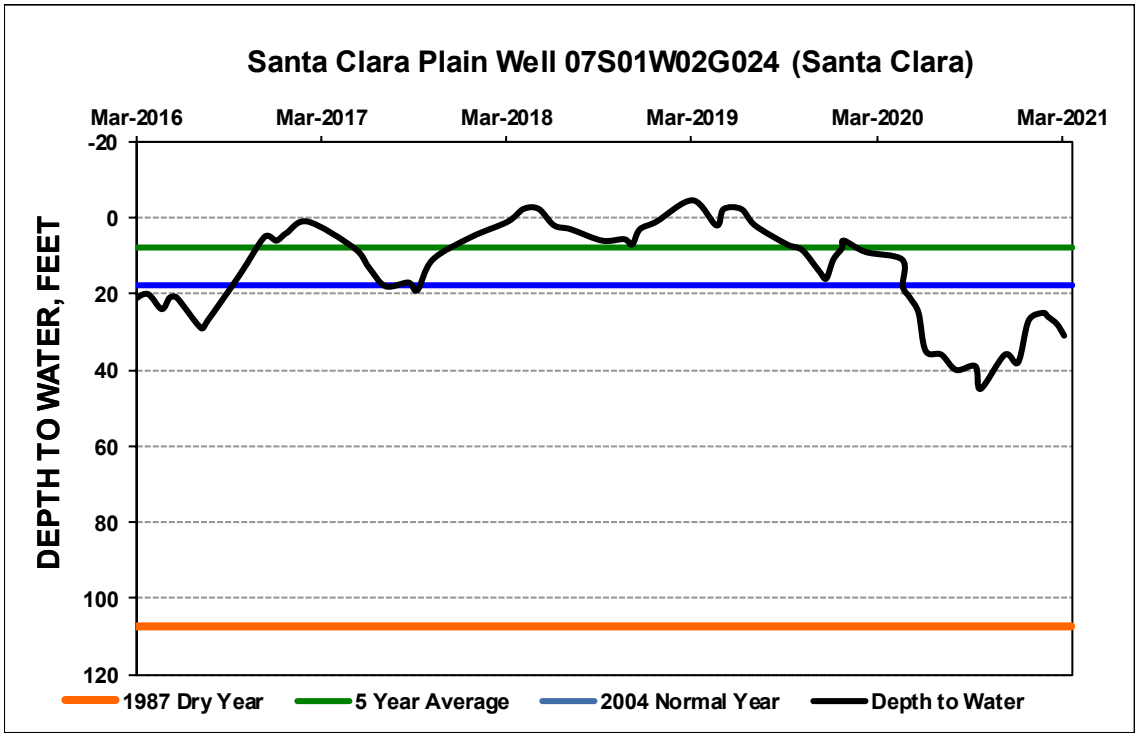


Figure 12. South Santa Clara Well Hydrograph

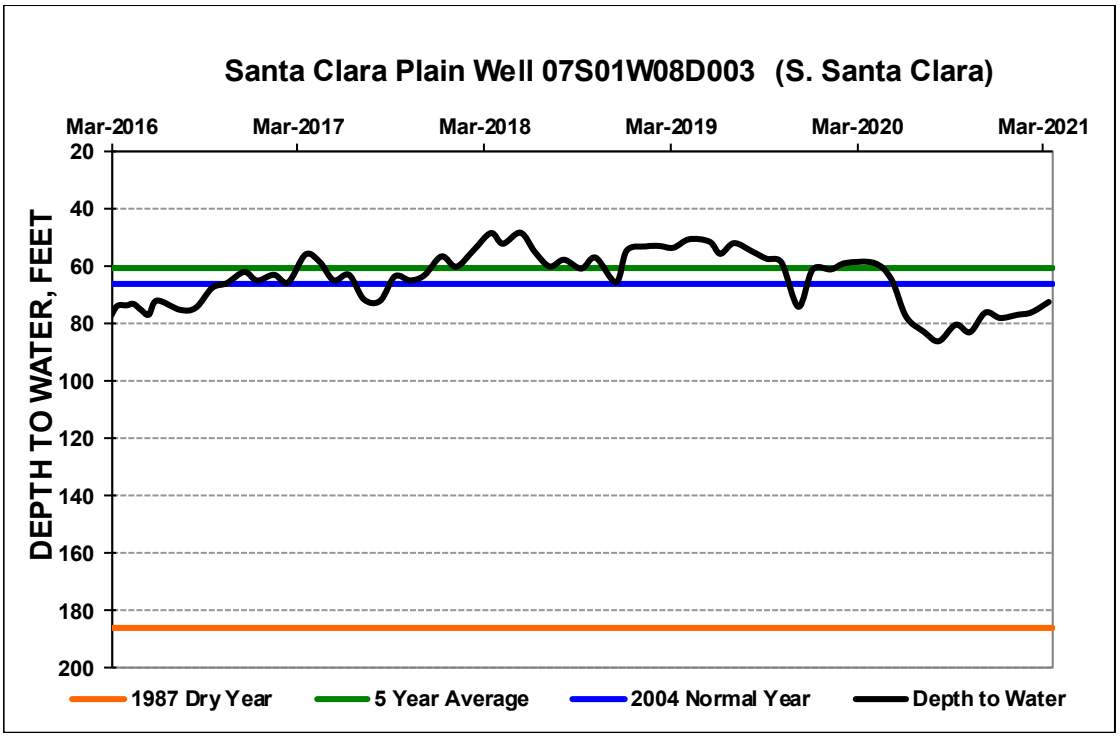
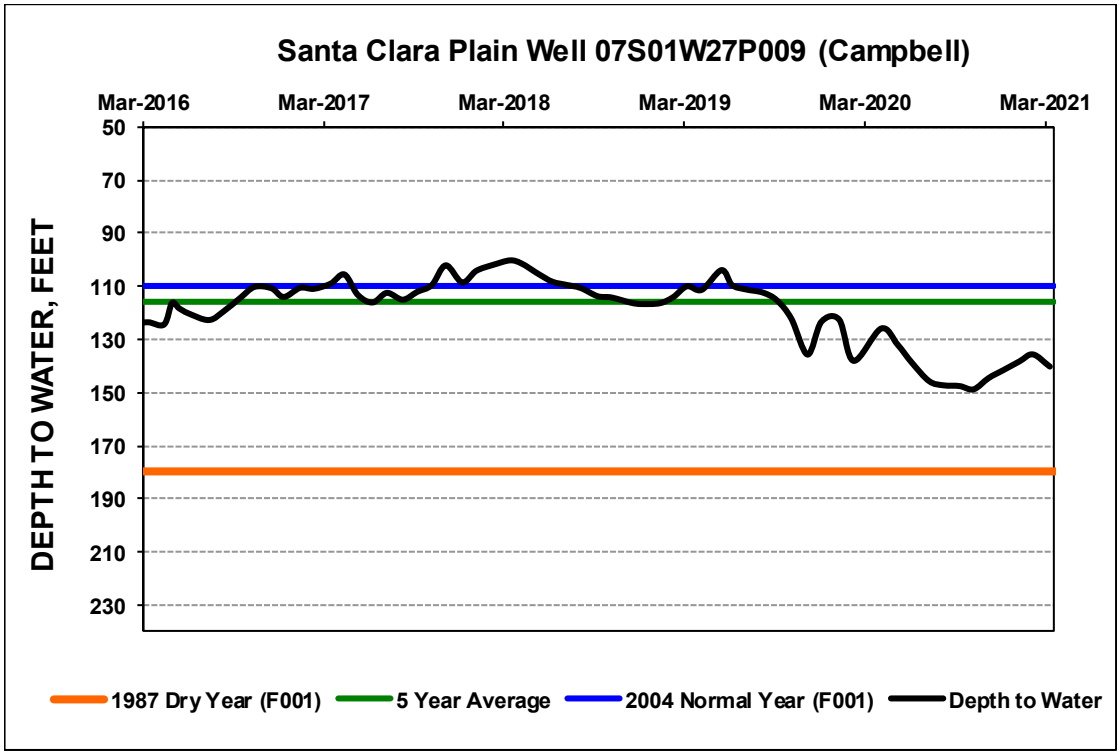


Figure 13. Campbell Well Hydrograph



The Campbell index well was replaced in August 2015 with a nearby well with similar water levels. Historic comparisons for 1987 and 2004 use data from the former index well (07S01W34F001).

Figure 14. South San Jose Well Hydrograph

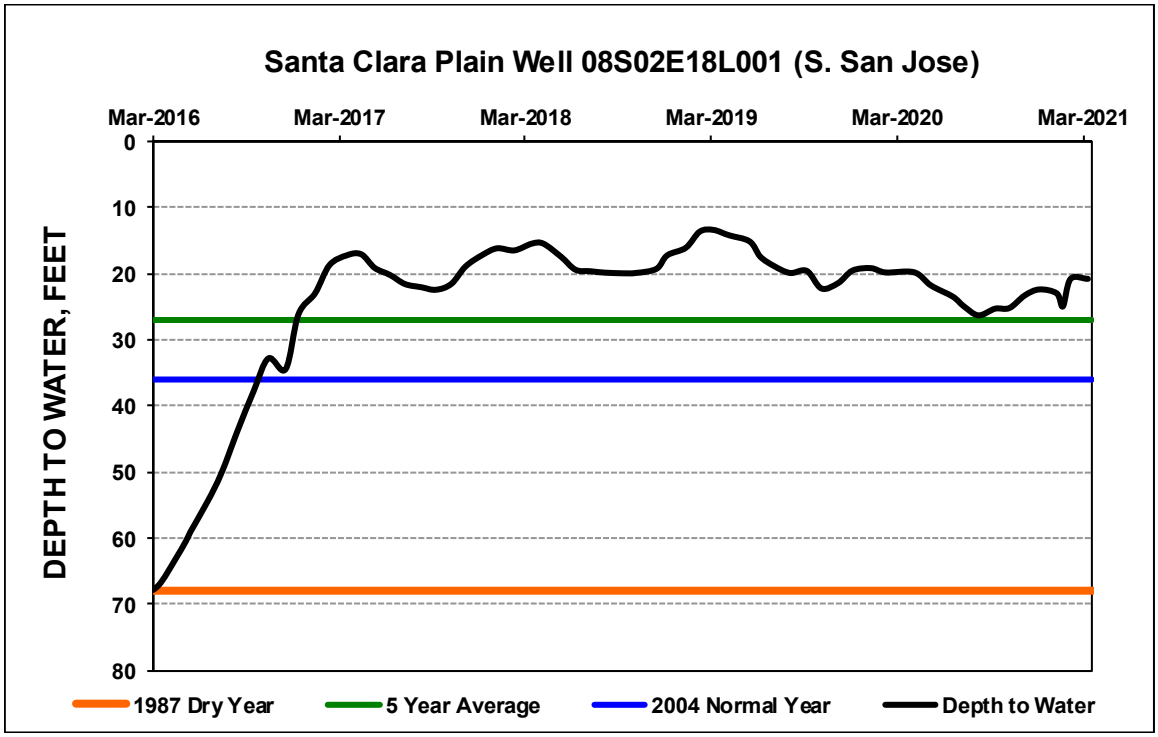


Figure 15. Coyote Valley Well Hydrograph (Index Well for the Coyote Valley)

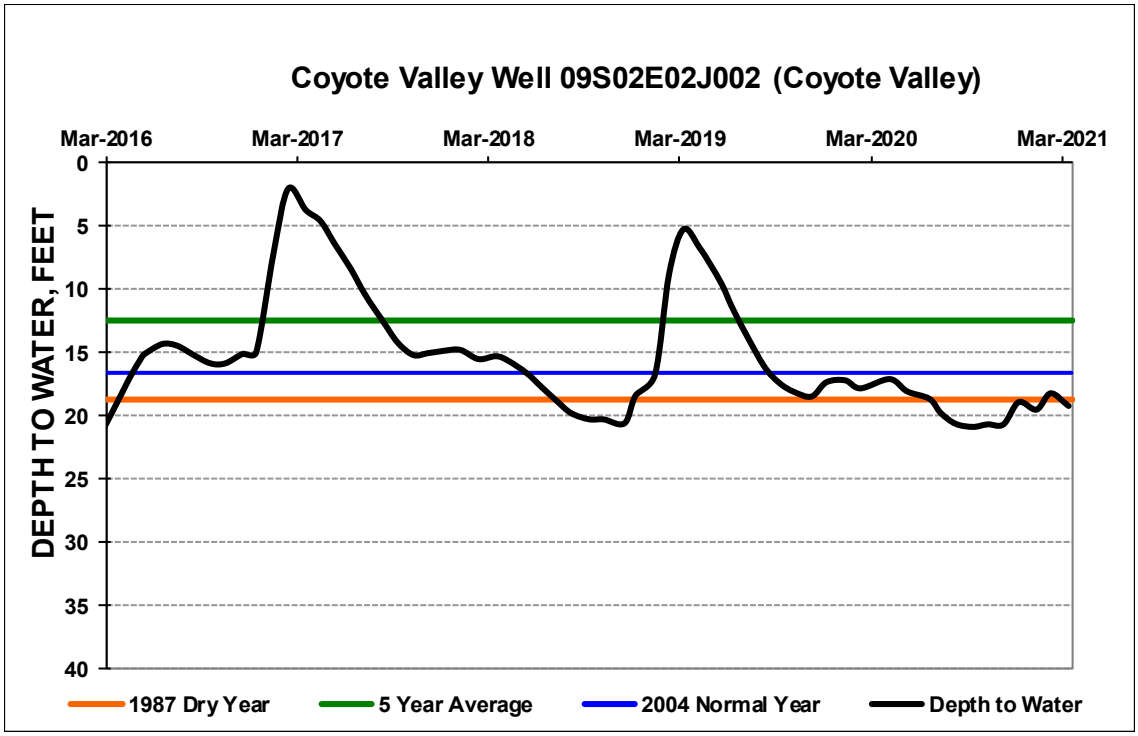


Figure 16. Morgan Hill Well Hydrograph

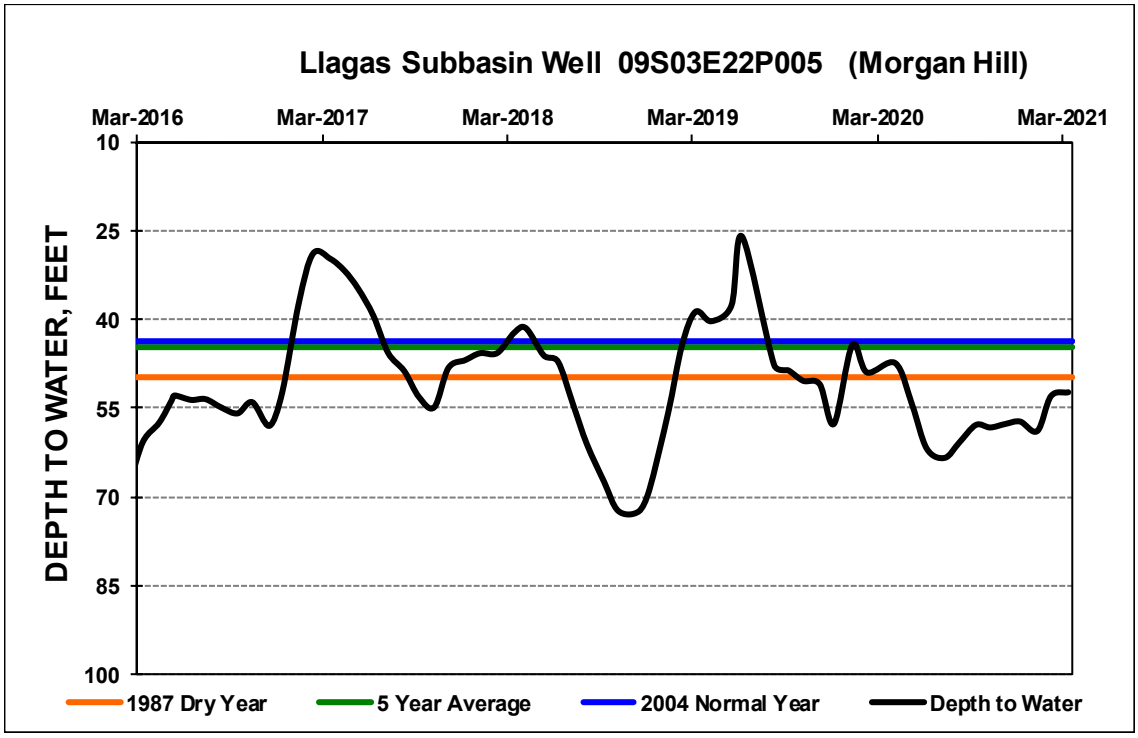
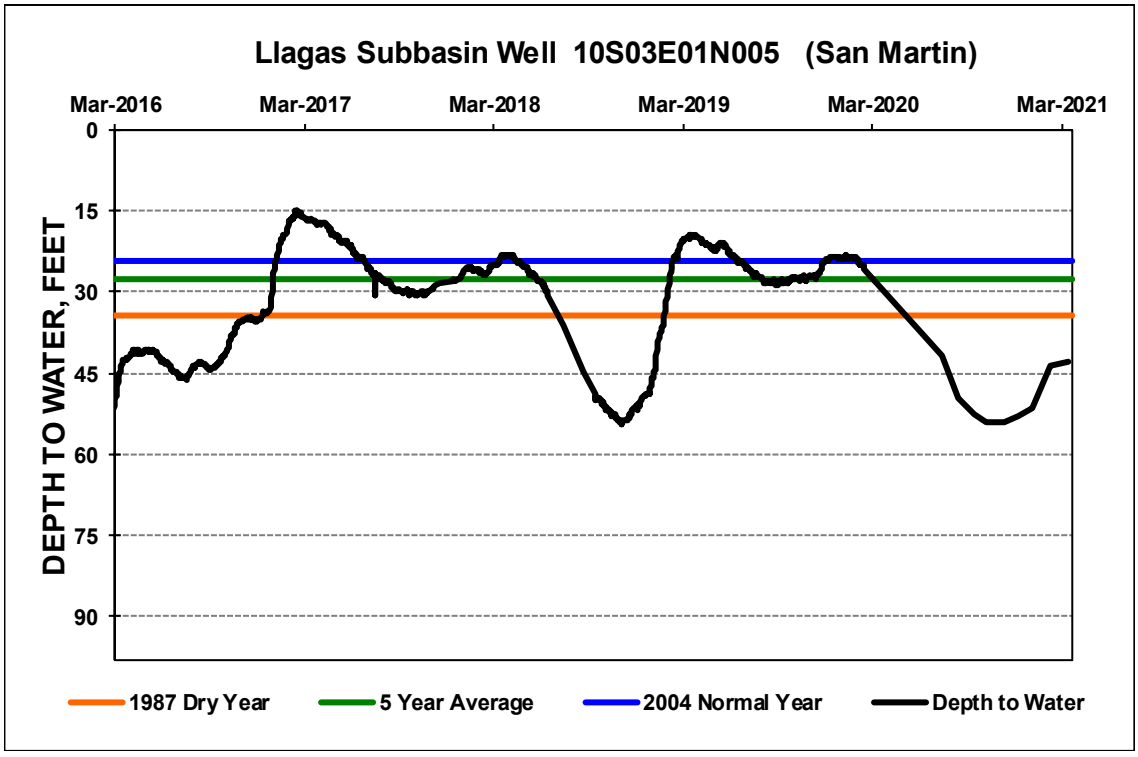
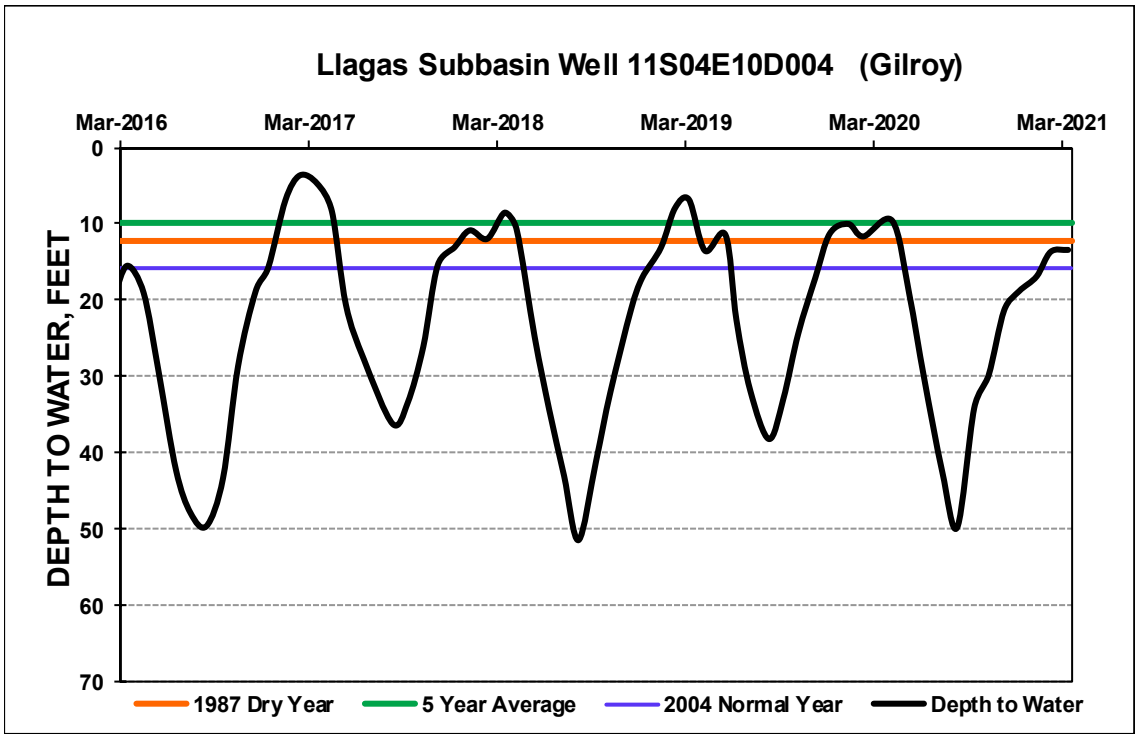


Figure 17. San Martin Well Hydrograph (Index Well for the Llagas Subbasin)



The San Martin index well was replaced in January 2021 with a nearby well with water levels similar to the prior wells but with a more complete record and better access.

Figure 18. Gilroy Well Hydrograph



Appendix J

Valley Water Groundwater Management Plan

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Appendix K

Water Waste Prevention in the Mountain View City Code

DIVISION 3. - WATER CONSERVATION

Footnotes:

*--- **(1)** ---*

***Editor's note—** Ord. No. 5.14, § 1, adopted April 8, 2014, amended the Code by, in effect, repealing former Div. 3, §§ 35.28.1—35.28.8, and adding a new Div. 3. Former Div. 3 pertained to similar subject matter, and derived from Ord. No. 11.89, adopted June 13, 1989; Ord. No. 8.91, adopted May 14, 1991; Ord. No. 4.92, adopted February 25, 1992; Ord. No. 1.93, adopted April 13, 1993.*

SEC. 35.28.1. - Findings and determinations.

The city council of the City of Mountain View hereby finds and determines that:

(a) The water conservation provisions defined in this division are needed to minimize water waste and conserve the City of Mountain View's water supply for the greatest public benefit, with particular regard to human consumption, sanitation and fire protection and the health, safety and welfare of the people and economy of the City of Mountain View;

(b) Permanent water conservation provisions are necessary to meet the continually changing demands made on the City of Mountain View's finite water supply and to prepare for future drought;

(c) More restrictive water conservation provisions are necessary during water shortages to manage the City of Mountain View's water supply and minimize the effects of drought and shortage;

(d) The City of Mountain View's primary water suppliers, the San Francisco Public Utilities Commission and the Santa Clara Valley Water District, support efficient water-use practices during normal supply conditions and water shortages; and

(e) The prohibition of nonessential uses of water imposed by this division are needed to prevent waste of the City of Mountain View's water, and are imposed and enforced pursuant to the city's power under Sec. 5 and 7 of Article 11 of the California Constitution and Sec. 350 through 359 and 375 through 378 of the California Water Code.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.2. - Definitions.

(a) "City" means the City of Mountain View, a charter city.

(b) "Director" means the public works director of the City of Mountain View, or his/her designee or representative.

(c) "Customer" means any individual, firm, partnership, unincorporated association, corporation, company, organization or governmental entity or agency, whether within or without the geographic boundaries of the City of Mountain View who uses water supplied by the city.

(d) "Irrigation station" means an area of irrigated landscape controlled by a single irrigation valve.

(e) "Hard-surfaced areas" means sidewalks, walkways, driveways, parking areas, tennis courts, patios, alleys or other paved areas.

(f) "Single-pass cooling system" means equipment where water is circulated only once to cool equipment before being disposed.

(g) "Decorative water feature" means a design element where open water performs an aesthetic function, including not limited to, ponds, fountains, waterfalls and artificial streams.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.3. - Prohibition of nonessential water use.

The nonessential water uses defined in Sec. 35.28.4, et seq. are prohibited as set forth below. In the event of a declared water shortage, any prohibited water uses imposed by this division in which two (2) or more prohibitions apply to the same water use, the most restrictive prohibition shall apply.

(a) Normal supply conditions. Any of the nonessential water uses defined in Sec. 35.28.4.1 are prohibited at all times.

(b) Stage 1 water shortage (up to ten (10) percent reduction). A Stage 1 water shortage exists when the city council declares that a water supply shortage exists and a demand reduction of up to ten (10) percent is necessary to appropriately respond to existing supply conditions. Upon declaration of a Stage 1 water shortage by the city council, city staff shall increase public education and outreach efforts to increase public awareness of the prohibited nonessential water uses as defined in Sec. 35.28.4.1 and to encourage voluntary reduction in water use.

(c) Stage 2 water shortage (up to twenty-five (25) percent reduction). A Stage 2 water shortage exists when the city council declares that a water supply shortage exists and a demand reduction of up to twenty-five (25) percent is necessary to appropriately respond to existing supply conditions. Upon declaration of a Stage 2 water shortage by the city council, any of the nonessential water uses defined in Sec. 35.28.4.1 through Sec. 35.28.4.2 are prohibited.

(d) Stage 3 water shortage (up to forty (40) percent reduction). A Stage 3 water shortage exists when the city council declares that a water supply shortage exists and a demand reduction of up to forty (40) percent is necessary to appropriately respond to existing supply conditions. Upon declaration of a Stage 3 water shortage by the city council, any of the nonessential water uses defined in Sec. 35.28.4.1 through Sec. 35.28.4.3 are prohibited.

(e) Stage 4 water shortage (greater than forty (40) percent reduction). A Stage 4 water shortage exists when the city council determines that a water supply shortage exists and a demand reduction of greater than forty (40) percent is necessary to make more efficient use of water and appropriately respond to existing water conditions. Upon declaration of a Stage 4 water shortage by the city council, any of the nonessential water uses defined in Sec. 35.28.4.1 through Sec. 35.28.4.4 are prohibited.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.3.1. - Water shortage declaration.

The city manager may recommend the city council adopt a resolution to declare a water shortage when there is a reasonable probability that there will be a supply shortage necessitating a demand reduction in order to ensure that sufficient supplies will be available to meet anticipated demands. Upon declaration of a water shortage emergency, the city manager shall take action to implement the prohibitions identified in this division, as applicable to the declared water shortage stage. The declared water shortage shall remain in effect until rescinded or otherwise modified by subsequent resolution of city council.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.4. - Nonessential water uses defined.

The following uses of potable water are hereby determined to be nonessential, except as further provided herein.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.4.1. - Normal supply conditions.

The following nonessential water uses are prohibited at all times and in all declared water shortage stages.

(a) Failure to repair broken or defective water systems.

(1) Use of potable water through any meter when written notice has been given by the director to repair broken or defective plumbing, sprinkler, watering or irrigation systems and has failed to effect such repairs. The failure of any customer to effect said repairs within the applicable time period after said written notification by director shall constitute grounds for immediate discontinuance of water service pursuant to Sec. 35.28.6.

(2) The time period within which repair shall be made of the broken or defective plumbing, sprinkler, watering or irrigation systems after receiving written notice is determined by the water supply condition as follows:

1. A maximum of ten (10) days under normal supply conditions.
2. A maximum of ten (10) days during a Stage 1 water shortage.
3. A maximum of five (5) days during a Stage 2 water shortage.
4. A maximum of three (3) days during a Stage 3 water shortage.
5. A maximum of twenty-four (24) hours during a Stage 4 water shortage.

(b) Water use that results in flooding or runoff. Use of potable water which results in flooding or runoff into gutters, sidewalks, driveways, streets, highways, roads or other hard-surfaced areas.

(c) Cleaning hard-surfaced areas. Use of potable water through a hose for the cleaning of hard-surfaced areas without a positive automatic shutoff valve on the outlet end of the hose.

(d) Vehicle washing. Use of potable water through a hose for washing cars, buses, boats, trailers or other vehicles without a positive automatic shutoff valve on the outlet end of the hose.

(e) Restaurant water service. Use of potable water for restaurant water service unless upon request.

(f) Single-pass cooling systems. Use of potable water in single-pass cooling systems.

(Ord. No. 5.14, § 1, 4/8/14; Ord. No. 3.15, § 1, 5/26/15.)

SEC. 35.28.4.2. - Stage 2 water shortage.

The following nonessential water uses are prohibited during a declared Stage 2, Stage 3 and Stage 4 water shortage.

(a) Cleaning hard-surfaced areas. Use of potable water for washing down of hard-surfaced areas, except by use of a hand-held bucket or similar container or when necessary to alleviate safety or sanitary hazards.

(b) Vehicle washing. Use of potable water for washing cars, buses, boats, trailers or other vehicles except by use of a hand-held bucket or similar container. This subsection does not apply to any commercial vehicle

washing facility.

(c) Landscape watering and irrigation.

(1) Watering or irrigation of lawn, landscape or other vegetated area with potable water between the hours of 9:00 a.m. and 5:00 p.m. on any day, except by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shutoff nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system. This subsection does not apply to irrigation stations that exclusively use drip-type irrigation systems.

(2) Watering or irrigation of lawn, landscape or other vegetated area with potable water for more than one (1) to three (3) days per week, as determined by the director, depending on the circumstances, to achieve the targeted demand reduction pursuant to a schedule established and posted by the city. This subsection does not apply to watering or irrigating for very short periods of time for the express purpose of adjusting or repairing an irrigation system.

(3) Watering or irrigation of lawn, landscape or other vegetated area with potable water for more than fifteen (15) minutes per day per irrigation station. This subsection does not apply to irrigation stations that exclusively use drip-type irrigation systems or high-efficiency sprinkler nozzles that have a precipitation rate of less than one (1) inch per hour, or watering or irrigating for very short periods of time for the express purpose of adjusting or repairing an irrigation system.

(4) Watering or irrigation of lawn, landscape or other vegetated area with potable water during a rain event.

(5) As an alternative to compliance with (c)(2) and (c)(3) of this section, large landscape water customers with a dedicated irrigation meter and those eligible and participating in the city's Landscape Water Budget Program may elect to reduce irrigation water use below the customer's Landscape Water Budget by a percentage as determined by the director and posted by the city.

Any customer electing to comply with this alternative irrigation program shall notify the city of their election in a manner determined by the director. If the customer fails to comply with the reduction requirements for any consecutive two-month period, the customer shall be removed from participation in this alternative program and be required to comply with (c)(2) and (c)(3) of this section. After removal from the program, a customer may re-elect to participate in this alternative program, only if the customer has reduced their irrigation water use below the Landscape Water Budget by the percentage set forth above as determined by the director and posted by the city for a consecutive two-month period.

(d) Decorative water features. Use of potable water in decorative water features except as needed to maintain aquatic life.

(e) Prerinse spray valves. Use of potable water through a non-low-flow prerinse spray valve for restaurant dishwashing.

(f) Hotel linens. Providing hotel guests with new towels and bed linens daily, without offering the option to reuse said towels and bed linens.

(g) New commercial car washes. Construction or installation and operation of a new commercial conveyor car wash system that does not utilize water-recirculation technologies.

(h) New commercial laundry systems. Construction or installation and operation of a new commercial laundry system that does not utilize water-recirculation technologies.

(i) Construction. Use of potable water for construction purposes, including, but not limited to, dust control, wh water is readily available.

(Ord. No. 5.14, § 1, 4/8/14; Ord. No. 3.15, § 2, 5/26/15.)

SEC. 35.28.4.3. - Stage 3 water shortage.

The following nonessential water uses are prohibited during a declared Stage 3 and Stage 4 water shortage.

(a) Commercial car washes. Operating a commercial car wash system that does not utilize water-recirculation technologies.

(b) Filling swimming pools. Filling swimming pools or spas with potable water.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.4.4. - Stage 4 water shortage.

The following nonessential water uses are prohibited during a declared Stage 4 water shortage.

(a) Landscape watering or irrigation. Watering or irrigating of lawn, landscape or other vegetated area with potable water, except for the following uses:

(1) Maintenance of existing landscape necessary for fire protection.

(2) Maintenance of existing landscape for soil erosion control.

(3) Maintenance of plant materials identified to be rare or essential to the well-being of protected species.

(4) Maintenance of landscape within active public parks and playing fields, day-care centers, golf course greens and school grounds, provided that such irrigation does not exceed one (1) day per week and does not occur between 9:00 a.m. and 5:00 p.m.

(5) Actively irrigated environmental mitigation projects.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.5 - Exceptions and appeals.

The procedures for exceptions and appeals shall be as set forth below.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.5.1. - Exceptions.

Written applications for an exception to the provisions of this division shall be made to the director. A written determination will be made on all requests for exceptions within ten (10) business days from receipt of an application for an exception and mailed to the applicant.

The director's determination shall consider the following criteria:

(a) Whether all practical water conservation measures have been previously adopted;

(b) Whether failure to grant the application would cause an emergency condition adversely affecting the health, sanitation, fire protection or safety of the customer or the public; or

(c) Whether undue hardship would result to the applicant if the application were denied or the flow-restricting were installed, including adverse economic impact such as loss of production or loss of jobs.

(Ord. No. 5.14, § 1, 4/8/14; Ord. No. 3.15, § 3, 5/26/15.)

SEC. 35.28.5.2. - Appeals.

Denials of any application for an exception or a decision of the director to install a flow-restricting device or discontinue water service may be appealed to the city manager, or his/her designee, whose decision shall be final. An application for an appeal shall be filed with the city clerk in writing within seven (7) calendar days after the director's decision and shall state the specific grounds for the appeal. The city manager shall issue a written decision within fifteen (15) calendar days after the appeal has been filed with the city clerk.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.6. - Enforcement.

The enforcement of the water conservation provisions of this division shall be as set forth below.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.6.1. - Installation of flow-restricting devices as enforcement.

(a) Upon the receipt of reliable information confirming an alleged violation of this division, the director shall issue a written warning to the suspected violator. The director may, after one (1) or more written warnings, determine whether to require installation of a flow-restricting device on the service line of any customer violating any of the provisions of this division.

(b) If the director determines installation of a flow-restricting device is necessary, written notification of the director's decision shall be mailed to the customer. The customer shall have ten (10) calendar days from the decision to contest the director's decision by submitting written documentation to the director. If the customer does not contest the decision, the decision will become final without further notification. If the customer contests the director's decision, the director shall have ten (10) business days to issue a final written decision considering the criteria set forth in Sec. 38.28.5.1. If the customer contested the director's decision, he/she may appeal the director's decision pursuant to Sec. 38.28.5.2.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.6.2. - Charges for installation and removal of flow-restricting devices.

The charges for the installation and removal of flow-restricting devices shall be fixed by resolution of the city council based on the city's costs for labor, equipment, materials and overhead.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.6.3. - Installation of flow-restricting devices—Time periods.

The first installation of a flow-restricting device shall remain in place for a minimum of three (3) days. The second installation of a flow-restricting device shall remain in place for a minimum period of ten (10) days. Normal water service shall not be restored until all installation and removal costs of flow-restricting devices have been paid.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.7. - Discontinuance of water service.

Continued water use in violation of any of the provisions of this division, after written warning by the director and installation of flow-restricting devices, may result in the discontinuation of water service by the City of Mountain View. The director shall mail a written notice of discontinuation of water service. A customer may appeal pursuant to Sec. 38.28.5.2. The charge for reactivating or restoring water service shall be fixed by resolution of the city council, based on the city's cost for labor, equipment, materials and overhead.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.8. - Penalties.

The remedies provided in this division are cumulative and in addition to any other remedies available at law or in equity, including enforcement pursuant to Chapter 1 of this Code. Any violation of this division may be remedied by an enforcement action brought by the city, including, but not limited to, administrative or traditional nuisance abatement proceedings, civil or criminal code enforcement proceedings and suits for injunctive relief.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.9—35.28.11 - Repealed by Ord. No. 1.93, 4/13/93.

SEC. 35.28.12—35.28.16. - Repealed by Ord. No. 5.78, 2/14/78.

Appendix L

Multi-Hazard Mitigation Plan for Santa Clara County

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