

## **APPENDIX A**

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### Legislative Requirements

- California Water Code – Urban Water Management Planning
- California Water Code – Sustainable Water Use and Demand Reductions

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**California Water Code**  
**Urban Water Management Planning**

## **CALIFORNIA WATER CODE DIVISION 6 PART 2.6.**

### **URBAN WATER MANAGEMENT PLANNING**

All California Codes have been updated to include the 2010 Statutes.

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#### **Chapter 1. General Declaration and Policy**

##### **SECTION 10610-10610.4**

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

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

- (1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.
- (2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.
- (3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate.
- (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.
- (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 California Urban Water Management Planning Act Page 2 2010 on water management strategies and supply reliability.

(b) This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.

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

(a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.

(b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.

(c) Urban water suppliers shall be required to develop water management plans to actively pursue the efficient use of available supplies.

## **Chapter 2. Definitions**

### **SECTION 10611-10617**

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

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

**10612.** "Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.

- 10613.** "Efficient use" means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable method of use.
- 10614.** "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.
- 10615.** "Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.
- 10616.** "Public agency" means any board, commission, county, city California Urban Water Management Planning Act Page 3 2010 and county, city, regional agency, district, or other public entity.
- 10616.5.** "Recycled water" means the reclamation and reuse of wastewater for beneficial use.
- 10617.** "Urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

## **Chapter 3. Urban Water Management Plans**

### **Article 1. General Provisions**

#### **SECTION 10620-10621**

- 10620.** (a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).
- (b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

(c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.

(d)(1) An urban water supplier may satisfy the requirements of this part by participation in areawide, regional, watershed, or basinwide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation and efficient water use.

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

(e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.

(f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

**10621.** (a) Each urban water supplier shall update its plan at least once every five years on or before December 31, in years ending in five and zero, except as provided in subdivision (d).

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

(d) Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.

## **Article 2. Contents of Plan**

### **SECTION 10630-10634**

**10630.** It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied.

**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 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.
- (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). If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:
  - (1) A copy of 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.
  - (2) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For basins that a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition.
  - (3) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.
  - (4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information



that is reasonably available, including, but not limited to, historic use records.

- (c) (1) Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following:

- (A) An average water year.

- (B) A single-dry water year.

- (C) Multiple-dry water years.

- (2) For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.

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

- (e) (1) Quantify, 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, identifying the uses among water use sectors, including, but not necessarily limited to, all of the following uses:

- (A) Single-family residential.

- (B) Multifamily.

- (C) Commercial.

- (D) Industrial.

- (E) Institutional and governmental.

- (F) Landscape.

- (G) Sales to other agencies.

- (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.

- (I) Agricultural.

- (J) Distribution system water loss.

- (2) The water use projections shall be in the same five-year increments described in subdivision (a).
- (3) (A) For the 2015 urban water management plan update, the distribution system water loss shall be quantified for the most recent 12-month period available. For all subsequent updates, the distribution system water loss shall be quantified for each of the five years preceding the plan update.
  - (B) The distribution system water loss quantification shall be reported in accordance with a worksheet approved or developed by the department through a public process. The water loss quantification worksheet shall be based on the water system balance methodology developed by the American Water Works Association.
- (4) (A) If available and applicable to an urban water supplier, water use projections may display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area.
  - (B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following:
    - (i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections.
    - (ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.
- (f) 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.

- (g) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use, as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.
- (h) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.
- (i) For purposes of this part, urban water suppliers that are members of the California Urban Water Conservation Council shall be deemed in compliance with the requirements of subdivision (f) by complying with all the provisions of the "Memorandum of Understanding Regarding Urban Water Conservation in California," dated December 10, 2008, as it may be amended, and by submitting the annual reports required by Section 6.2 of that memorandum.

- (j) 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 (c). 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 (c).

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

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

**10631.2.** (a) In addition to the requirements of Section 10631, an urban water management plan may, but is not required to, include any of the following information:

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

(7) Any other energy-related information the urban water supplier deems appropriate.

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

**10631.5.** (a) (1) Beginning January 1, 2009, the terms of, and eligibility for, a water management grant or loan made to an urban water supplier and awarded or administered by the department, state board, or California Bay-Delta Authority or its successor agency shall be conditioned on the implementation of the water demand management measures described in Section 10631, as determined by the department pursuant to subdivision (b).

(2) For the purposes of this section, water management grants and loans include funding for programs and projects for surface water or groundwater storage, recycling, desalination, water conservation, water supply reliability, and water supply augmentation. This section does not apply to water management projects funded by the federal American Recovery and Reinvestment Act of 2009 (Public Law 111-5).

(3) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if the urban water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the water demand management measures. The supplier may request grant or loan funds to implement the water demand management measures to the extent the request is consistent with the eligibility requirements applicable to the water management funds.

(4) (A) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if an urban water supplier submits to the department for approval documentation demonstrating that a water demand management measure is not locally cost effective. If the department determines that the documentation submitted by the urban water supplier fails to demonstrate that a water demand management measure is not locally

cost effective, the department shall notify the urban water supplier and the agency administering the grant or loan program within 120 days that the documentation does not satisfy the requirements for an exemption, and include in that notification a detailed statement to support the determination.

(B) For purposes of this paragraph, "not locally cost effective" means that the present value of the local benefits of implementing a water demand management measure is less than the present value of the local costs of implementing that measure.

(b) (1) The department, in consultation with the state board and the California BayDelta Authority or its successor agency, and after soliciting public comment regarding eligibility requirements, shall develop eligibility requirements to implement the requirement of paragraph (1) of subdivision (a). In establishing these eligibility requirements, the department shall do both of the following:

(A) Consider the conservation measures described in the Memorandum of Understanding Regarding Urban Water Conservation in California, and alternative conservation approaches that provide equal or greater water savings.

(B) Recognize the different legal, technical, fiscal, and practical roles and responsibilities of wholesale water suppliers and retail water suppliers.

(2) (A) For the purposes of this section, the department shall determine whether an urban water supplier is implementing all of the water demand management measures described in Section 10631 based on either, or a combination, of the following:

(i) Compliance on an individual basis.

(ii) Compliance on a regional basis. Regional compliance shall require participation in a regional conservation program consisting of two or more urban water suppliers that achieves the level of conservation or water efficiency savings equivalent to the amount of conservation or savings achieved if each of the participating urban water suppliers implemented the water demand management measures. The urban water supplier administering the regional program shall provide participating urban water suppliers and the department with data to demonstrate that the regional program is consistent with this clause. The department shall review the data to determine

whether the urban water suppliers in the regional program are meeting the eligibility requirements.

(B) The department may require additional information for any determination pursuant to this section.

(3) The department shall not deny eligibility to an urban water supplier in compliance with the requirements of this section that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the water demand management measures described in Section 10631.

(c) In establishing guidelines pursuant to the specific funding authorization for any water management grant or loan program subject to this section, the agency administering the grant or loan program shall include in the guidelines the eligibility requirements developed by the department pursuant to subdivision (b).

(d) Upon receipt of a water management grant or loan application by an agency administering a grant and loan program subject to this section, the agency shall request an eligibility determination from the department with respect to the requirements of this section. The department shall respond to the request within 60 days of the request.

(e) The urban water supplier may submit to the department copies of its annual reports and other relevant documents to assist the department in determining whether the urban water supplier is implementing or scheduling the implementation of water demand management activities. In addition, for urban water suppliers that are signatories to the Memorandum of Understanding Regarding Urban Water Conservation in California and submit biennial reports to the California Urban Water Conservation Council in accordance with the memorandum, the department may use these reports to assist in tracking the implementation of water demand management measures.

(f) This section shall remain in effect only until July 1, 2016, and as of that date is repealed, unless a later enacted statute, that is enacted before July 1, 2016, deletes or extends that date.

**10631.7.** The department, in consultation with the California Urban Water Conservation Council, shall convene an independent technical panel to provide information and recommendations to the department and the Legislature on new demand management measures, technologies, and approaches. The panel shall consist of no more than seven members, who shall be selected by the



department to reflect a balanced representation of experts. The panel shall have at least one, but no more than two, representatives from each of the following: retail water suppliers, environmental organizations, the business community, wholesale water suppliers, and academia. The panel shall be convened by January 1, 2009, and shall report to the Legislature no later than January 1, 2010, and every five years thereafter. The department shall review the panel report and include in the final report to the Legislature the department's recommendations and comments regarding the panel process and the panel's recommendations.

**10632.** (a) The plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier:

- (1) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions that are applicable to each stage.
- (2) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.
- (3) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.
- (4) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.
- (5) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.
- (6) Penalties or charges for excessive use, where applicable.
- (7) An analysis of the impacts of each of the actions and conditions described in paragraphs (1) to (6), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.



- (8) A draft water shortage contingency resolution or ordinance.
- (9) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.

(b) Commencing with the urban water management plan update due July 1, 2016, for purposes of developing the water shortage contingency analysis pursuant to subdivision (a), the 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.

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

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

- (g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

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

## **Article 2.5. Water Service Reliability**

### **SECTION 10635**

- 10635.** (a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry 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) 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.
- (c) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.
- (d) 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.

## **Article 3. Adoption and Implementation of Plans**

### **SECTION 10640-10645**

**10640.** 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.

- 10641.** An urban water supplier required to prepare a plan may consult with, and obtain comments from, any public agency or state agency or any person who has special expertise with respect to water demand management methods and techniques.
- 10642.** Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan. Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of 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 hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its service area.

After the hearing, the plan shall be adopted as prepared or as modified after the hearing.

- 10643.** An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.
- 10644.** (a) (1) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.
- (2) The plan, or amendments to the plan, submitted to the department pursuant to paragraph (1) shall be submitted electronically and shall include any standardized forms, tables, or displays specified by the department.
- (b) (1) Notwithstanding Section 10231.5 of the Government Code, the department shall prepare and submit to the Legislature, on or before December 31, in the years ending in six and one, a report summarizing the status of the plans adopted pursuant to this part. The report prepared by the department shall identify the exemplary elements of the individual plans. The department shall provide a copy of the report to each urban water supplier that has submitted its plan to the department. The department shall also prepare reports and provide data for any legislative hearings designed to consider the effectiveness of plans submitted pursuant to this part.

- (2) A report to be submitted pursuant to paragraph (1) shall be submitted in compliance with Section 9795 of the Government Code.
- (c) (1) For the purpose of identifying the exemplary elements of the individual plans, the department shall identify in the report water demand management measures adopted and implemented by specific urban water suppliers, and identified pursuant to Section 10631, that achieve water savings significantly above the levels established by the department to meet the requirements of Section 10631.5.
- (2) The department shall distribute to the panel convened pursuant to Section 10631.7 the results achieved by the implementation of those water demand management measures described in paragraph (1).
- (3) The department shall make available to the public the standard the department will use to identify exemplary water demand management measures.

**10645.** 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.

#### **Chapter 4. Miscellaneous Provisions**

##### **SECTION 10650-10656**

**10650.** Any actions or proceedings 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 shall be commenced within 18 months after that adoption is required by this part.
- (b) Any action or proceeding alleging that a plan, or action taken pursuant to the plan, does not comply with this part shall be commenced within 90 days after filing of the plan or amendment thereto pursuant to Section 10644 or the taking of that action.

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

**10652.** The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part or to the implementation of actions taken

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

- 10653.** The adoption of a plan shall satisfy any requirements of state law, regulation, or order, including those of the State Water Resources Control Board and the Public Utilities Commission, for the preparation of water management plans or conservation plans; provided, that if the State Water Resources Control Board or the Public Utilities Commission requires additional information concerning water conservation 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 prepared to meet federal laws or regulations after the effective date of this part, and which substantially meets the requirements of this part, or by any existing urban water management plan which includes the contents of a plan required under this part.
- 10654.** An urban water supplier may recover in its rates the costs incurred in preparing its plan and implementing the reasonable water conservation measures included in the plan. Any best water management practice that is included in the plan that is identified in the "Memorandum of Understanding Regarding Urban Water Conservation in California" is deemed to be reasonable for the purposes of this section.
- 10655.** If any provision of this part or the application thereof to any person or circumstances is held invalid, that invalidity shall not affect other provisions or applications of this part which can be given effect without the invalid provision or application thereof, and to this end the provisions of this part are severable.
- 10656.** An urban water supplier that does not prepare, adopt, and submit its urban water management plan to the department in accordance with this part, is ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) or Division 26 (commencing with Section 79000), or receive drought assistance from the state until the urban water management plan is submitted pursuant to this article.

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**California Water Code**  
**Sustainable Water Use and Demand Reduction**

## **California Water Code Division 6, Part 2.55.**

**Chapter 1. General Declarations and Policy** §10608-10608.8  
**Chapter 2. Definitions** §10608.12  
**Chapter 3. Urban Retail Water Suppliers** §10608.16-10608.44  
**Chapter 4. Agricultural Water Suppliers** §10608.48  
**Chapter 5. Sustainable Water Management** §10608.50  
**Chapter 6 Standardized Data Collection** §10608.52  
**Chapter 7 Funding Provisions** §10608.56-10608.60  
**Chapter 8 Quantifying Agricultural Water Use Efficiency** §10608.64

### **Chapter 1. General Declarations and Policy** **SECTION 10608-10608.8**

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

- (a) Water is a public resource that the California Constitution protects against waste and unreasonable use.
- (b) Growing population, climate change, and the need to protect and grow California's economy while protecting and restoring our fish and wildlife habitats make it essential that the state manage its water resources as efficiently as possible.
- (c) Diverse regional water supply portfolios will increase water supply reliability and reduce dependence on the Delta.
- (d) Reduced water use through conservation provides significant energy and environmental benefits, and can help protect water quality, improve streamflows, and reduce greenhouse gas emissions.
- (e) The success of state and local water conservation programs to increase efficiency of water use is best determined on the basis of measurable outcomes related to water use or efficiency.
- (f) Improvements in technology and management practices offer the potential for increasing water efficiency in California over time, providing an essential water management tool to meet the need for water for urban, agricultural, and environmental uses.
- (g) The Governor has called for a 20 percent per capita reduction in urban water use statewide by 2020.
- (h) The factors used to formulate water use efficiency targets can vary significantly from location to location based on factors including weather, patterns of urban and suburban development, and past efforts to enhance water use efficiency. (i) Per capita water use is a valid measure of a water provider's efforts to reduce urban water use within its service area.



However, per capita water use is less useful for measuring relative water use efficiency between different water providers. Differences in weather, historical patterns of urban and suburban development, and density of housing in a particular location need to be considered when assessing per capita water use as a measure of efficiency.

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

- (a) Require all water suppliers to increase the efficiency of use of this essential resource.
- (b) Establish a framework to meet the state targets for urban water conservation identified in this part and called for by the Governor.
- (c) Measure increased efficiency of urban water use on a per capita basis.
- (d) Establish a method or methods for urban retail water suppliers to determine targets for achieving increased water use efficiency by the year 2020, in accordance with the Governor's goal of a 20-percent reduction.
- (e) Establish consistent water use efficiency planning and implementation standards for urban water suppliers and agricultural water suppliers.
- (f) Promote urban water conservation standards that are consistent with the California Urban Water Conservation Council's adopted best management practices and the requirements for demand management in Section 10631.
- (f) 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.
- (g) Recognize and account for the investment of urban retail water suppliers in providing recycled water for beneficial uses.
- (h) Require implementation of specified efficient water management practices for agricultural water suppliers.
- (i) Support the economic productivity of California's agricultural, commercial, and industrial sectors.
- (k) Advance regional water resources management.

**10608.8.** (a) (1) Water use efficiency measures adopted and implemented pursuant to this part or Part 2.8 (commencing with Section 10800) are water

conservation measures subject to the protections provided under Section 1011.

- (2) Because an urban agency is not required to meet its urban water use target until 2020 pursuant to subdivision (b) of Section 10608.24, an urban retail water supplier's failure to meet those targets shall not establish a violation of law for purposes of any state administrative or judicial proceeding prior to January 1, 2021. Nothing in this paragraph limits the use of data reported to the department or the board in litigation or an administrative proceeding. This paragraph shall become inoperative on January 1, 2021.
- (3) To the extent feasible, the department and the board shall provide for the use of water conservation reports required under this part to meet the requirements of Section 1011 for water conservation reporting.
- (b) This part does not limit or otherwise affect the application of Chapter 3.5 (commencing with Section 11340), Chapter 4 (commencing with Section 11370), Chapter 4.5 (commencing with Section 11400), and Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.
- (c) This part does not require a reduction in the total water used in the agricultural or urban sectors, because other factors, including, but not limited to, changes in agricultural economics or population growth may have greater effects on water use. This part does not limit the economic productivity of California's agricultural, commercial, or industrial sectors.
- (d) The requirements of this part do not apply to an agricultural water supplier that is a party to the Quantification Settlement Agreement, as defined in subdivision (a) of Section 1 of Chapter 617 of the Statutes of 2002, during the period within which the Quantification Settlement Agreement remains in effect. After the expiration of the Quantification Settlement Agreement, to the extent conservation water projects implemented as part of the Quantification Settlement Agreement remain in effect, the conserved water created as part of those projects shall be credited against the obligations of the agricultural water supplier pursuant to this part.

## **Chapter 2 Definitions**

### **SECTION 10608.12**

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

- (a) "Agricultural water supplier" means a water supplier, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding recycled water. "Agricultural water supplier" includes a supplier or

contractor for water, regardless of the basis of right, that distributes or sells water for ultimate resale to customers. "Agricultural water supplier" does not include the department.

(b) "Base daily per capita water use" means any of the following:

- (1) The urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous 10-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.
- (2) For an urban retail water supplier that meets at least 10 percent of its 2008 measured retail water demand through recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier, the urban retail water supplier may extend the calculation described in paragraph (1) up to an additional five years to a maximum of a continuous 15-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.
- (3) For the purposes of Section 10608.22, the urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous five-year period ending no earlier than December 31, 2007, and no later than December 31, 2010.

(c) "Baseline commercial, industrial, and institutional water use" means an urban retail water supplier's base daily per capita water use for commercial, industrial, and institutional users.

(d) "Commercial water user" means a water user that provides or distributes a product or service.

(e) "Compliance daily per capita water use" means the gross water use during the final year of the reporting period, reported in gallons per capita per day.

(f) "Disadvantaged community" means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.

(g) "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 longterm storage.
  - (3) The volume of water the urban retail water supplier conveys for use by another urban water supplier.
  - (4) The volume of water delivered for agricultural use, except as otherwise provided in subdivision (f) of Section 10608.24.
- (h) "Industrial water user" means a water user that is primarily a manufacturer or processor of materials as defined by the North American Industry Classification System code sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development.
- (i) "Institutional water user" means a water user dedicated to public service. This type of user includes, among other users, higher education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions.
- (j) "Interim urban water use target" means the midpoint between the urban retail water supplier's base daily per capita water use and the urban retail water supplier's urban water use target for 2020.
- (k) "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.
- (l) "Process water" means water used for producing a product or product content or water used for research and development, including, but not limited to, continuous manufacturing processes, water used for testing and maintaining equipment used in producing a product or product content, and water used in combined heat and power facilities used in producing a product or product content. Process water does not mean incidental water uses not related to the production of a product or product content, including, but not limited to, water used for restrooms, landscaping, air conditioning, heating, kitchens, and laundry.
- (m) "Recycled water" means recycled water, as defined in subdivision (n) of Section 13050, that is used to offset potable demand, including recycled water supplied for direct use and indirect potable reuse, that meets the following requirements, where applicable:
- (1) For groundwater recharge, including recharge through spreading basins, water supplies that are all of the following:

- (A) Metered.
  - (B) Developed through planned investment by the urban water supplier or a wastewater treatment agency.
  - (C) Treated to a minimum tertiary level.
  - (D) Delivered within the service area of an urban retail water supplier or its urban wholesale water supplier that helps an urban retail water supplier meet its urban water use target.
- (2) For reservoir augmentation, water supplies that meet the criteria of paragraph (1) and are conveyed through a distribution system constructed specifically for recycled water.
- (n) "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.
- (o) "Reporting period" means the years for which an urban retail water supplier reports compliance with the urban water use targets.
- (p) "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.
- (q) "Urban water use target" means the urban retail water supplier's targeted future daily per capita water use.
- (r) "Urban wholesale water supplier," means a water supplier, either publicly or privately owned, that provides more than 3,000 acre-feet of water annually at wholesale for potable municipal purposes.

## **Chapter 3 Urban Retail Water Suppliers**

### **SECTION 10608.16-10608.44**

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

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

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

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

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

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

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

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

(B) For landscape irrigated through dedicated or residential meters or

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

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

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

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

(A) Consider climatic differences within the state.

(B) Consider population density differences within the state.

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

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

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

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

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

(d) The department shall update the method described in paragraph (4) of subdivision (b) and report to the Legislature by December 31, 2014. An urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may adopt a new urban daily per capita water use target pursuant to this updated method.

(e) An urban retail water supplier shall include in its urban water management plan due in 2010 pursuant to Part 2.6 (commencing with Section 10610) the baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.



- (f) When calculating per capita values for the purposes of this chapter, an urban retail water supplier shall determine population using federal, state, and local population reports and projections.
- (g) An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan required pursuant to Part 2.6 (commencing with Section 10610).
- (h) (1) The department, through a public process and in consultation with the California Urban Water Conservation Council, shall develop technical methodologies and criteria for the consistent implementation of this part, including, but not limited to, both of the following:
  - (A) Methodologies for calculating base daily per capita water use, baseline commercial, industrial, and institutional water use, compliance daily per capita water use, gross water use, service area population, indoor residential water use, and landscaped area water use.
  - (B) Criteria for adjustments pursuant to subdivisions (d) and (e) of Section 10608.24.
- (2) The department shall post the methodologies and criteria developed pursuant to this subdivision on its Internet Web site, and make written copies available, by October 1, 2010. An urban retail water supplier shall use the methods developed by the department in compliance with this part.
- (i) (1) The department shall adopt regulations for implementation of the provisions relating to process water in accordance with subdivision (l) of Section 10608.12, subdivision (e) of Section 10608.24, and subdivision (d) of Section 10608.26.

(2) The initial adoption of a regulation authorized by this subdivision is deemed to address an emergency, for purposes of Sections 11346.1 and 11349.6 of the Government Code, and the department is hereby exempted for that purpose from the requirements of subdivision (b) of Section 11346.1 of the Government Code. After the initial adoption of an emergency regulation pursuant to this subdivision, the department shall not request approval from the Office of Administrative Law to readopt the regulation as an emergency regulation pursuant to Section 11346.1 of the Government Code.

(j) (1) An urban retail water supplier is granted an extension to July 1, 2011, for adoption of an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) due in 2010 to allow the use of technical methodologies developed by the department pursuant to paragraph (4) of subdivision (b) and subdivision (h). An urban retail water supplier that adopts an urban water management plan due in 2010 that does not use the methodologies developed by the department pursuant to subdivision (h) shall amend the plan by July 1, 2011, to comply with this part.

(2) An urban wholesale water supplier whose urban water management plan prepared pursuant to Part 2.6 (commencing with Section 10610) was due and not submitted in 2010 is granted an extension to July 1, 2011, to permit coordination between an urban wholesale water supplier and urban retail water suppliers.

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

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

(b) Each urban retail water supplier shall meet its urban water use target by December 31, 2020.

(c) An urban retail water supplier's compliance daily per capita water use shall be the measure of progress toward achievement of its urban water use target.

(d) (1) When determining compliance daily per capita water use, an urban retail water supplier may consider the following factors:

(A) Differences in evapotranspiration and rainfall in the baseline period compared to the compliance reporting period.

(B) Substantial changes to commercial or industrial water use resulting from increased business output and economic development that have occurred during the reporting period.

(C) Substantial changes to institutional water use resulting from fire suppression services or other extraordinary events, or from new or expanded operations, that have occurred during the reporting period.

(2) If the urban retail water supplier elects to adjust its estimate of compliance daily per capita water use due to one or more of the factors described in paragraph (1), it shall provide the basis for, and data supporting, the adjustment in the report required by Section 10608.40.

(e) When developing the urban water use target pursuant to Section 10608.20, an urban retail water supplier that has a substantial percentage of industrial water use in its service area may exclude process water from the calculation of gross water use to avoid a disproportionate burden on another customer sector.

(f) (1) An urban retail water supplier that includes agricultural water use in an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) may include the agricultural water use in determining gross water use. An urban retail water supplier that includes agricultural water use in determining gross water use and develops its urban water use target pursuant to paragraph (2) of subdivision (b) of Section 10608.20 shall use a water efficient standard for agricultural irrigation of 100 percent of reference evapotranspiration multiplied by the crop coefficient for irrigated acres.

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

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

- (1) Allow community input regarding the urban retail water supplier's implementation plan for complying with this part.
- (2) Consider the economic impacts of the urban retail water supplier's implementation plan for complying with this part.
- (3) Adopt a method, pursuant to subdivision (b) of Section 10608.20, for determining its urban water use target.

(b) In complying with this part, an urban retail water supplier may meet its urban water use target through efficiency improvements in any combination among its customer sectors. An urban retail water supplier shall avoid placing a disproportionate burden on any customer sector.

(c) For an urban retail water supplier that supplies water to a United States Department of Defense military installation, the urban retail water supplier's implementation plan for complying with this part shall consider the conservation of that military installation under federal Executive Order 13514.

(d) (1) Any ordinance or resolution adopted by an urban retail water supplier after the effective date of this section shall not require existing customers as of the effective date of this section, to undertake changes in product formulation, operations, or equipment that would reduce process water use, but may provide technical assistance and financial incentives to those customers to implement efficiency measures for process water. This section shall not limit an ordinance or resolution adopted pursuant to a declaration of drought emergency by an urban retail water supplier.

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

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

(1) Through an urban wholesale water supplier.

(2) Through a regional agency authorized to plan and implement water conservation, including, but not limited to, an agency established under the Bay Area Water Supply and Conservation Agency Act (Division 31

(commencing with Section 81300)).

- (3) Through a regional water management group as defined in Section 10537.
- (4) By an integrated regional water management funding area.
- (5) By hydrologic region.
- (6) Through other appropriate geographic scales for which computation methods have been developed by the department.

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

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

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

**10608.40.** Urban water retail suppliers shall report to the department on their progress in meeting their urban water use targets as part of their urban water management plans submitted pursuant to Section 10631. The data shall be

reported using a standardized form developed pursuant to Section 10608.52.

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

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

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

(a) Appropriate metrics for evaluating commercial, industrial, and institutional water use.

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

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

## **Chapter 4 Agricultural Water Suppliers**

### **SECTION 10608.48**

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

(b) Agricultural water suppliers shall implement all 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 data shall 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.

## **Chapter 5 Sustainable Water Management**

### **Section 10608.50**

- 10608.50.**(a) The department, in consultation with the board, shall promote implementation of regional water resources management practices through increased incentives and removal of barriers consistent with state and federal law. Potential changes may include, but are not limited to, all of the following:
- (1) Revisions to the requirements for urban and agricultural water management plans.
  - (2) Revisions to the requirements for integrated regional water management plans.
  - (3) Revisions to the eligibility for state water management grants and loans.
  - (4) Revisions to state or local permitting requirements that increase water supply opportunities, but do not weaken water quality protection under state and federal law.

- (5) Increased funding for research, feasibility studies, and project construction.
- (6) Expanding technical and educational support for local land use and water management agencies.
- (b) No later than January 1, 2011, and updated as part of the California Water Plan, the department, in consultation with the board, and with public input, shall propose new statewide targets, or review and update existing statewide targets, for regional water resources management practices, including, but not limited to, recycled water, brackish groundwater desalination, and infiltration and direct use of urban stormwater runoff.

## **Chapter 6 Standardized Data Collection**

### **SECTION 10608.52**

- 10608.52.**(a) The department, in consultation with the board, the California Bay-Delta Authority or its successor agency, the State Department of Public Health, and the Public Utilities Commission, shall develop a single standardized water use reporting form to meet the water use information needs of each agency, including the needs of urban water suppliers that elect to determine and report progress toward achieving targets on a regional basis as provided in subdivision (a) of Section 10608.28.
- (b) At a minimum, the form shall be developed to accommodate information sufficient to assess an urban water supplier's compliance with conservation targets pursuant to Section 10608.24 and an agricultural water supplier's compliance with implementation of efficient water management practices pursuant to subdivision (a) of Section 10608.48. The form shall accommodate reporting by urban water suppliers on an individual or regional basis as provided in subdivision (a) of Section 10608.28.

## **Chapter 7 Funding Provisions**

### **Section 10608.56-10608.60**

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

(b) On and after July 1, 2013, an agricultural water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

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

(d) Notwithstanding subdivision (b), the department shall determine that an agricultural water supplier is eligible for a water grant or loan even though the supplier is not implementing all of the efficient water management practices described in Section 10608.48, if the agricultural water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the efficient water management practices. The supplier may request grant or loan funds to implement the efficient water management practices to the extent the request is consistent with the eligibility requirements applicable to the water funds.

(e) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to

Section 10608.24, if the urban retail water supplier has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.

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

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

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

## **Chapter 8 Quantifying Agricultural Water Use Efficiency**

### **SECTION 10608.64**

**10608.64.** The department, in consultation with the Agricultural Water Management Council, academic experts, and other stakeholders, shall develop a methodology for quantifying the efficiency of agricultural water use.

Alternatives to be assessed shall include, but not be limited to, determination of efficiency levels based on crop type or irrigation system distribution uniformity. On or before December 31, 2011, the department shall report to the Legislature on a proposed methodology and a plan for implementation. The plan shall include the estimated implementation costs and the types of data needed to support the methodology. Nothing in this section authorizes the department to implement a methodology established pursuant to this section.



## APPENDIX B

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### DWR Tables

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**Table 2-1 Retail Only: Public Water Systems**

Public Water System Number	Public Water System Name	Number of Municipal Connections 2015	Volume of Water Supplied 2015
CA5010028	City of Ceres	11,646	2,105
<b>TOTAL</b>		11,646	2,105
NOTES:NOTES: Volumes are in MG.			

Table 2-2: Plan Identification			
Select Only One	Type of Plan		Name of RUWMP or Regional Alliance <i>if applicable</i> <i>drop down list</i>
<input checked="" type="checkbox"/>	Individual UWMP		
	<input type="checkbox"/>	Water Supplier is also a member of a RUWMP	
	<input type="checkbox"/>	Water Supplier is also a member of a Regional Alliance	
<input type="checkbox"/>	Regional Urban Water Management Plan (RUWMP)		
NOTES:			

Table 2-3: Agency Identification	
Type of Agency (select one or both)	
<input type="checkbox"/>	Agency is a wholesaler
<input checked="" type="checkbox"/>	Agency is a retailer
Fiscal Calendar Year (select one)	
<input checked="" type="checkbox"/>	UWMP Tables Are in Calendar Years
<input type="checkbox"/>	UWMP Tables Are in Fiscal Years
Units of Measure Used in UWMP (select from Drop down)	
Unit	MG

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 CWC 10631.
Wholesale Water Supplier Name <i>(Add additional rows as needed)</i>
Turlock Irrigation District
NOTES:

Table 3-1 Retail: Population - Current and Projected					
Population Served	2015 <sup>(a)</sup>	2020 <sup>(b)</sup>	2025 <sup>(b)</sup>	2030 <sup>(b)</sup>	2035 <sup>(b)</sup>
	46,989	59,266	71,543	83,820	96,100
NOTES: (a) Source: Department of Finance Demographic Research unit report E-5 (b) Future population growth assumed from the City's 2010 Water Master Plan at year 2035.					

**Table 4-1 Retail: Demands for Potable and Raw Water - Actual**

Use Type	2015 Actual		
<i>Drop down list</i> <i>May select each use multiple times</i> <i>These are the only Use Types that will be recognized by the WUEdata online submittal tool</i>	Additional Description (as needed)	Level of Treatment When Delivered	Volume
Single Family		Drinking Water	1,317
Multi-Family		Drinking Water	231
Commercial		Drinking Water	653
Industrial		Drinking Water	20
Landscape		Drinking Water	131
Institutional/Governmental		Drinking Water	98
Losses		Drinking Water	161
<b>TOTAL</b>			<b>2,611</b>
NOTES: Volumes are in MG.			



**Table 4-2 Retail: Demands for Potable and Raw Water - Projected**

Use Type <i>(Add additional rows as needed)</i>	Additional Description <i>(as needed)</i>	Projected Water Use <i>Report To the Extent that Records are Available</i>			
		2020	2025	2030	2035
Single Family		1,777	2,237	2,696	3,156
Multi-Family		301	347	393	512
Commercial		852	982	1,111	1,447
Industrial		31	41	50	64
Landscape		171	198	224	291
Institutional/Governmental		114	120	126	162
Losses		258	316	373	373
<b>TOTAL</b>		3,505	4,241	4,973	6,006
NOTES: Volumes are in MG. Projections are based on 2010 Water Master Plan.					

Table 4-3 Retail: Total Water Demands					
	2015	2020	2025	2030	2035
Potable and Raw Water <i>From Tables 4-1 and 4-2</i>	2,611	3,505	4,241	4,973	6,006
Recycled Water Demand* <i>From Table 6-4</i>	0	0	0	0	0
<b>TOTAL WATER DEMAND</b>	2,611	3,505	4,241	4,973	6,006
<i>*Recycled water demand fields will be blank until Table 6-4 is complete.</i>					
NOTES: Volumes are in MG.					

Table 4-4 Retail: 12 Month Water Loss Audit Reporting	
Reporting Period Start Date (mm/yyyy)	Volume of Water Loss*
01/2015	113.887
* Taken from the field "Water Losses" (a combination of apparent losses and real losses) from the AWWA worksheet.	
NOTES: Volumes are in MG.	

Table 4-5 Retail Only: Inclusion in Water Use Projections	
Are Future Water Savings Included in Projections? (Refer to Appendix K of UWMP Guidebook)	Yes
If "Yes" to above, state the section or page number, in the cell to the right, where citations of the codes, ordinances, etc... utilized in demand projections are found.	Section 4.4
Are Lower Income Residential Demands Included In Projections?	Yes

<b>Table 5-1 Baselines and Targets Summary</b> <i>Retail Agency or Regional Alliance Only</i>					
Baseline Period	Start Year	End Year	Average Baseline GPCD*	2015 Interim Target *	Confirmed 2020 Target*
10-15 year	2001	2010	224	202	180
5 Year	2005	2009	219		
*All values are in Gallons per Capita per Day (GPCD)					

Retail Agency or Regional Alliance Only

Actual 2015 GPCD*	2015 Interim Target GPCD*	Optional Adjustments to 2015 GPCD					2015 GPCD* <i>(Adjusted if applicable)</i>	Did Supplier Achieve Targeted Reduction for 2015? Y/N
		Enter "0" if no adjustment is made <i>Methodology 8</i>						
		Extraordinary Events*	Economic Adjustment*	Weather Normalization*	TOTAL Adjustments*	Adjusted 2015 GPCD*		
123	202	0	0	0	0	123	123	Yes
*All values are in Gallons per Capita per Day (GPCD)								
NOTES: Volumes are in MG								

### Table 6-1 Retail: Groundwater Volume Pumped

Groundwater Type	Location or Basin Name	2011	2012	2013	2014	2015
Alluvial Basin	Turlock Subbasin within the San Joaquin Valley Groundwater Basin	2,675	2,624.80	2,605	2,441	2,104.50
<b>TOTAL</b>		2,675	2,625	2,605	2,441	2,105
NOTES: Volumes are in MG.						

### Table 6-2 Retail: Wastewater Collected Within Service Area in 2015

	There is no wastewater collection system. The supplier will not complete the table below.					
	Percentage of 2015 service area covered by wastewater collection system <i>(optional)</i>					
	Percentage of 2015 service area population covered by wastewater collection system <i>(optional)</i>					
Wastewater Collection			Recipient of Collected Wastewater			
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated?	Volume of Wastewater Collected from UWMP Service Area 2015	Name of Wastewater Treatment Agency Receiving Collected Wastewater	Treatment Plant Name	Is WWTP Located Within UWMP Area?	Is WWTP Operation Contracted to a Third Party? <i>(optional)</i>
<i>Add additional rows as needed</i>						
City of Ceres	Metered	345	City of Turlock	Turlock Regional Water Quality Control Facility	No	
City of Ceres	Estimated	635	City of Modesto	Wastewater Primary Treatment Facility	No	
City of Ceres	Metered	524	City of Ceres	Wastewater Treatment Plant (WWTP)	Yes	
<b>Total Wastewater Collected from</b>		<b>1,504</b>				
NOTES: Volumes are in MG.						



**Table 6-3 Retail: Wastewater Treatment and Discharge Within Service Area in 2015**

	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)	Method of Disposal	Does This Plant Treat Wastewater Generated	Treatment Level	2015 volumes			
							Wastewater Treated	Discharged Treated Wastewater	Recycled Within Service Area	Recycled Outside of Service Area
Ceres Wastewater Treatment Plant (WWTP)	Percolation ponds	On Site		Percolation ponds	No	Secondary, Undisinfected	524	524	0	0
Total							524	524	0	0
NOTES: Volumes are in MG.										

**Table 6-4 Retail: Current and Projected Recycled Water Direct Beneficial Uses Within Service Area**

<input checked="checked" type="checkbox"/>	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.						
Beneficial Use Type	General Description of 2015 Uses	Level of Treatment	2015	2020	2025	2030	2035
Agricultural irrigation							
Landscape irrigation (excludes golf courses)							
Golf course irrigation							
Commercial use							
Industrial use							
Geothermal and other energy production							
Seawater intrusion barrier							
Recreational impoundment							
Wetlands or wildlife habitat							
Groundwater recharge (IPR)*							
Surface water augmentation (IPR)*							
Direct potable reuse							
Other (Provide General Description)							
		Total:	0	0	0	0	0
NOTES:							

**Table 6-5 Retail: 2010 UWMP Recycled Water Use Projection Compared to 2015 Actual**

<input checked="" type="checkbox"/>		Recycled water was not used in 2010 nor projected for use in 2015. The supplier will not complete the table below.	
Use Type		2010 Projection for 2015	2015 Actual Use
Agricultural irrigation			
Landscape irrigation (excludes golf courses)			
Golf course irrigation			
Commercial use			
Industrial use			
Geothermal and other energy production			
Seawater intrusion barrier			
Recreational impoundment			
Wetlands or wildlife habitat			
Groundwater recharge (IPR)			
Surface water augmentation (IPR)			
Direct potable reuse			
Other	<i>Type of Use</i>		
<b>Total</b>		0	0
NOTES:			

Table 6-6 Retail: Methods to Expand Future Recycled Water Use			
<input checked="" type="checkbox"/>	Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
	Provide page location of narrative in UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use
Total			0
NOTES:			

Table 6-7 Retail: Expected Future Water Supply Projects or Programs						
<input type="checkbox"/>	No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Supplier will not complete the table below.					
<input checked="" type="checkbox"/>	Some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.					
Page 6-1	Provide page location of narrative in the UWMP					
Name of Future Projects or Programs	Joint Project with other agencies?		Description (if needed)	Planned Implementation Year	Planned for Use in Year Type	Expected Increase in Water Supply to Agency
Regional Surface Water Supply Project	Yes	Stanislaus Regional Water Authority		2020	Average Year	5 MGD
NOTES: Volumes are in MG.						

Table 6-8 Retail: Water Supplies — Actual				
Water Supply	Water Supply	2015		
		Actual Volume	Water Quality	Total Right or Safe Yield
<i>Add additional rows as needed</i>				
Groundwater	City's domestic supply wells	2,105	Drinking Water	
Groundwater	Non-Potable park irrigation water	57	Raw Water	
Total		2,161		0
NOTES: Volumes are in MG.				

### Table 6-9 Retail: Water Supplies — Projected

Water Supply	Additional Detail on Water Supply	Projected Water Supply Report To the Extent Practicable							
		2020		2025		2030		2035	
		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									
Groundwater		1,680		2,416		3,148		4,181	
Surface water		1,825		1,825		1,825		1,825	
Total		3,505	0	4,241	0	4,973	0	6,006	0

NOTES: Volumes are in MG.

In all year types, if demand cannot be met from Surface Water, it is assumed that groundwater will supply all remaining demand.

The City assumes 1,825 MGY of surface water from the Stanislaus Regional Water Supply Project will be available by 2020, however the project is still in the planning phase and this water may not be available until a later date.

**Table 7-1 Retail: Basis of Water Year Data**

Year Type	Base Year <i>If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 1999-2000, use 2000</i>	Available Supplies if Year Type Repeats	
		<input type="checkbox"/>	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location _____
		<input checked="" type="checkbox"/>	Quantification of available supplies is provided in this table as either volume only, percent only, or both.
		Volume Available	% of Average Supply
Average Year	1992	~	100%
Single-Dry Year	1999	~	100%
Multiple-Dry Years 1st Year	1987	~	100%
Multiple-Dry Years 2nd Year	1988	~	100%
Multiple-Dry Years 3rd Year	1989	~	100%

NOTES: Volumes are in MG.  
In all year types, if demand cannot be met from Surface Water project, it is assumed that groundwater will supply all remaning demand.



**Table 7-2 Retail: Normal Year Supply and Demand Comparison**

	2020	2025	2030	2035
Supply totals ( <i>autofill from Table 6-9</i> )	3,505	4,241	4,973	6,006
Demand totals ( <i>autofill from Table 4-3</i> )	3,505	4,241	4,973	6,006
Difference	0	0	(0)	(0)

NOTES: Volumes are in MG.

In all year types, if demand cannot be met from Surface Water alone, it is assumed that groundwater will supply all remaining demand.

The City assumes 1,825 MG of surface water from the Stanislaus Regional Water Supply Project will be available by 2020, however the project is still in the planning phase and this water may not be available until a later date.

**Table 7-3 Retail: Single Dry Year Supply and Demand Comparison**

	2020	2025	2030	2035
Supply totals	3,505	4241	4,973	6,006
Demand totals	3,505	4241	4,973	6,006
Difference	0	0	0	0

NOTES: NOTES: Volumes are in MG.

In all year types, if demand cannot be met from Surface Water alone, it is assumed that groundwater will supply all remaining demand.

The City assumes 1,825 MG of surface water from the Stanislaus Regional Water Supply Project will be available by 2020, however the project is still in the planning phase and this water may not be available until a later date.

**Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison**

		2020	2025	2030	2035
First year	Supply totals	3,505	4241	4,973	6,006
	Demand totals	3,505	4241	4,973	6,006
	Difference	0	0	0	0
Second year	Supply totals	3,505	4241	4,973	6,006
	Demand totals	3,505	4241	4,973	6,006
	Difference	0	0	0	0
Third year	Supply totals	3,505	4241	4,973	6,006
	Demand totals	3,505	4241	4,973	6,006
	Difference	0	0	0	0

NOTES: NOTES: Volumes are in MG.

In all year types, if demand cannot be met from Surface Water alone, it is assumed that groundwater will supply all remaining demand.

The City assumes 1,825 MG of surface water from the Stanislaus Regional Water Supply Project will be available by 2020, however the project is still in the planning phase and this water may not be available until a later date.

Table 8-1 Retail Stages of Water Shortage Contingency Plan		
Stage	Complete Both	
	Percent Supply Reduction <sup>1</sup> <i>Numerical value as a percent</i>	Water Supply Condition <i>(Narrative description)</i>
<i>Add additional rows as needed</i>		
I	10%	Drought Preparedness & Response Plan Section 12.1
II	20 - 30%	Drought Preparedness & Response Plan Section 12.2
III	50%	Drought Preparedness & Response Plan Section 12.3
<sup>1</sup> One stage in the Water Shortage Contingency Plan must address a water shortage of 50%.		
NOTES:		

**Table 8-2 Retail Only: Restrictions and Prohibitions on End Uses**

Stage	Restrictions and Prohibitions on End Users	Additional Explanation or Reference (optional)	Penalty, Charge, or Other Enforcement?
ALL	Landscape - Limit landscape irrigation to specific times	Ceres Municipal Code: A-1 (a-1)	Yes
ALL	Landscape - Limit landscape irrigation to specific days	Ceres Municipal Code: A-1 (a-2,3)	Yes
ALL	Landscape - Restrict or prohibit runoff from landscape irrigation	Ceres Municipal Code: A-1 (b)	Yes
ALL	Landscape - Prohibit certain types of landscape irrigation	Ceres Municipal Code: A-1 (c)	Yes
ALL	Other - Require automatic shut of hoses	Ceres Municipal Code: A-1 (d)	Yes
ALL	Other - Prohibit use of potable water for washing hard surfaces	Ceres Municipal Code: A-1 (e)	Yes
ALL	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Ceres Municipal Code: A-1 (f)	Yes
I	Landscape - Limit landscape irrigation to specific times	Ceres Municipal Code: A-1 (a-1)	Yes
I	Landscape - Limit landscape irrigation to specific days	Ceres Municipal Code: A-1 (a-2,3)	Yes
I	Landscape - Restrict or prohibit runoff from landscape irrigation	Ceres Municipal Code: A-1 (b)	Yes
I	Other - Require automatic shut of hoses	Ceres Municipal Code: A-1 (d)	Yes
I	Other - Prohibit use of potable water for washing hard surfaces	Ceres Municipal Code: A-1 (e)	Yes
I	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Ceres Municipal Code: A-1 (f)	Yes
I	Water Features - Restrict water use for decorative water features, such as fountains	Drought Preparedness & Response Plan Section 11.1	Yes
I	CII - Restaurants may only serve water upon request	Drought Preparedness & Response Plan Section 11.1	Yes
II	Landscape - Limit landscape irrigation to specific times	Ceres Municipal Code: A-1 (a-1)	Yes
II	Landscape - Limit landscape irrigation to specific days	Ceres Municipal Code: A-1 (a-2,3)	Yes
II	Landscape - Restrict or prohibit runoff from landscape irrigation	Ceres Municipal Code: A-1 (b)	Yes
II	Other - Require automatic shut of hoses	Ceres Municipal Code: A-1 (d)	Yes
II	Water Features - Restrict water use for decorative water features, such as fountains	Drought Preparedness & Response Plan Section 11.2	Yes
III	Landscape - Prohibit all landscape irrigation	Drought Preparedness & Response Plan Section 11.3	Yes
III	Water Features - Restrict water use for decorative water features, such as fountains	Drought Preparedness & Response Plan Section 11.3	Yes
III	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	Drought Preparedness & Response Plan Section 11.3	Yes
III	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Drought Preparedness & Response Plan Section 11.3	Yes
III	Other	Drought Preparedness & Response Plan Section 11.3	Yes
NOTES: Per Ceres Municipal Code and Corresponding Ordinances.			

**Table 8-3 Retail Only:**

**Stages of Water Shortage Contingency Plan - Consumption Reduction Methods**

Stage	Consumption Reduction Methods by Water Supplier	Additional Explanation or Reference <i>(optional)</i>
All Stages	Expand Public Information Campaign	Drought Preparedness & Response Plan Section 12.1.2, 12.2.2, 12.3.2
All Stages	Offer Water Use Surveys	Drought Preparedness & Response Plan Section 13.2
All Stages	Provide Rebates on Plumbing Fixtures and Devices	Drought Preparedness & Response Plan Section 14
All Stages	Provide Rebates for Landscape Irrigation Efficiency	Drought Preparedness & Response Plan Section 14
All Stages	Provide Rebates for Turf Replacement	Drought Preparedness & Response Plan Section 14
All Stages	Increase Water Waste Patrols	
II	Decrease Line Flushing	
II	Implement or Modify Drought Rate Structure or Surcharge	Resolution No. 2015-64

NOTES:

**Table 8-4 Retail: Minimum Supply Next Three Years**

	2016	2017	2018
Available Water Supply	2,125	2,145	2,166

NOTES: Volumes are in MG.

Table 10-1 Retail: Notification to Cities and Counties		
City Name	60 Day Notice	Notice of Public Hearing
City of Ceres	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Stanislaus County Public Works Department	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



## **APPENDIX C**

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### **DWR UWMP Checklist**

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## Appendix C: Urban Water Management Plan Checklist Checklist Arranged by Subject

<b>CWC Section</b>	<b>UWMP Requirement</b>	<b>Subject</b>	<b>Guidebook Location</b>	<b>UWMP Location (Optional Column for Agency Use)</b>
<b>10620(b)</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.	Plan Preparation	Section 2.1	<b>Section 2.1 (page 2-1)</b>
<b>10620(d)(2)</b>	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.	Plan Preparation	Section 2.5.2	<b>Section 2.5 (page 2-1)</b>
<b>10642</b>	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.	Plan Preparation	Section 2.5.2	<b>Section 2.5.2 (page 2-3)</b>
<b>10631(a)</b>	Describe the water supplier service area.	System Description	Section 3.1	<b>Section 3.2 (page 3-1)</b>
<b>10631(a)</b>	Describe the climate of the service area of the supplier.	System Description	Section 3.3	<b>Section 3.3 (page 3-1)</b>
<b>10631(a)</b>	Provide population projections for 2020, 2025, 2030, and 2035.	System Description	Section 3.4	<b>Section 3.4 (page 3-2)</b>
<b>10631(a)</b>	Describe other demographic factors affecting the supplier's water management planning.	System Description	Section 3.4	<b>Section 3.4.1 (page 3-2)</b>
<b>10631(a)</b>	Indicate the current population of the service area.	System Description and Baselines and Targets	Sections 3.4 and 5.4	<b>Section 3.4 (page 3-2)</b>
<b>10631(e)(1)</b>	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Section 4.2	<b>Section 4.2 (page 4-1)</b>
<b>10631(e)(3)(A)</b>	Report the distribution system water loss for the most recent 12-month period available.	System Water Use	Section 4.3	<b>Section 4.3 (page 4-4)</b>
<b>10631.1(a)</b>	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	Section 4.5	<b>Section 4.5 (page 4-5)</b>
<b>10608.20(b)</b>	Retail suppliers shall adopt a 2020 water use target using one of four methods.	Baselines and Targets	Section 5.7 and App E	<b>Section 5.6 (page 5-5) Appendix E</b>

<b>10608.20(e)</b>	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.	Baselines and Targets	Chapter 5 and App E	<b>Section 5.5, 5.6, 5.7 (page 5-3); Appendix E</b>
<b>10608.22</b>	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.	Baselines and Targets	Section 5.7.2	<b>Section 5.6.1 (page 5-4); Appendix E</b>
<b>10608.24(a)</b>	Retail suppliers shall meet their interim target by December 31, 2015.	Baselines and Targets	Section 5.8 and App E	<b>Section 5.7 (page 5-5); Appendix E</b>
<b>10608.24(d)(2)</b>	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.	Baselines and Targets	Section 5.8.2	<b>N/A</b>
<b>10608.36</b>	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.	Baselines and Targets	Section 5.1	<b>N/A</b>
<b>10608.40</b>	Retail suppliers shall report on their progress in meeting their water use targets. The data shall be reported using a standardized form.	Baselines and Targets	Section 5.8 and App E	<b>Section 5.7 (page 5-5); Appendix E</b>
<b>10631(b)</b>	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, 2030, and 2035.	System Supplies	Chapter 6	<b>Section 6.9 (page 6-11)</b>
<b>10631(b)</b>	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Section 6.2	<b>Section 6.2 (page 6-1)</b>
<b>10631(b)(1)</b>	Indicate whether a 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.	System Supplies	Section 6.2.2	<b>Section 6.2 (page 6-1)</b>
<b>10631(b)(2)</b>	Describe the groundwater basin.	System Supplies	Section 6.2.1	<b>Section 6.2.1 (page 6-1)</b>
<b>10631(b)(2)</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.	System Supplies	Section 6.2.2	<b>Section 6.2.2 (page 6-3)</b>
<b>10631(b)(2)</b>	For unadjudicated basins, indicate whether or not the department has identified the basin as overdrafted, or projected to become	System Supplies	Section 6.2.3	<b>Section 6.2.2, 6.2.3 (page 6-3)</b>

	overdrafted. Describe efforts by the supplier to eliminate the long-term overdraft condition.			
<b>10631(b)(3)</b>	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	System Supplies	Section 6.2.4	<b>Section 6.2.6 (page 6-5)</b>
<b>10631(b)(4)</b>	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System Supplies	Sections 6.2 and 6.9	<b>Section 6.9 (page 6-11)</b>
<b>10631(d)</b>	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	System Supplies	Section 6.7	<b>Section 6.7 (page 6-10)</b>
<b>10631(g)</b>	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 multiple-dry years.	System Supplies	Section 6.8	<b>Section 6.8 (page 6-10)</b>
<b>10631(h)</b>	Describe desalinated water project opportunities for long-term supply.	System Supplies	Section 6.6	<b>Section 6.6 (page 6-10)</b> N/A
<b>10631(j)</b>	Retail suppliers will include documentation that they have provided their wholesale supplier(s) – if any - with water use projections from that source.	System Supplies	Section 2.5.1	<b>Section 2.5.1 (page 2-3)</b> N/A
<b>10631(j)</b>	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.	System Supplies	Section 2.5.1	N/A
<b>10633</b>	For wastewater and recycled water, coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.1	<b>Section 6.5.1 (page 6-7)</b>
<b>10633(a)</b>	Describe the wastewater collection and treatment systems in the supplier's service area. Include quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.	System Supplies (Recycled Water)	Section 6.5.2	<b>Section 6.5.2 (page 6-7)</b>
<b>10633(b)</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.	System Supplies (Recycled Water)	Section 6.5.2.2	<b>Section 6.5.2 (page 6-7)</b>
<b>10633(c)</b>	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.3 and 6.5.4	<b>Section 6.5.3</b> N/A
<b>10633(d)</b>	Describe and quantify the potential uses of recycled water and provide a determination	System Supplies (Recycled	Section 6.5.4	<b>Section 6.5.3</b>



	of the technical and economic feasibility of those uses.	Water)		(page 6-9)
<b>10633(e)</b>	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.	System Supplies (Recycled Water)	Section 6.5.4	<b>Section 6.5.3</b> (page 6-9) N/A
<b>10633(f)</b>	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.	System Supplies (Recycled Water)	Section 6.5.5	<b>Section 6.5.3</b> (page 6-9) N/A
<b>10633(g)</b>	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.5	N/A
<b>10620(f)</b>	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water Supply Reliability Assessment	Section 7.4	<b>Section 7.4</b> (page 7-9)
<b>10631(c)(1)</b>	Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage.	Water Supply Reliability Assessment	Section 7.1	<b>Section 7.1</b> (page 7-1)
<b>10631(c)(1)</b>	Provide data for an average water year, a single dry water year, and multiple dry water years	Water Supply Reliability Assessment	Section 7.2	<b>Section 7.2</b> (page 7-5)
<b>10631(c)(2)</b>	For any water source that may not be available at a consistent level of use, describe plans to supplement or replace that source.	Water Supply Reliability Assessment	Section 7.1	<b>Section 7.1</b> (page 7-1)
<b>10634</b>	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	Water Supply Reliability Assessment	Section 7.1	<b>Section 7.1.3</b> (page 7-3)
<b>10635(a)</b>	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.	Water Supply Reliability Assessment	Section 7.3	<b>Section 7.3</b> (page 7-6)
<b>10632(a) and 10632(a)(1)</b>	Provide an urban water shortage contingency analysis that specifies stages of action and an outline of specific water supply conditions at each stage.	Water Shortage Contingency Planning	Section 8.1	<b>Section 8.1</b> (page 8-1) <b>Appendix G</b>
<b>10632(a)(2)</b>	Provide an estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency.	Water Shortage Contingency Planning	Section 8.9	<b>Section 8.9</b> (page 8-9)
<b>10632(a)(3)</b>	Identify actions to be undertaken by the urban water supplier in case of a catastrophic interruption of water supplies.	Water Shortage Contingency Planning	Section 8.8	<b>Section 8.8</b> (page 8-8)
<b>10632(a)(4)</b>	Identify mandatory prohibitions against specific water use practices during water	Water Shortage Contingency	Section 8.2	<b>Section 8.2</b> (page 8-1)

	shortages.	Planning		
<b>10632(a)(5)</b>	Specify consumption reduction methods in the most restrictive stages.	Water Shortage Contingency Planning	Section 8.4	<b>Section 8.4 (page 8-7)</b>
<b>10632(a)(6)</b>	Indicated penalties or charges for excessive use, where applicable.	Water Shortage Contingency Planning	Section 8.3	<b>Section 8.3 (page 8-7)</b>
<b>10632(a)(7)</b>	Provide an analysis of the impacts of each of the actions and conditions in the water shortage contingency analysis on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts.	Water Shortage Contingency Planning	Section 8.6	<b>Section 8.6 (page 8-8)</b>
<b>10632(a)(8)</b>	Provide a draft water shortage contingency resolution or ordinance.	Water Shortage Contingency Planning	Section 8.7	<b>Section 8.7 (page 8-8) Appendix F</b>
<b>10632(a)(9)</b>	Indicate a mechanism for determining actual reductions in water use pursuant to the water shortage contingency analysis.	Water Shortage Contingency Planning	Section 8.5	<b>Section 8.5 (page 8-8)</b>
<b>10631(f)(1)</b>	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.	Demand Management Measures	Sections 9.2 and 9.3	<b>Section 9.2 (page 9-1)</b>
<b>10631(f)(2)</b>	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	Demand Management Measures	Sections 9.1 and 9.3	<b>N/A</b>
<b>10631(i)</b>	CUWCC members may submit their 2013-2014 CUWCC BMP annual reports in lieu of, or in addition to, describing the DMM implementation in their UWMPs. This option is only allowable if the supplier has been found to be in full compliance with the CUWCC MOU.	Demand Management Measures	Section 9.5	<b>N/A</b>
<b>10608.26(a)</b>	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets.	Plan Adoption, Submittal, and Implementation	Section 10.3	<b>Section 10.3 (page 10-2) Appendix D</b>
<b>10621(b)</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.	Plan Adoption, Submittal, and Implementation	Section 10.2.1	<b>Section 10.2 (page 10-2) Appendix D</b>
<b>10621(d)</b>	Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.	Plan Adoption, Submittal, and Implementation	Sections 10.3.1 and 10.4	<b>Section 10.3.1 and 10.4 (page 10-2)</b>

<b>10635(b)</b>	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.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	<b>Section 10.4</b> <b>(page 10-2)</b>
<b>10642</b>	Provide supporting documentation that the urban water supplier made the plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan.	Plan Adoption, Submittal, and Implementation	Sections 10.2.2, 10.3, and 10.5	<b>Section 10.3</b> <b>(page 10-2)</b> <b>Appendix D</b>
<b>10642</b>	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	Sections 10.2.1	<b>Section 10.2.1</b> <b>(page 10-2)</b>
<b>10642</b>	Provide supporting documentation that the plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Section 10.3.1	<b>Section 10.3.1</b> <b>(page 10-2)</b> <b>Appendix J</b>
<b>10644(a)</b>	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	Section 10.4.3	<b>Section 10.4</b> <b>(page 10-2)</b>
<b>10644(a)(1)</b>	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.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	<b>Section 10.4</b> <b>(page 10-2)</b>
<b>10644(a)(2)</b>	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	Sections 10.4.1 and 10.4.2	<b>Section 10.4, 10.7</b> <b>(page 10-2)</b>
<b>10645</b>	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.	Plan Adoption, Submittal, and Implementation	Section 10.5	<b>Section 10.5</b> <b>(page 10-2)</b>



- Notice of Preparation of the City of Ceres's Urban Water Management Plan 2015 Update was sent to the following agencies:
  - City of Modesto
  - City of Turlock
  - Denair Community Services District
  - East Stanislaus Regional Water Management Partnership
  - Eastside Water District
  - Keyes Community Services District
  - Merced County Public Works Department
  - Merced Irrigation District
  - Modesto Irrigation District
  - Stanislaus Regional Water Authority
  - Turlock Groundwater Basin Association
  - Turlock Irrigation District
  - City of Hughson
- Notice of Public Hearing by the City Council of the City of Ceres was ran in the following two local newspapers:
  - Legal Ad ran in the Modesto Bee June 13, 2016 & June 20, 2016
  - Legal Ad ran in the Ceres Courier June 15, 2016 & June 22, 2016

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**PUBLIC WORKS DEPARTMENT**  
**2220 HACKETT ROAD**  
**CERES, CA 95307-3600**  
**(209) 538-5688**  
**FAX (209) 538-5605**

**CITY COUNCIL**

Chris Viera, Mayor  
Ken Lane, Council Member  
Bret Durossette, Council Member  
Mike Kline, Council Member  
Linda Ryno, Council Member

**DATE:** February 11, 2016  
**TO:** All Interested Parties  
**FROM:** Jeremy Damas, Public Works Director  
**SUBJECT:** Notice of Preparation of the City of Ceres's 2015 Urban Water Management Plan Update

The City of Ceres (City) is currently in the process of updating its Urban Water Management Plan (UWMP). The UWMP is a planning document to support long-term resource planning, and ensure adequate water supplies are available to meet existing and future water demands. As part of this process, the City is required to notify Stanislaus County and agencies within the County of this planned update at least 60 days prior to the proposed public hearing. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision (California Water Code § 10621 (b)).

The Urban Water Management Planning Act, Water Code §10610 et seq., requires every urban water supplier 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 to prepare and adopt an UWMP and update that plan every five years. The City of Ceres must adopt and submit the updated plan to the California Department of Water Resources by July 1, 2016. If you have any questions or comments regarding the update please contact the undersigned.

Sincerely,

Jeremy Damas  
Public Works Director  
City of Ceres  
2220 Hackett Road  
Ceres, CA 95307  
(209) 538-5717  
[Jeremy.damas@ci.ceres.ca.us](mailto:Jeremy.damas@ci.ceres.ca.us)



**PUBLIC WORKS DEPARTMENT**  
2220 HACKETT ROAD  
CERES, CA 95307-3600  
(209) 538-5732  
FAX (209) 538-5605

**CITY COUNCIL**

Chris Vierra, Mayor  
Ken Lane, Council Member  
Bret Durossette, Council Member  
Mike Kline, Council Member  
Linda Ryno, Council Member

DATE: June 10, 2016  
TO: All Interested Parties  
FROM: Jeremy Damas, Public Works Director  
SUBJECT: Notice of Public Hearing for City of Ceres 2015 Urban Water Management Plan Update

In accordance with the Urban Water Management Planning Act (California Water Code Section 10610 et seq.), the City of Ceres is required to update its Urban Water Management Plan (UWMP) to meet the California Department of Water Resources requirements for a 2015 UWMP. The City's 2010 UWMP was adopted in June 2011.

The City has completed the draft 2015 UWMP and has scheduled a public hearing for review of the updated 2015 UWMP on Monday, June 27, 2016 at 6:00 pm in the City Council Chambers at the City of Ceres Community Center located at 2701 Fourth Street, Ceres CA. It is anticipated to formally adopt the 2015 UWMP following the public hearing.

At this time we invite your agency to review the draft 2015 UWMP located at the City of Ceres Public Works Department (2220 Hackett Road), the Ceres Public Library (2250 Magnolia Street), and the City's website (<http://www.ci.ceres.ca.us/213.html>). Please forward your comments no later than end of day Friday, June 24, 2016.

Sincerely,

Jeremy Damas  
Public Works Director  
City of Ceres  
2220 Hackett Road  
Ceres, CA 95307  
(209) 538-5717  
[Jeremy.Damas@ci.ceres.ca.us](mailto:Jeremy.Damas@ci.ceres.ca.us)

## **PUBLIC NOTICE**

### **NOTICE OF PUBLIC HEARING BY THE CITY COUNCIL OF THE CITY OF CERES**

Public hearing will be held on **MONDAY, JUNE 27, 2016, AT 6:00 P.M.**, in the **City Council Chambers** at the Community Center located at **2701 Fourth Street, Ceres CA, to consider the adoption of the 2015 Urban Water Management Plan and method for determining urban water use targets as required by the Water Conservation Act of 2009.** In accordance with the Urban Water Management Planning Act (California Water Code Sections 10610 – 10657), the City of Ceres is required to update its Urban Water Management Plan (UWMP) and submit it to the State of California's Department of Water Resources by July 1, 2016. In addition to the 2015 UWMP, the City must also allow community input regarding the method for determining urban water use targets as required by the Water Conservation Act of 2009, SB X7-7 (better known as 20% by 2020), which requires cities to achieve a 20% per capita per day reduction by 2020.

The City of Ceres released the Draft UWMP on June 13, 2016. The Draft UWMP is available for public review and comment through the end of the public hearing described above. The Draft UWMP can be viewed at the following locations: City of Ceres City Clerk's Office (2720 Second Street); City of Ceres Public Works Department (2220 Hackett Road); Ceres Public Library (2250 Magnolia Street); City of Ceres website (<http://www.ci.ceres.ca.us/213.html>). For questions or more information on the Draft UWMP please contact Jeremy Damas, Public Works Director, City of Ceres Public Works Department at (209) 538-5732.

Both verbal and written public comments on the proposed updates to the 2015 Draft Urban Water Management Plan are invited at the public hearing. Written comments may also be provided prior to the public hearing via: (a) hand-delivered or mailed letter to the City of Ceres, Public Works Department, Attn: Jeremy Damas, 2220 Hackett Road, Ceres, CA 95307, (b) faxed to (209) 538-5605, Attn: Jeremy Damas, or (c) email to [Jeremy.damas@ci.ceres.ca.us](mailto:Jeremy.damas@ci.ceres.ca.us). Written comments submitted in advance will receive the same attention as comments received at the public hearing; however, they must be received no later than Friday, June 24, 2016 at 5:00 p.m.

The **public hearing** will be held to consider and adopt proposed revisions and updates to the 2015 Draft Urban Water Management Plan.

**Challenges in court to any of the items identified in this public notice may be limited to only those issues raised at the public hearing described in this notice, or in written correspondence delivered to the Ceres City Council at, or prior to, the public hearing.**

**Pursuant to California Constitution Article III, Section 6, establishing English as the official language for the State of California, notice is hereby given that all proceedings before the Ceres City Council shall be in English and anyone wishing to address the Council is required to have a translator present who will take an oath to make an accurate translation from any language not English into the English language.**



# The Modesto Bee

modbee.com

## PUBLIC NOTICE

### NOTICE OF PUBLIC HEARING BY THE CITY COUNCIL OF THE CITY OF CERES

Public hearing will be held on **MONDAY, JUNE 27, 2016, AT 4:00 P.M.**, in the City Council Chambers of the Community Center located at 3701 Fourth Street, Ceres, CA, to consider the adoption of the 2015 Urban Water Management Plan and method for determining urban water use targets as required by the Water Conservation Act of 2009. In accordance with the Urban Water Management Planning Act (California Water Code Sections 10610 - 10657), the City of Ceres is required to update its Urban Water Management Plan (UWMP) and submit it to the State of California's Department of Water Resources by July 1, 2016. In addition to the 2015 UWMP, the City must also allow community input regarding the method for determining urban water use targets as required by the Water Conservation Act of 2009, SB X7-7 (better known as 30% by 2020), which requires cities to achieve a 30% per capita per day reduction by 2020.

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6/10/2016 9:32:52AM





# The Modesto Bee

modbee.com

## PUBLIC NOTICE

### NOTICE OF PUBLIC HEARING BY THE CITY COUNCIL OF THE CITY OF CERES

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WGD: 3688977 6/20

6/13/2016 1:42:05PM

**DECLARATION OF PUBLICATION  
(C.C.P. S2015.5)**

**COUNTY OF STANISLAUS  
STATE OF CALIFORNIA**

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am a printer and principal clerk of the publisher of **THE MODESTO BEE**, which has been adjudged a newspaper of general circulation by the Superior Court of the County of **STANISLAUS**, State of California, under the date of **February 25, 1951, Action No. 46453**. The notice of which the annexed is a printed copy has been published in each issue thereof on the following dates, to wit:

**JUNE 20, 2016**

I certify (or declare) under penalty of perjury that the foregoing is true and correct and that this declaration was executed at **MODESTO, California** on

**JUNE 20, 2016**

*Cynthia A. Mohammed*

(Signature)

**PUBLIC NOTICE**

**NOTICE OF PUBLIC HEARING BY  
THE CITY COUNCIL  
OF THE CITY OF CERES**

Public hearing will be held on **MONDAY, JUNE 27, 2016, AT 6:00 P.M.**, in the City Council Chambers at the Community Center located at 2701 Fourth Street, Ceres, CA, to consider the adoption of the 2015 Urban Water Management Plan and method for determining urban water use targets as required by the Water Conservation Act of 2009. In accordance with the Urban Water Management Planning Act (California Water Code Sections 10610 - 10657), the City of Ceres is required to update its Urban Water Management Plan (UWMP) and submit it to the State of California's Department of Water Resources by July 1, 2016. In addition to the 2015 UWMP, the City must also allow community input regarding the method for determining urban water use targets as required by the Water Conservation Act of 2009, SB 507 (better known as 20% by 2020), which requires cities to achieve a 20% per capita per day reduction by 2020.

The City of Ceres released the Draft UWMP on June 13, 2016. The Draft UWMP is available for public review and comment through the end of the public hearing described above. The Draft UWMP can be viewed at the following locations: City of Ceres City Clerk's Office (2720 Second Street); City of Ceres Public Works Department (2220 Hackett Road); Ceres Public Library (2250 Magnolia Street); City of Ceres website (<http://www.ci.ceres.ca.us/213.html>). For questions or more information on the Draft UWMP please contact Jeremy Damas, Public Works Director, City of Ceres Public Works Department at (209) 538-5732.

Both verbal and written public comments on the proposed updates to the 2015 Draft Urban Water Management Plan are invited at the public hearing. Written comments may also be provided prior to the public hearing via: (a) hand-delivered or mailed letter to the City of Ceres, Public Works Department, Attn: Jeremy Damas, 2220 Hackett Road, Ceres, CA 95307; (b) faxed to: (209) 538-5405, Attn: Jeremy Damas; or (c) email to [Jeremy.damas@ci.ceres.ca.us](mailto:Jeremy.damas@ci.ceres.ca.us). Written comments submitted in advance will receive the same attention as comments received at the public hearing; however, they must be received no later than Friday, June 24, 2016 at 5:00 p.m.

The public hearing will be held to consider and adopt proposed revisions and updates to the 2015 Draft Urban Water Management Plan.

Challenges in court to any of the items identified in this public notice may be limited to only those issues raised at the public hearing described in this notice, or in written correspondence delivered to the Ceres City Council at or prior to the public hearing.

Pursuant to California Constitution Article III, Section 6, establishing English as the official language for the State of California, notice is hereby given that all proceedings before the Ceres City Council shall be in English and anyone wishing to address the Council is required to have a translator present who will take an oath to make an accurate translation from any language not English into the English language.

MOD - 250894 4/20



# Affidavit of Publication

## PUBLIC NOTICE

STATE OF CALIFORNIA,  
County of Stanislaus

KATICA KROLL

Of the said County, being duly sworn, deposes and says:

I am a citizen of the United States and a resident of the county aforesaid; I am over the age of twenty-one years, and not a party to or interested in the above entitled matter. I am the principal clerk of THE CERES COURIER, 138 South Center Street, Turlock, California, a newspaper of general circulation, published in Ceres, California in the City of Ceres, County of Stanislaus, and which newspaper has been adjudged a newspaper of general circulation, by the Superior Court of the County of Stanislaus, State of California. That the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any JUNE 15, 22, 2016

I certify (or declare) under penalty of perjury that the foregoing is true and correct. This 22<sup>nd</sup> day of JUNE 2016



Principal Clerk of the Printer

## PUBLIC NOTICE

### PUBLIC NOTICE NOTICE OF PUBLIC HEARING BY THE CITY COUNCIL OF THE CITY OF CERES

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Both verbal and written public comments on the proposed updates to the 2015 Draft Urban Water Management Plan are invited at the public hearing. Written comments may also be provided prior to the public hearing via: (a) hand-delivered or mailed letter to the City of Ceres, Public Works Department, Attn: Jeremy Damas, 2220 Hackett Road, Ceres, CA 95307, (b) faxed to (209) 538-5605, Attn: Jeremy Damas, or (c) email to [Jeremy.damas@ci.ceres.ca.us](mailto:Jeremy.damas@ci.ceres.ca.us). Written comments submitted in advance will receive the same attention as comments received at the public hearing; however, they must be received no later than Friday, June 24, 2016 at 5:00 p.m. The public hearing will be held to consider and adopt proposed revisions and updates to the 2015 Draft Urban Water Management Plan. Challenges in court to any of the items identified in this public notice may be limited to only those issues raised at the public hearing described in this notice, or in written correspondence delivered to the Ceres City Council at, or prior to, the public hearing. Pursuant to California Constitution Article III, Section 6, establishing English as the official language for the State of California, notice is hereby given that all proceedings before the Ceres City Council shall be in English and anyone wishing to address the Council is required to have a translator present who will take an oath to make an accurate translation from any language not English into the English language. 6/15, 6/22/2016

## **APPENDIX E**

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SB X7-7 Tables

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**SB X7-7 Table 0: Units of Measure Used in UWMP\****(select one from the drop down list)*

Million Gallons

*\*The unit of measure must be consistent with Table 2-3*

NOTES:

SB X7-7 Table-1: Baseline Period Ranges			
Baseline	Parameter	Value	Units
10- to 15-year baseline period	2008 total water deliveries	3,424	Million Gallons
	2008 total volume of delivered recycled water	-	Million Gallons
	2008 recycled water as a percent of total deliveries	0.00%	Percent
	Number of years in baseline period <sup>1, 2</sup>	10	Years
	Year beginning baseline period range	2001	
	Year ending baseline period range <sup>3</sup>	2010	
5-year baseline period	Number of years in baseline period	5	Years
	Year beginning baseline period range	2005	
	Year ending baseline period range <sup>4</sup>	2009	
<sup>1</sup> If the 2008 recycled water percent is less than 10 percent, then the first baseline period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first baseline period is a continuous 10- to 15-year period.			
<sup>2</sup> The Water Code requires that the baseline period is between 10 and 15 years. However, DWR recognizes that some water suppliers may not have the minimum 10 years of baseline data.			
<sup>3</sup> The ending year must be between December 31, 2004 and December 31, 2010.			
<sup>4</sup> The ending year must be between December 31, 2007 and December 31, 2010.			
NOTES:			

**SB X7-7 Table 2: Method for Population Estimates**

Method Used to Determine Population (may check more than one)	
<input checked="" type="checkbox"/>	<b>1. Department of Finance (DOF)</b> DOF Table E-8 (1990 - 2000) and (2000-2010) and DOF Table E-5 (2011 - 2015) when available
<input type="checkbox"/>	<b>2. Persons-per-Connection Method</b>
<input type="checkbox"/>	<b>3. DWR Population Tool</b>
<input type="checkbox"/>	<b>4. Other</b> DWR recommends pre-review
NOTES: 2010 Census used to estimate City of Population for 2010.	

**SB X7-7 Table 3: Service Area Population**

Year		Population
10 to 15 Year Baseline Population		
Year 1	2001	35,196
Year 2	2002	36,088
Year 3	2003	37,012
Year 4	2004	38,189
Year 5	2005	39,606
Year 6	2006	41,799
Year 7	2007	43,029
Year 8	2008	44,103
Year 9	2009	44,738
Year 10	2010	45,417
<i>Year 11</i>		
<i>Year 12</i>		
<i>Year 13</i>		
<i>Year 14</i>		
<i>Year 15</i>		
5 Year Baseline Population		
Year 1	2005	39,606
Year 2	2006	41,799
Year 3	2007	43,029
Year 4	2008	44,103
Year 5	2009	44,738
2015 Compliance Year Population		
<b>2015</b>		46,989
NOTES: Source Department of Finance Demographic Research Unit report E8 & E5		

**SB X7-7 Table 4: Annual Gross Water Use \***

Baseline Year <i>Fm SB X7-7 Table 3</i>		Volume Into Distribution System <i>This column will remain blank until SB X7-7 Table 4-A is completed.</i>	Deductions					Annual Gross Water Use
			Exported Water	Change in Dist. System Storage (+/-)	Indirect Recycled Water <i>This column will remain blank until SB X7-7 Table 4-B is completed.</i>	Water Delivered for Agricultural Use	Process Water <i>This column will remain blank until SB X7-7 Table 4-D is completed.</i>	
10 to 15 Year Baseline - Gross Water Use								
Year 1	2001	2,989			-		-	2,989
Year 2	2002	3,423			-		-	3,423
Year 3	2003	3,200			-		-	3,200
Year 4	2004	3,401			-		-	3,401
Year 5	2005	3,317			-		-	3,317
Year 6	2006	3,401			-		-	3,401
Year 7	2007	3,889			-		-	3,889
Year 8	2008	3,424			-		-	3,424
Year 9	2009	2,996			-		-	2,996
Year 10	2010	2,899			-		-	2,899
Year 11	0	-			-		-	-
Year 12	0	-			-		-	-
Year 13	0	-			-		-	-
Year 14	0	-			-		-	-
Year 15	0	-			-		-	-
10 - 15 year baseline average gross water use								3,294
5 Year Baseline - Gross Water Use								
Year 1	2005	3,317			-		-	3,317
Year 2	2006	3,401			-		-	3,401
Year 3	2007	3,889			-		-	3,889
Year 4	2008	3,424			-		-	3,424
Year 5	2009	2,996			-		-	2,996
5 year baseline average gross water use								3,405
2015 Compliance Year - Gross Water Use								
2015		2,105	-		-		-	2,105
* NOTE that the units of measure must remain consistent throughout the UWMP, as reported in Table 2-3								
NOTES:								



### SB X7-7 Table 4-A: Volume Entering the Distribution System(s)

Complete one table for each source.

<b>Name of Source</b>	Groundwater			
<b>This water source is:</b>				
<input checked="" type="checkbox"/>	The supplier's own water source			
<input type="checkbox"/>	A purchased or imported source			
<b>Baseline Year</b> <i>Fm SB X7-7 Table 3</i>	<b>Volume Entering Distribution System</b>	<b>Meter Error Adjustment*</b> <i>Optional (+/-)</i>	<b>Corrected Volume Entering Distribution System</b>	
<b>10 to 15 Year Baseline - Water into Distribution System</b>				
Year 1	2001	2,989		2,989
Year 2	2002	3,423		3,423
Year 3	2003	3,200		3,200
Year 4	2004	3,401		3,401
Year 5	2005	3,317		3,317
Year 6	2006	3,401		3,401
Year 7	2007	3,889		3,889
Year 8	2008	3,424		3,424
Year 9	2009	2,996		2,996
Year 10	2010	2,899		2,899
Year 11	0			-
Year 12	0			-
Year 13	0			-
Year 14	0			-
Year 15	0			-
<b>5 Year Baseline - Water into Distribution System</b>				
Year 1	2005	3,317		3,317
Year 2	2006	3,401		3,401
Year 3	2007	3,889		3,889
Year 4	2008	3,424		3,424
Year 5	2009	2,996		2,996
<b>2015 Compliance Year - Water into Distribution System</b>				
<b>2015</b>		2,105		2,105
<i>* Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document</i>				
NOTES:				

**SB X7-7 Table 4-C: Process Water Deduction Eligibility***(For use only by agencies that are deducting process water) Choose Only One*

<input type="checkbox"/>	<b>Criteria 1-</b> Industrial water use is equal to or greater than 12% of gross water use. Complete SB X7-7 Table 4-C.1
<input type="checkbox"/>	<b>Criteria 2 -</b> Industrial water use is equal to or greater than 15 GPCD. Complete SB X7-7 Table 4-C.2
<input type="checkbox"/>	<b>Criteria 3 -</b> Non-industrial use is equal to or less than 120 GPCD. Complete SB X7-7 Table 4-C.3
<input checked="" type="checkbox"/>	<b>Criteria 4 -</b> Disadvantaged Community. Complete SB x7-7 Table 4-C.4

NOTES:

**SB X7-7 Table 4-C.4: Process Water Deduction Eligibility****Criteria 4**

Disadvantaged Community. A "Disadvantaged Community" (DAC) is a community with a median household income less than 80 percent of the statewide average.

**SELECT ONE**

"Disadvantaged Community" status was determined using one of the methods listed below:

☐**1. IRWM DAC Mapping tool**

[http://www.water.ca.gov/irwm/grants/resources\\_dac.cfm](http://www.water.ca.gov/irwm/grants/resources_dac.cfm)

If using the IRWM DAC Mapping Tool, include a screen shot from the tool showing that the service area is considered a DAC.

☒**2. 2010 Median Income**

California Median Household Income		Service Area Median Household Income	Percentage of Statewide Average	Eligible for Exclusion? Y/N
2015 Compliance Year - Process Water Deduction Eligibility				
2010	\$60,883	\$46,132	76%	YES

NOTES:

**SB X7-7 Table 5: Gallons Per Capita Per Day (GPCD)**

Baseline Year <i>Fm SB X7-7 Table 3</i>		Service Area Population <i>Fm SB X7-7 Table 3</i>	Annual Gross Water Use <i>Fm SB X7-7 Table 4</i>	Daily Per Capita Water Use (GPCD)
10 to 15 Year Baseline GPCD				
Year 1	2001	35,196	2,989	233
Year 2	2002	36,088	3,423	260
Year 3	2003	37,012	3,200	237
Year 4	2004	38,189	3,401	244
Year 5	2005	39,606	3,317	229
Year 6	2006	41,799	3,401	223
Year 7	2007	43,029	3,889	248
Year 8	2008	44,103	3,424	213
Year 9	2009	44,738	2,996	183
Year 10	2010	45,417	2,899	175
<i>Year 11</i>	0	-	-	
<i>Year 12</i>	0	-	-	
<i>Year 13</i>	0	-	-	
<i>Year 14</i>	0	-	-	
<i>Year 15</i>	0	-	-	
10-15 Year Average Baseline GPCD				<b>224</b>
5 Year Baseline GPCD				
Baseline Year <i>Fm SB X7-7 Table 3</i>		Service Area Population <i>Fm SB X7-7 Table 3</i>	Gross Water Use <i>Fm SB X7-7 Table 4</i>	Daily Per Capita Water Use
Year 1	2005	39,606	3,317	229
Year 2	2006	41,799	3,401	223
Year 3	2007	43,029	3,889	248
Year 4	2008	44,103	3,424	213
Year 5	2009	44,738	2,996	183
5 Year Average Baseline GPCD				<b>219</b>
2015 Compliance Year GPCD				
<b>2015</b>		46,989	2,105	<b>123</b>
NOTES:				

**SB X7-7 Table 6:** Gallons per Capita per Day  
*Summary From Table SB X7-7 Table 5*

10-15 Year Baseline GPCD	224
5 Year Baseline GPCD	219
2015 Compliance Year GPCD	123
NOTES:	

**SB X7-7 Table 7: 2020 Target Method***Select Only One*

Target Method		Supporting Documentation
<input checked="" type="checkbox"/>	Method 1	SB X7-7 Table 7A
<input type="checkbox"/>	Method 2	SB X7-7 Tables 7B, 7C, and 7D
<input type="checkbox"/>	Method 3	SB X7-7 Table 7-E
<input type="checkbox"/>	Method 4	Method 4 Calculator

NOTES:

**SB X7-7 Table 7-A: Target Method 1**

20% Reduction

10-15 Year Baseline GPCD	2020 Target GPCD
224	180
NOTES:	

**SB X7-7 Table 7-F: Confirm Minimum Reduction for 2020 Target**

5 Year Baseline GPCD <i>From SB X7-7 Table 5</i>	Maximum 2020 Target <sup>1</sup>	Calculated 2020 Target <sup>2</sup>	<b>Confirmed 2020 Target</b>
219	208	180	<b>180</b>

<sup>1</sup> Maximum 2020 Target is 95% of the 5 Year Baseline GPCD

<sup>2</sup> 2020 Target is calculated based on the selected Target Method, see SB X7-7 Table 7 and corresponding tables for agency's calculated target.

NOTES:



**SB X7-7 Table 8: 2015 Interim Target GPCD**

Confirmed 2020 Target <i>Fm SB X7-7 Table 7-F</i>	10-15 year Baseline GPCD <i>Fm SB X7-7 Table 5</i>	<b>2015 Interim Target GPCD</b>
180	224	<b>202</b>
NOTES:		

**SB X7-7 Table 9: 2015 Compliance**

Actual 2015 GPCD	2015 Interim Target GPCD	Optional Adjustments <i>(in GPCD)</i>					2015 GPCD <i>(Adjusted if applicable)</i>	Did Supplier Achieve Targeted Reduction for 2015?
		Enter "0" if Adjustment Not Used			TOTAL Adjustments	Adjusted 2015 GPCD		
		Extraordinary Events	Weather Normalization	Economic Adjustment				
123	202	<i>From Methodology 8 (Optional)</i>	<i>From Methodology 8 (Optional)</i>	<i>From Methodology 8 (Optional)</i>	-	123	123	YES

NOTES:

- Resolution No. 2011-42 High Efficiency Washing Machine/Ultra Low Flush Toilet Rebate Program
- Resolution No. 2014-27 City's Drought Preparedness Water Rationing Stages
- Resolution No. 2015-56 Energy Efficient Dishwasher Replacement Rebate Program
- Resolution No. 2015-57 Turf Removal Rebate Program
- Resolution No. 2015-58 Smart Irrigation Controller Rebate Program
- Resolution No. 2015-64 amending the penalty schedule of section 13.04.130 of the Municipal Code to add fines for exceeding Water Usage Targets.
- Resolution No. 2015-65 amending the penalty schedule of section 13.04.130 of the Municipal Code for citations issued for Water Wasting.
- Resolution No. 2015-120 Enter into a MOU with the TGBA
- Ceres Municipal Code, Title 13 water and sewer chapter 13.04.130

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**RESOLUTION NO. 2011- 42**

**RESOLUTION APPROVING A REBATE UP TO \$75.00 FOR THE  
INSTALLATION OF A HIGH EFFICIENCY WASHING MACHINE OR AN  
ULTRA LOW FLUSH TOILET FOR CITY OF CERES RESIDENTS**

**THE CITY COUNCIL  
City of Ceres, California**

**WHEREAS**, the City of Ceres desires to promote the efficient use of water by offering a rebate of \$75.00 for all residents who install High Efficiency Washing Machines or Ultra Low Flush Toilets to those residents that receive their water from and live within the City of Ceres; and,

**WHEREAS**, the rebate program will be based on a first come first served basis beginning July 1<sup>st</sup> of every year with up to a total of 150 rebates available per year for the installation of High Efficiency Washing Machines and Ultra Low Flush Toilets; and,

**WHEREAS**, the City Council approved the FY 2010/11 Water Operations Budget, including an appropriation in the amount of \$32,000 for promotional activities.

**NOW, THEREFORE, IT IS HEREBY RESOLVED** that the City Council of the City of Ceres does hereby approve a rebate of \$75.00 for the installation of High Efficiency Washing Machines and a rebate of \$75.00 for Ultra Low Flush Toilets to customers that live within the City of Ceres.

**PASSED AND ADOPTED** by the Ceres City Council at a regular meeting thereof held on the 11<sup>th</sup> day of April, 2011 by the following vote:

**AYES:** Councilmembers Durossette, Lane, Ochoa, Mayor Vierra

**NOES:** None

**ABSENT:** None



Chris Vierra, Mayor

**ATTEST:**

  
Cindy Heidorn, CMC, City Clerk

RESOLUTION NO. 2014 - 27

**RESOLUTION APPROVING THE ADOPTION OF THE CITY'S DROUGHT  
PREPAREDNESS WATER RATIONING STAGES.**

**THE CITY COUNCIL  
City of Ceres, California**

**WHEREAS,** the State of California is currently experiencing a major drought; and

**WHEREAS,** there is concern that if the drought continues it will be necessary to implement additional water conservation measures;

**NOW, THEREFORE, IT IS HEREBY RESOLVED** by the City Council of the City of Ceres that three stages be adopted for potential water rationing. Implementation of Stage 2 or Stage 3 will only occur upon direction of the City Council. The stages are defined as follows;

**Stage 1. Current Conditions:**

1. All residents can water 3 days per week, based on odd and even addresses, from midnight to noon and from 7 pm to midnight.
2. No outdoor watering on Mondays.
3. Use of a hose outside is permitted with the use of a shutoff nozzle.

**Stage 2:**

1. Outdoor watering is limited to 2 days per week, Tuesday/Saturday for even addresses and Wednesday/Sunday for odd addresses.
2. No outdoor water is permitted with the use of a hose or shutoff nozzle.

**Stage 3:**

1. No outdoor watering is permitted at any time.

**PASSED AND ADOPTED** by the Ceres City Council at a regular meeting thereof held on the 14<sup>th</sup> day of April, 2014, by the following vote:

**AYES:** Councilmembers Durossette, Kline, Lane, Ryno, Mayor Vierra

**NOES:** None

**ABSENT:** None



Chris Vierra, Mayor

**ATTEST:**

  
Ann Montgomery, Deputy City Clerk

**RESOLUTION NO. 2015 - 56**

**RESOLUTION APPROVING AN ENERGY EFFICIENT  
DISHWASHER REPLACEMENT REBATE PROGRAM**

**THE CITY COUNCIL  
City of Ceres, California**

**WHEREAS,** the City of Ceres desires to offer a rebate of \$75 to all City of Ceres residents who wish to replace their aging dishwashers with an energy efficient dishwasher; and,

**WHEREAS,** the rebate program will be based on a first come, first serve basis beginning July 1<sup>st</sup> of every year while funds are available; and,

**WHEREAS,** rebates will only be offered to customers that are served by the City of Ceres Water System and have an active account; and,

**WHEREAS,** City Council approves each fiscal year funding for promotional activities such as rebates within the Water Fund.

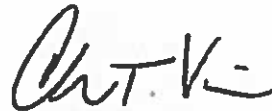
**NOW, THEREFORE, IT IS HEREBY RESOLVED** that the City Council of the City of Ceres does hereby approve a rebate of \$75 for the installation of an energy efficient dishwasher.

**PASSED AND ADOPTED** by the Ceres City Council at a regular meeting thereof held on the 26<sup>th</sup> day of May, 2015, by the following vote:

**AYES:** Council Members Durossette, Kline, Ryno, Mayor Vierra

**NOES:** None

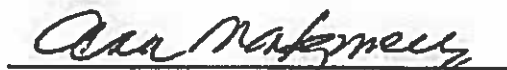
**ABSENT:** Council Member Lane



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Chris Vierra, Mayor

**ATTEST:**

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Ann Montgomery, Acting City Clerk

**RESOLUTION NO. 2015 - 57**

**RESOLUTION APPROVING A REBATE OF \$1 PER SQUARE FOOT  
OF LAWN AREA REMOVED UP TO 500 SQUARE FEET FOR RESIDENTIAL  
AND 1,000 SQUARE FEET FOR NON RESIDENTIAL**

**THE CITY COUNCIL  
City of Ceres, California**

**WHEREAS**, the City of Ceres desires to offer a rebate of \$1 for every square foot of lawn area removed up to \$500 for single family homes and \$1,000 for all other accounts to help reduce water usage for all residents and customers; and,

**WHEREAS**, the program outlines a minimum of 100 square feet of irrigated lawn area be removed to be eligible for the rebate; and,

**WHEREAS**, the rebate cannot exceed the total cost of the project; and,

**WHEREAS**, the rebate program will be based on a first come, first serve basis beginning July 1<sup>st</sup> of every year while funding is available; and,

**WHEREAS**, City Council approves each fiscal year funding for promotional activities such as rebates within the Water Fund.

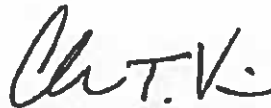
**NOW, THEREFORE, IT IS HEREBY RESOLVED** that the City Council of the City of Ceres does hereby approve a \$1 rebate for every square foot of lawn area removed up to \$500 for single family residents and \$1,000 for all other accounts, to customers that live within the City of Ceres and are served by the City of Ceres Water System.

**PASSED AND ADOPTED** by the Ceres City Council at a regular meeting thereof held on the 26<sup>th</sup> day of May, 2015, by the following vote:

**AYES:** Council Members Durossette, Kline, Ryno, Mayor Vierra

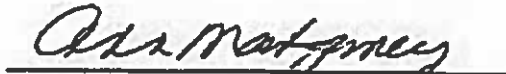
**NOES:** None

**ABSENT:** Council Member Lane



Chris Vierra, Mayor

**ATTEST:**

  
Ann Montgomery, Acting City Clerk



**RESOLUTION NO. 2015 - 58**

**RESOLUTION APPROVING A SMART IRRIGATION CONTROLLER  
REBATE PROGRAM**

**THE CITY COUNCIL  
City of Ceres, California**

**WHEREAS**, the City of Ceres desires to offer a rebate of \$50 to replace to all City of Ceres residents who are active Water System account holders and wish to replace their irrigation controllers with a Smart Controller with the WaterSense Label; and,

**WHEREAS**, the rebate program will be based on a first come, first serve basis beginning July 1<sup>st</sup> of every year while funds are available; and,

**WHEREAS**, rebates will only be offered to customers that are served by the City of Ceres Water System and have an active account; and,

**WHEREAS**, City Council approves each fiscal year funding for promotional activities such as rebates within the Water Fund.

**NOW, THEREFORE, IT IS HEREBY RESOLVED** that the City Council of the City of Ceres does hereby approve a rebate of \$50 for the installation of a Smart Irrigation Controller with a WaterSense Label that meets EPA criteria. .

**PASSED AND ADOPTED** by the Ceres City Council at a regular meeting thereof held on the 26<sup>th</sup> day of May, 2015, by the following vote:

**AYES:** Council Members Durossette, Kline, Ryno, Mayor Vierra

**NOES:** None

**ABSENT:** Council Member Lane



Chris Vierra, Mayor

**ATTEST:**

  
Ann Montgomery, Acting City Clerk

**RESOLUTION NO. 2015 -64**

**RESOLUTION AMENDING THE PENALTY SCHEDULE OF SECTION 13.04.130 OF THE MUNICIPAL CODE TO ADD FINES FOR EXCEEDING WATER USAGE TARGETS.**

**THE CITY COUNCIL  
City of Ceres, California**

**WHEREAS**, the Governor of the State of California and the Water Board has put into law executive order B-29-15 imposing statewide water restrictions.; and

**WHEREAS**, the City of Ceres is required to reduce our water production by 28% from June of 2015 thru February of 2016 compared to the same time in 2013.; and

**WHEREAS**, Section 13.04.130 (4), states "The amount of the penalty imposed for citations issued within section 13.04.130 shall be set from time to time by resolution of the City Council"; and

**WHEREAS**, all account holders will be given a monthly target for water usage and if that target is exceed, a warning or fine will be applied to their monthly water bill. Warning and Fines are as follows:

If target is exceeded by 10%, Warning

If target is exceeded by 25%, \$25 fine

If target is exceeded by 75%, \$75 fine

If target is exceeded by 150%, \$150 fine

**NOW, THEREFORE, IT IS HEREBY RESOLVED** that the City Council of the City of Ceres does hereby approve an amendment to the Penalty Schedule of section 13.04.130 of the Municipal Code to add fines for exceeding water usage targets.

**PASSED AND ADOPTED** by the Ceres City Council at a regular meeting thereof held on the 8th day of June, 2015, by the following vote:

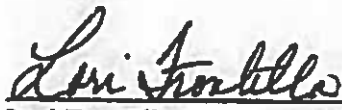
**AYES: 5 Council Members: Durossette, Kline, Lane, Ryno, Mayor Vierra**

**NOES:**

**ABSENT:**

  
Chris Vierra, Mayor

**ATTEST:**

  
Lori Frontella, MMC,  
Interim City Clerk

**RESOLUTION NO. 2015 - 65**

**RESOLUTION AMENDING THE PENALTY SCHEDULE OF SECTION 13.04.130 OF THE MUNICIPAL CODE FOR CITATIONS ISSUED FOR WATER WASTING.**

**THE CITY COUNCIL**  
City of Ceres, California

**WHEREAS**, The Governor of the State of California and the Water Board has put into law executive order B-29-15 imposing statewide water restrictions. The City of Ceres is required to reduce our water production by 28% from June of 2015 thru February of 2016 compared to the same time in 2013.; and

**WHEREAS**, Section 13.04.130 (4), The amount of the penalty imposed for citations issued within section 13.04.130 shall be set from time to time by resolution of the City Council; and

**WHEREAS**, By increasing the fines, the awareness by each customer will increase to support our goal of 28% water reduction. Warnings and fines will start over should twelve (12) months pass without a violation. Warning and fines structure will be;

1<sup>st</sup> offense Warning  
2<sup>nd</sup> offense \$20 fine  
3<sup>rd</sup> offense \$100 fine  
4<sup>th</sup> offense \$250 fine  
5<sup>th</sup> offense \$500 fine

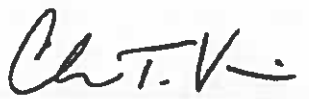
**NOW, THEREFORE, IT IS HEREBY RESOLVED** that the City Council of the City of Ceres does hereby approve an amendment to the Penalty Schedule of Section 13.01.130 of the Municipal Code for citations issued for Water Wasting.

**PASSED AND ADOPTED** by the Ceres City Council at a regular meeting thereof held on the 8<sup>th</sup> day of June, 2015, by the following vote:

**AYES: 5 Council Members: Durossette, Kline, Lane, Ryno, Mayor Vierra**

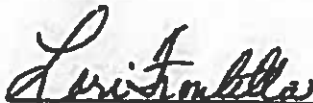
**NOES:**

**ABSENT:**



Chris Vierra, Mayor

**ATTEST:**



Lori Frontella, MMC, Interim City Clerk

**RESOLUTION NO. 2015-120**

**RESOLUTION AUTHORIZING THE CITY MANAGER TO ENTER INTO  
A MEMORANDUM OF UNDERSTANDING (MOU) WITH THE TURLOCK  
GROUNDWATER BASIN ASSOCIATION FOLLOWING THE  
SUSTAINABLE GROUNDWATER MANAGEMENT ACT.**

**THE CITY COUNCIL  
City of Ceres**

**WHEREAS,** The City of Ceres is a member agency of the Turlock Groundwater Basin Association whose purpose is to coordinate groundwater management activities within the basin; and,

**WHEREAS,** The Sustainable Groundwater Management Act issued by DWR requires the development of a Groundwater Sustainable Agency by June 2017; and,

**WHEREAS,** The established Groundwater Sustainable Agency must have an approved Groundwater Sustainable Plan adopted by each member agency by December 2020.

**NOW THEREFORE BE IT HEREBY RESOLVED** that the City Council of the City of Ceres does hereby authorize the City Manager to enter into a Memorandum of Understanding (MOU) with the Turlock Groundwater Basin Association (TGBA) for the purpose of coordinating activities for compliance with the Sustainable Groundwater Management Act.

**PASSED AND ADOPTED** by the Ceres City Council at a regular meeting thereof held on the 14<sup>th</sup> day of September 2015, by the following vote:

<b>AYES:</b>	<b>4</b>	<b>Council Members:</b>	<b>Durossette, Kline, Ryno, Vierra</b>
<b>NOES:</b>	<b>0</b>	<b>Council Members:</b>	
<b>ABSENT:</b>	<b>1</b>	<b>Council Members:</b>	<b>Lane</b>



**Chris Vierra, Mayor**

**ATTEST:**



**Lori Frontella, MMC, Interim City Clerk**

**MEMORANDUM OF UNDERSTANDING  
SETTING FORTH CERTAIN ITEMS OF AGREEMENT  
AMONG THE TURLOCK GROUNDWATER BASIN ASSOCIATION  
FOLLOWING THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT**

**1. Parties**

The Parties ("Parties") to this *Memorandum of Understanding Setting Forth Certain Items of Agreement among certain members of the Turlock Groundwater Basin Association ("TGBA") Following the Sustainable Groundwater Management Act ("Post-SGMA MOU")*. These Parties are the signatories to this Post-SGMA MOU.

**2. Recitals**

This MOU is entered into with regard to the following facts and circumstances:

- 2.1. The Parties share common groundwater resources and have managed those resources in the best interests of their respective constituents in compliance with applicable state laws.
- 2.2. In pursuit of goals and items of mutual agreement outlined in an existing agreement of the Parties, many of the Parties regularly coordinate, collaborate, and communicate groundwater management in a formal setting by way of TGBA meetings.
- 2.3. With its passage in the California Legislature and signing into law by Governor Brown, the Sustainable Groundwater Management Act of 2014 ("SGMA") will change many conditions and requirements under which all groundwater resources are currently managed within the Turlock Subbasin ("Subbasin").
- 2.4. A foundational tenet of the SGMA is to maintain existing local control of groundwater management, provided groundwater is managed in a sustainable manner, as outlined in the SGMA.

2.5. The Turlock Subbasin is defined by the Department of Water Resources' ("DWR") Bulletin 118, 2003 Update. The SGMA requires certain deadlines be met by local agencies within the Subbasin. These deadlines must be met in order to avoid intervention of local groundwater management by the State Water Resources Control Board ("State Water Board").

2.6. Relevant to the Parties, the first SGMA deadline for local agencies requires the formation of at least one Groundwater Sustainability Agency (GSA") by June 30, 2017 in order to avoid the Subbasin placed on probationary status (California Water Code §10735.2). DWR is to be informed of the formation of GSAs and to assess the adequacy of coordination agreements required by SGMA. Probationary status could lead to the State Water Board developing an enforceable interim plan to manage local groundwater resources.

2.7. The second deadline for local agencies requires a Groundwater Sustainability Plan ("GSP") to be developed to achieve groundwater sustainability within the Subbasin and submitted to DWR by January 31, 2022. The entire Subbasin must be covered by at least one GSP. If more than one GSP is established, a coordination agreement must be in place to ensure the coordinated implementation of the GSPs for the Subbasin to achieve sustainability.

### **3. Agreement**

The Parties agree as follows:

3.1. **Civility:** The Parties agree to work together in a civil manner in an effort to move toward groundwater sustainability within the Subbasin and SGMA compliance.

3.2. **Groundwater governance:** While it is unknown at this time what governance structure will take form for the Subbasin, the Parties agree to work individually and collectively to seek formation of one or more GSAs to provide SGMA-compliant groundwater

management governance within the Subbasin prior to June 30, 2017. The ultimate governance structure within the Subbasin is not the subject of this MOU. As such, this Post-SGMA MOU does not form a GSA or multiple GSAs, but rather begins a consensus-seeking discussion process toward SGMA compliance.

**3.3. TGBA is a forum for discussion:** The TGBA, by way of its membership, provides one of several forums to discuss possible groundwater governance structures. However, it is the Parties to this MOU (as defined in Water Code §10721(m)) that have ultimate decision-making authority on groundwater governance within the Subbasin.

**3.4. Coordination:** The SGMA requires that the entire Subbasin be covered by a GSP. If more than one GSP is established, SGMA further requires that a coordination agreement be in place and deemed adequate by DWR. To this end, the Parties understand that coordination and collaboration on various levels, many of which may not be clear at this time, will be essential to complying with the SGMA requirements, regardless of which groundwater governance structure ultimately develops within the Subbasin.

**3.5. Groundwater Sustainability Plan:** To facilitate the coordination required by SGMA, the Parties agree to work individually and collectively to pursue developing a single GSP to manage groundwater within the Subbasin.

**3.6. Groundwater Model and Other Data Coordination:** Development of a SGMA-compliant GSP will require a groundwater model and/or other tools to be developed for the Subbasin. While groundwater modeling has been done in the past, there will likely be a need for improved tools to assist the Parties in developing a SGMA compliant GSP. These types of tools can take years to develop. The SGMA deadlines may not allow for the time needed to systematically establish GSAs before starting work on the needed tools for developing the GSP. Therefore, the Parties agree to cooperatively

pursue the development of a groundwater model and/or other tools for the entire Subbasin that may be needed to meet the SGMA deadlines and requirements.

**3.7. No replacement of existing MOU:** The Post-SGMA MOU does not replace or otherwise alter the existing *Turlock Groundwater Basin Association Memorandum of Understanding*, whose term commenced November 15, 2001.

**3.8. No implied financial commitment:** The Post-SGMA MOU does not imply any financial commitment of the Parties above and beyond what is already stipulated in the existing TGBA MOU of 2001.

**3.9. No creation of joint powers:** The Post-SGMA MOU does not provide for the creation of an agency or entity which is separate from the Parties pursuant to Chapter 5 (commencing with §6500) of Division 7 of Title 1 of the Government Code, relating to the joint exercise of powers.

**3.10. Term:** The Parties have entered into this Post-SGMA MOU voluntarily. This MOU may not be modified except by mutual consent of authorized officials from the Parties. This MOU shall become effective upon signature by the authorized officials from the Parties and will remain in effect until modified or terminated by any Party by mutual consent. In the absence of mutual agreement by the Parties, this MOU shall expire upon approval by DWR of the GSP developed pursuant to this MOU.

**3.11. Good faith efforts:** Each Party should use its best efforts and work wholeheartedly and in good faith for the expeditious completion of the objectives of this MOU and the satisfactory performance of the terms and provisions contained herein.

**COUNTERPARTS:** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement.



IN WITNESS WHEREOF, the Parties have caused this MOU to be executed, each signatory hereto represents that he has been appropriately authorized to enter into this MOU on behalf of the Party for whom he/she signs.

As authorized by Toby Wells, City Manager approved by the City Council of the City of Ceres on September 14, 2015.

Signed:

  
\_\_\_\_\_  
Toby Wells, City Manager

Attest:

  
\_\_\_\_\_  
Lori Frontella, MMC, Interim City Clerk

## **Ceres Municipal Code, Title 13 water and sewer chapter 13.04.130**

### **13.04.130 - RULES AND REGULATIONS.**

The City shall provide a comprehensive water conservation program through limitations on water usage and through public education. Landscaping systems shall be properly designed, installed, maintained and operated to prevent the wasting of water. The use of drought-tolerant landscaping shall be encouraged. Serving water in restaurants only upon customer request shall be encouraged.

#### **A. Utility customers shall not be permitted to wastewater.**

1. Acts constituting water wasting shall include, but shall not be limited to, any of the following acts:
  - a. Failure to comply with the following schedule when watering lawns, plants, or garden, or using outdoor water for other purposes.
    - (1) No lawn/garden watering, or other outdoor use, will be allowed between twelve o'clock (12:00) noon and seven o'clock (7:00) P.M., every day.
    - (2) Dwellings or establishments with odd-numbered street addresses shall use outdoor water only on Sundays, Wednesdays and Fridays.
    - (3) Dwellings or establishments with even-numbered street addresses shall use outdoor water only on Tuesdays, Thursdays and Saturdays.
    - (4) No dwelling or establishment may use outdoor water on Mondays unless a determination is made of special circumstances by the Director of Public Works or his or her designee. In no case shall any facility water more than three (3) days a week.
  - b. Watering lawns or gardens such that excess water leaves the property or area being watered.
  - c. Watering outdoor landscaping while raining.
  - d. Washing vehicles, equipment or boats using an open hose which is not equipped with a shut-off nozzle.
  - e. Hosing down driveways, streets, parking lots and building exteriors without the consent of the Director of Public Works or his or her designee except for valid health or safety reasons.
  - f. Having leaky faucets or plumbing fixtures on the premises.
  - g. Operating evaporated coolers which are not equipped with a recirculating pump.
2. Should the Department of Public Works determine that any utility customer, or person using the utilities with the consent of the customer, has violated the provisions of subsection A1 of this Section, regarding water wasting, the utility customer shall be served, either personally, by mail, or by posting at the residence or business premises of the customer, a warning notice stating the acts or conduct which constitute the violation and stating that any further violation(s) will result in the issuance of a citation.
3. Should a utility customer, or person using the utilities with the consent of the customer, violate the provisions of subsection A1 of this Section after being served a warning notice as provided in subsection A2 of this Section such person shall be issued a citation. Said citation shall state:
  - a. The date, time and circumstances of the violation;
  - b. The location of the violation;
  - c. The amount of the penalty imposed;

d. The appeal rights of the customer.

The citation may be served either personally, by mail, or by posting at the residence or business premises of the customer.

4. The amount of the penalty imposed for citations issued under this Section shall be set from time to time by resolution of the City Council. Any penalty imposed may be added to and collected as part of the regular municipal utility account of any person or business against whom the penalty has been assessed. Failure of the utility customer to pay the penalty shall be cause for termination of utility services. Said penalty may also be collected in any manner allowed by law.
  5. A utility customer shall have the right to appeal the citation before the City's Administrative Hearing Officer, provided the request for an appeal is filed with the Department of Public Works within ten (10) days from the service of the citation. Notice of the appeal hearing and the rules and regulations regarding the conduct of the appeal hearing shall be those provided in Chapter 19.10 of the Ceres Municipal Code.
  6. Reserved.
  7. Failure of any utility customer to pay the penalty fees imposed as provided herein shall be grounds to discontinue utilities until compliance is obtained.
  8. The City Council does hereby designate the following persons as persons who are authorized to investigate violations, serve warning notices and issue citations required or authorized by this subsection:
    - a. Water Conservation Officers;
    - b. Code Enforcement Officers;
    - c. Sworn Police Officers;
    - d. Community Service Officers;
    - e. Volunteers in public service and field employees of the Department of Public Works who are specifically designated by the Director of Public Works.
- B. All water services installed shall have an approved wheel valve where the service pipe enters the house and/or structure, ahead of any branch line, including irrigation system, and on the house side of any meter or idler. No water distribution system shall be connected so as to contaminate the City water supply either by cross connection or otherwise.
- C. Multiple Units:
1. Number of Services to Separate Parcels: Separate parcels under single control or management shall be supplied through individual service connections unless otherwise authorized by the Deputy Director of Public Works.
  2. Service to Multiple Units: Separate houses, buildings, living or business quarters on the same parcel or on adjoining parcels, under a single control or management, may be served at the option of the applicant, by either of the following methods:
    - a. Through separate service connection to each unit, provided that the pipeline system from each service is independent of the others, and it is not interconnected. Turning off the service to a unit turns off all water to the inside of the unit.
    - b. Through a single service connection to the entire premises; provided that the water piping for all units is interconnected. If multiple units are served through a single service, the property owner shall be responsible for the payment of charges for all services supplied to all units. The owner shall sign an agreement with the City to hold the City harmless for any damage that may occur due to the water being disconnected for nonpayment of charges.

- D. No person shall supply water in any way for use outside the premises to which the service is assigned (or appurtenant) without the special permission of the Director of Public Works.
- E. Access to service connections and water meters must be provided at all times.
- F. All persons must keep their service pipes in good order at their own expense and may be held liable for damages which may result from their failure to do so.
- G. It is unlawful for any person to adjust, interfere or tamper with City water service connections, valves or meter equipment or to construct a bypass around a meter or service. Examples of tampering shall include, but not be limited to: turning water service on after it has been shut off by the City; obstructing access to the meter service box; and altering or damaging meter equipment so that it malfunctions or is non-operational. Upon the City's discovery that tampering has occurred, the water service shall be turned off and/or locked or the curb stop shall be sealed.

The account holder of the premises where the tampering occurred shall be responsible for payment of the actual cost to repair all damages associated with the tampering, and for an additional charge for the tampering which shall be set by resolution of the City Council. All costs and charges shall be added to the account of the water service customer and must be paid before water service is restored to the premises.

(Ord. No. 2011-1005, §§ 5—9, 10-24-2011; Ord. No. 2011-1002, § 1, 8-8-2011; Ord. 2006-959 § 1, 2006; Ord. 99-889 Exh. C (part), 1999; Ord. 95-849, 1995; Ord. 95-842, 1995; Ord. 93-810, 1993; Ord. 91-779, 1991; Ord. 91-775, 1991; Ord. 90-750, 1990; Ord. 89-724, 1989; Ord. 88-707, 1988; Ord. 88-701, 1988; Ord. 81-572, 1981; Ord. 80-550, 1980)

## **APPENDIX G**

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### **Water Emergency/Drought Preparedness & Response Plan**

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## **Drought Preparedness & Response Planning for the City of Ceres Public Water System**

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City of Ceres Water Division  
2220 Hackett Road  
Ceres, CA 95307

City of Ceres  
Public Water System ID Number: 5010028

Date February 23, 2016

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## **1. Declaration of policy, purpose, and intent**

### **1.1. General**

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, fire protection, and to protect and preserve public health, welfare, and safety; while minimizing the adverse impacts of water supply shortage or other water supply emergency conditions; the City of Ceres hereby adopts the following regulations and restrictions on the delivery and consumption of water through an ordinance and resolution.

- City of Ceres municipal code 13.04.130
- Drought Preparedness Water Rationing Stages Resolution NO. 2014-27

The Drought Preparedness and Response plan is a framework of forward-leaning planning for scenarios and objectives, managerial and technical actions, and potential response systems in order to prevent, or better respond to, a drought-related emergency or critical situation. The overall goal, and the contingency planning process, is to facilitate rapid emergency response. The intention of the Plan is to be functional, flexible, and easy to implement, and also serve as a tool for maintaining control over the events or limiting the risk of loss of control.

The primary focus is placed on best management practices to manage water use demand, while evaluating options for alternative water supply sources. Water uses regulated or prohibited under the Plan are considered to be non-essential. A continuation of such practices during times of water shortage or other emergency water supply condition is deemed to constitute a waste; which subjects the offender(s) to penalties as defined in this Plan.

### **1.2. Water use priorities**

The risks to public health from water shortages could be high and include issues of water quality, water quantity, sanitation, hygiene for personal use and food preparation. As a result, the City establishes the following priorities for use in developing demand reduction programs and allocations during a water shortage emergency. Priorities for use of available water, from highest to lowest priority, are:

1. Health and safety: residential home interior uses, sanitation, and fire fighting
2. Commercial, industrial, and governmental: maintain jobs and economic base
3. Existing landscaping: especially trees and shrubs
4. New demand: projects without permits when shortage is declared

### **1.3. Application**

The provisions outlined shall apply to all customers and properties utilizing water provided by the City of Ceres public water system.

## **2. Drought task force**

A drought task force was created by the City in order to develop this Plan and to assist in further developing and implementing effective drought monitoring, mitigation, and response actions. The drought task force consists of representatives from the following:

- City Manager
- Public Works Director
- Water Distribution Supervisor
- Water Resource Analyst
- Fire Chief
- Police Chief
- Critical water users, e.g. health clinics, schools

### **3. Authorization**

The designated official listed below, or his/her designee, is hereby authorized and directed to implement the applicable provisions outlined upon determination that such implementation is necessary to protect public health, safety, and welfare. The designated official or his/her designee shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan. The authorized designated official is: Jeremy Damas Public Works Director.

#### 4. Definitions

For the purposes of this report, the following definitions shall apply:

- A. **Aesthetic water use:** water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.
- B. **Commercial and institutional water use:** water use which is integral to the operations of commercial and non-profit establishments and governmental entities such as retail establishments, hotels and motels, restaurants, and office buildings. The term is also referred to as non-residential water use.
- C. **Conservation:** those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water or increase the recycling and reuse of water so that a supply is conserved and made available for future or alternative uses.
- D. **Customer:** any person, company, or organization using water supplied by the potable water system.
- E. **Domestic water use:** water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence. The term is also referred to as residential water use.
- F. **Drought level or stage:** severity of the drought conditions indicated by the impact and/or vulnerability triggering criteria for the water source and capacity to meet demand, and corresponding best management practices to mitigate impacts.
- G. **Even number address:** street addresses, box numbers, or rural postal route numbers ending in 0, 2, 4, 6, or 8.
- H. **Industrial water use:** the use of water in processes designed to convert materials of lower value into forms having greater usability and value.
- I. **Landscape irrigation use:** water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, golf courses, parks, right-of-way and medians.
- J. **Non-essential water use:** water uses that are neither essential nor required for the protection of public, health, safety, and welfare.
- K. **Non-residential water use:** the term is also referred to as commercial or institutional water use.
- L. **Odd numbered address:** street addresses, box numbers, or rural postal route

numbers ending in 1, 3, 5, 7, or 9.

**M. Public water system:** a system for the provision to the public of water for human consumption through pipes or other constructed conveyances. The term is also referred to as community water system.

**N. Residential water use:** The term is also referred to as domestic water use.

## **5. Previous water shortage conditions**

While there are many methods utilized to define drought; some can be quantified, such as meteorological drought (period of below precipitation) or hydrologic drought (period of below average runoff), while others are more qualitative in nature (shortage of water for a particular purpose). In California, drought is commonly associated with impacts and below normal precipitation. Drought impacts increase with the length of a drought, depleting water supplies in reservoirs and levels in ground water basins. The extent of drought impacts is dependent on many factors including but not limited to climate change, water use patterns, available water supplies and geography. While warming temperatures due to global climate change combined with changes in precipitation and runoff patterns, are projected to increase the frequency and intensity of droughts in California. In addition, analysis of recharge patterns shows that large expanses of alluvial basin floors are drying out under current climatic conditions, with little to no recharge to underlying groundwater.

In California both surface and groundwater supplies have been stressed by multi-year droughts of large scale extent throughout recorded history. Over the last hundred years the state has had the following drought cycles: 1918-20, 1923-26, 1928-35, 1947-50, 1959-62, 1976-77, 1987-92, 2000-02, 2007-09, and 2012-2016. Demonstrating that California's annual water supply conditions are highly variable and drought is a recurring feature in the state's water budget that needs to be addressed and accounted for.

Locally, the City of Ceres gets on average 12 inches of rain per year; with a 95° high average in the month of July and a 40° low average in the month of January. This is an important part of the hydrologic cycle that facilitates groundwater recharge. Recharge is supplied by rain, snowmelt, rivers, lakes, and streams. While the amount of groundwater in storage in each basin is dependent on the precipitation, recharge and the total extraction of water from all the wells within the system; the Turlock subbasin that supplies the City's groundwater has remained relatively stable. This initial evaluation will help the City plan additional programs that will lead to more efficient management over the produced water supply, taking into account the political, institutional, legal and technical specifics of the basin to maintain the quality and quantity of the groundwater supply in the basin. Regionally, the Central Valley is faced with an increase in water demand due to population growth, economic expansion, and agricultural development at a time when the stresses on the available water supply are increasing. Combined with changes in water quality standards which are resulting in less water and more expensive measures needed to assure a safe and reliable drinking water supply to meet demand and acceptable water pressures throughout the system. The City of Ceres is currently implementing the following response actions:

- mandatory water use reduction
- water allocations
- additional groundwater wells drilled
- additional rebate programs

## **6. Criteria for initiating and termination of drought response stages**

The designated official shall monitor water supply on a periodic basis as determined by the severity of the drought, and determine when conditions warrant initiation or termination of each stage of the Plan based on the specified triggering criteria. The triggering criteria are based on public health risks (likelihood and impacts) and an analysis of the anticipated vulnerability of the water source under drought conditions, and system capacity limits.

## **7. Coordination with regional partners**

The City is in or adjacent to an area with other regional partners. As appropriate, this Plan will be provided to other regional partners for the purpose of effective and efficient planning and coordination of resources for drought emergency response. The regional partners for drought emergency response include:

- A. City of Turlock
- B. City of Modesto
- C. City of Hughson
- D. City of Waterford (Hickman)
- E. Hilmar County Water District
- F. Delhi County Water District
- G. Denair Community Services District
- H. Keyes Community Services District
- I. Ballico Community Services District
- J. Monterey Tract
- K. Turlock Irrigation District
- L. Merced Irrigation District
- M. Eastside Water District
- N. Ballico-Cortez Water District
- O. Stevinson Water District
- P. Merced County
- Q. Stanislaus County



## 8. Public education and notification

Community outreach, education, and notification about drought conditions and the City's Plan will include information about the conditions under which each stage is to be initiated or terminated, the drought response measures to be implemented in each stage, and the specifications required of the public.

The more severe the water shortage, the more vigorous the public information campaign will need to be. Any public communications strategy undertaken in connection with a water shortage should contain the following fundamental attributes:

- **Timely:** Information should be distributed well in advance of voluntary or mandatory actions that are to take effect, repeated often, and updated at regular intervals.
- **Credible:** Information should strive to be clear, professional, consistent, straight forward, reasoned, and honest to build trust and community support.
- **Multi-modal:** Information should be made available to the public using a variety of methods; for example using the City of Ceres Water Conservation website, water meter portal, bill inserts, email, newspaper, radio, and council meetings.
- **Open:** The public water system will actively listen to, engage, and involve its customers, solicit feedback, address identified concerns, and respond to public input.
- **Coordinated:** The public water system should collaborate with other departments and other impacted entities to ensure that the community as a whole has a synchronized and coordinated approach.
- **Action oriented:** Information should always contain positive action steps people can take to help foster a spirit of cooperation and create an overall atmosphere that encourages the people to conserve water for the public good.

There are various methods to carry out communications and public outreach. The designated official will consider the following techniques and methods to notify the public:

- Announcement at public events and meetings
- Presentations and open forums at community meetings
- Publication in a newspaper of general circulation
- Press releases using other local media; e.g. television, radio, E-mail
- Direct mail to each customer; e.g. utility bill inserts
- Telephone hotline
- Public service announcements
- Signs posted in public places; e.g. posting a bulletin at city offices

- Take-home fliers/posters at schools, libraries
- Public information booths at events
- Outdoor signs
- Drought response center
- Announcements on the official City Website
- Notifying other government offices, departments, schools, and other agencies as appropriate

The designated official will notify the following individuals or agencies:

- State Water Resource Board
- City manager
- Fire chief
- Police chief
- Critical water users, e.g. health clinics, schools (see attachment)
- County Office of Emergency Services (OES) Director
- County Health Service District/Field Office
- Other Federal entities; e.g. BIA, BOR, EPA (see attachment)

## **9. Summary inventory of water supply and demand**

### **9.1. Water supply**

The City's public water system is currently supplied solely by groundwater from the Turlock Subbasin. Within the City limits, the City supplies water to nearly all residential, commercial, industrial, institutional, and governmental water users. The City's water service area is generally contiguous with the City limit; however, the northwest portion of the City receives water service from the City of Modesto. The City also provides water service for a small number of customers who are outside of the current City limit, but are within the City's Primary Sphere of Influence. The City currently services approximately 45,000 customers; with an additional 1,200 residents receiving water service by the City of Modesto in the northwestern portion of the City.

Estimations of the total storage capacity of the Turlock Subbasin and the amount of water in storage as of 1995 were calculated using an estimated specific yield of 10.1 percent and water levels collected by DWR and cooperators. According to these calculations, the total storage capacity of the subbasin is estimated to be 15,800,000 acre-foot (AF) to a depth of 300 feet and 30,000,000 AF to the base of fresh groundwater. On average the subbasin water level has declined nearly 7 feet from 1970 through 2000. The Turlock groundwater Sub basin is bounded by the Tuolumne River on the north, the Merced River on the south, and the San Joaquin River on the west.

A water balance study of the Turlock Subbasin was prepared in 2003 and updated in 2007 to estimate the inflows and outflows from the subbasin between 1952 and 2006. Outflows from the Subbasin result from municipal, domestic, and agricultural supply and drainage well pumping, discharge to the local rivers, discharges from subsurface agricultural drains, and consumption by riparian vegetation. The estimated average total outflow for the 1997-2006 periods is 541,000AF/yr. The majority of outflow comes from estimated agricultural, municipal and rural residential, and drainage well pumping, which collectively averaged 457,000 AF/yr for the 1997-2006 period. Inflows to the subbasin result primarily from deep percolation of agricultural and landscape irrigation water and infiltration of precipitation. The estimated average total inflow for the 1997- 2006 period is 519,000 AF/yr.

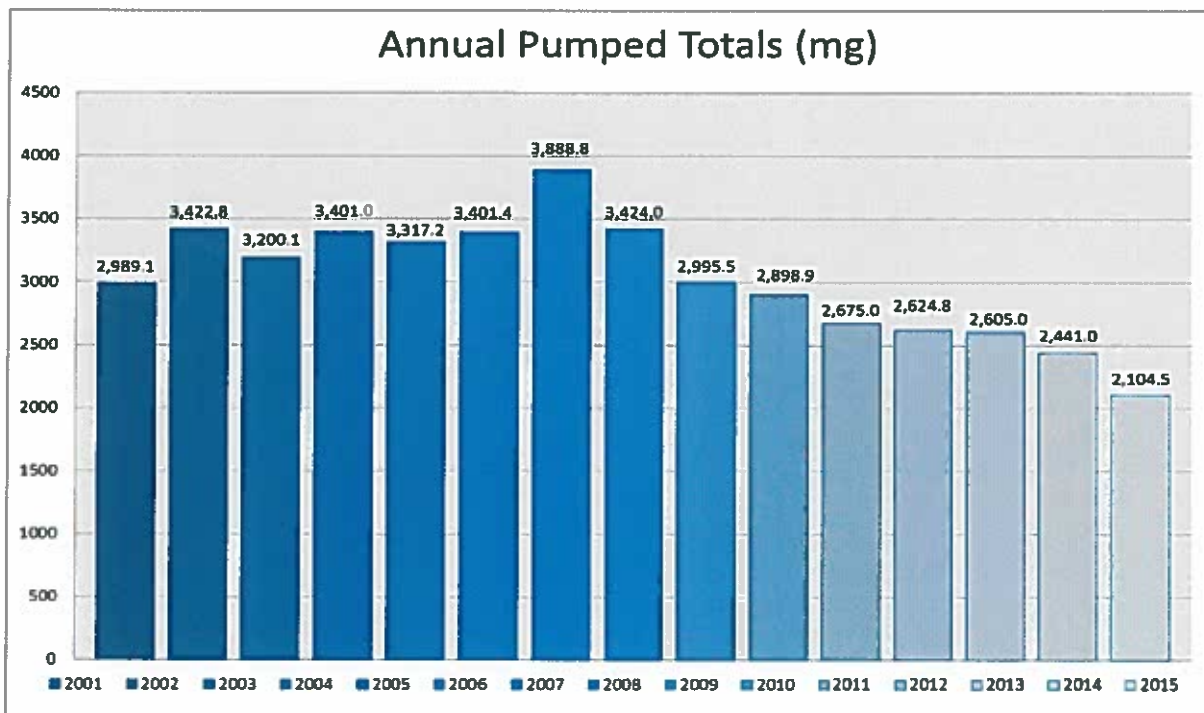
Natural recharge of the subbasin was estimated to be 33,000 AF. Artificial recharge and subsurface inflow were not determined. Applied water recharge was calculated to be 313,000 AF. Annual urban extraction and annual agricultural extraction were calculated at 65,000 and 387,000 AF, respectively. Other extractions and subsurface inflow were not determined. However, when ground water withdrawal exceeds the average rate of recharge then the ground water system, as a whole, is no longer in equilibrium because outputs (withdrawal) exceeds inputs (recharge).

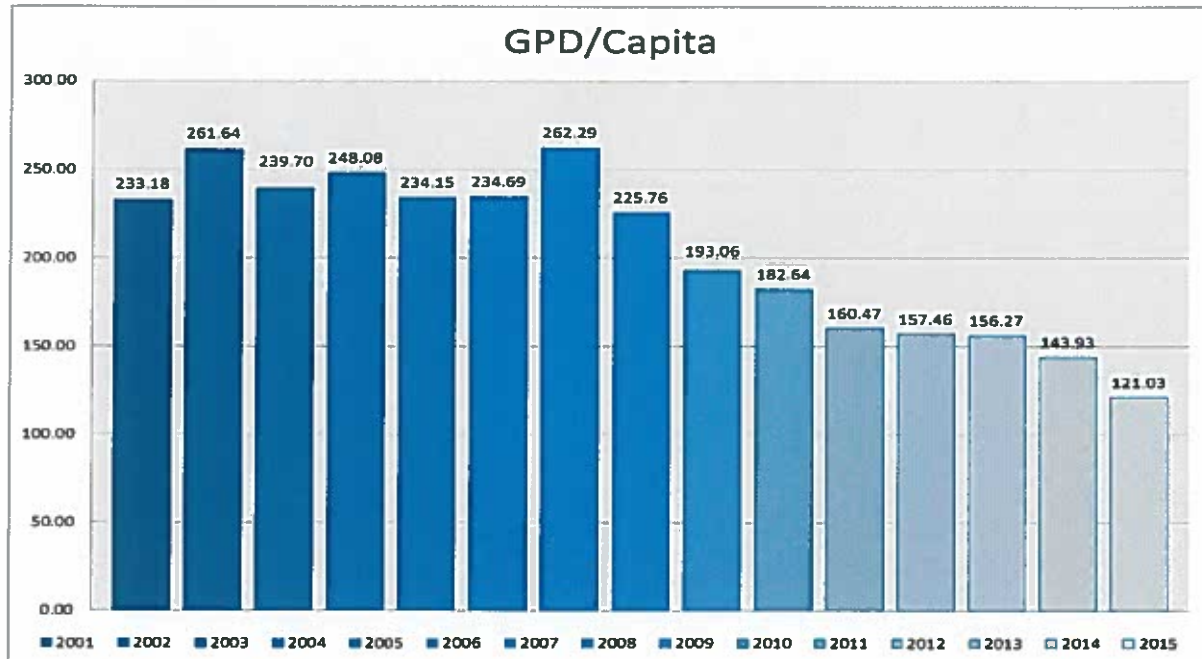
While production from a specific water supply source will often vary year to year, due to a variety of factors, it is anticipated that during a drought condition, the water supply would drastically change in quantity and quality.

## 9.2. Water supply and demand

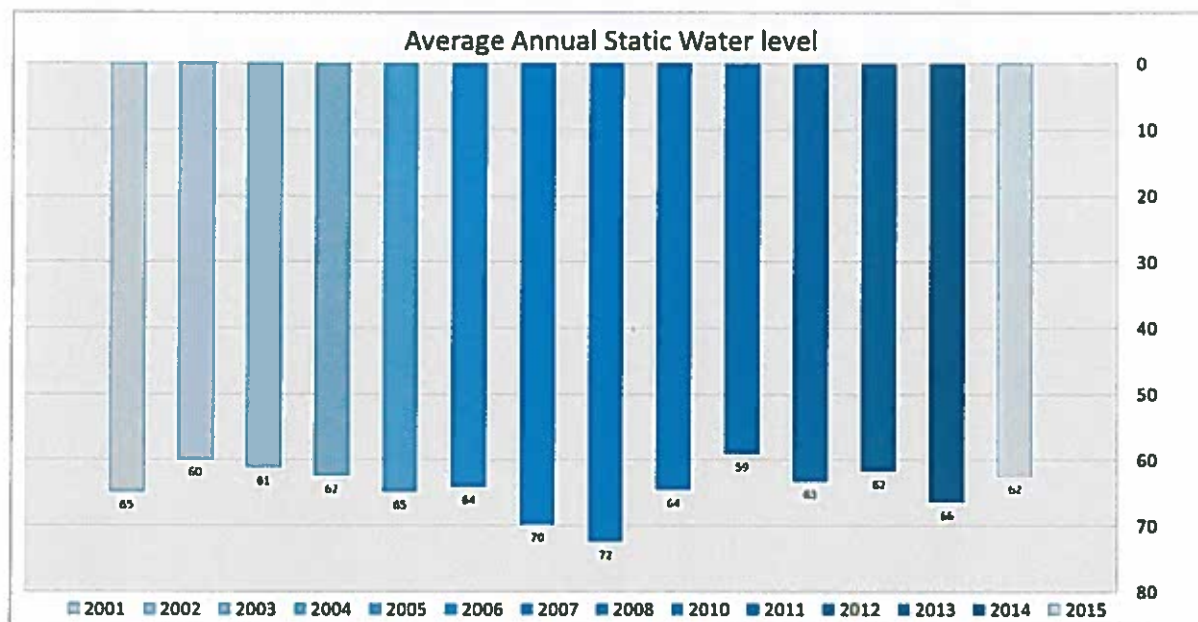
During a calendar year on average the state of California relies on groundwater for about 40% of its supply during normal years. During times of drought, California's groundwater aquifers provide up to 60% to meet demand. Several cities such as, the City of Ceres rely on groundwater as the sole source of their portable water supply to meet production demands. Currently, the City's potable water supply is delivered from 13 groundwater wells and a system of 154 miles of water pipelines. Additionally, the system has two storage tanks with a total storage capacity of 3.8 million gallons respectively that operate daily to meet customer and peak demands.

On average, over the course of the last fifteen years the City supplied 3,025.9 million gallons annually; with 2,104.5 million gallons pumped in 2015 as shown in the chart below. The current pumping capacity for the City during 2015 was 11,566 gallons per minute; with a daily average of 5.766 mg. The gallons per day per capita usage was 121.03 during 2015; which is a reduction of 53% from the 2007 usage of 262.29 million gallons; as shown in the chart titled GPD/Capita.





To get the average rate of domestic and commercial water demand the City's public water system calculates the gallons per day per capita. This is accomplished by utilizing a formula that takes the annual production number, times it by one million, divide's that number by the city's population, and then divide's that number by the number of days in the year 365. The graph above illustrates the city's gallons per day per capita reduction over the course of the last fifteen years. This calculation is designed to help quantify and track water demands on the water distribution systems. This data is also utilized for reporting at the internal and state level for mandated water conservation goals and to meet state water reduction legislature. For example, in 2010 the City was required to update the Urban Water Management Plan. In that plan the reduction goal for 2015 was set at 219 gallons per capita per day. As noted and shown in the graph the City continues to reduce its gallons per day per capita each year.



The City's current practice to assess water levels is to measure the static water levels quarterly from the wells located within the potable water system. The chart above shows on an average basis, our depths have remained stable. Over the course of the last fifteen years; with an average read of 65' in 2001 compared to an average read of 62' in 2015.

### 9.3. Reliability

In any groundwater basin, groundwater storage will fluctuate both seasonally and annually; depending upon water year classification, distribution of rainfall, physical and biological factors. To meet the City's water demand, the city has installed generators on several sites to ensure reliability. In the case of a power outage nine well generators are located throughout the City; which has increased the available backup power in case of emergency by 51% percent.

## **10. Determining if a water shortage is imminent**

In normal or wet years when the water supply outlook is favorable, there is generally sufficient supply to meet the existing demand. However, after an unusually dry winter or period of consecutive dry years, there is an increased likelihood the water supply would not meet the demand. It is critical during this situation to undertake an analysis of whether water supplies will be deficient relative to the estimated water needs for the coming dry season. If possible, the analysis should be performed before the end of the rainy season in time to decide appropriate actions and to provide adequate notice to the public. There is a chance that late winter rains will change the water supply outlook, and therefore, the situation often remains dynamic through the end of April.

Generally, the period of May 1 to October 31 is considered the critical period for the purpose of defining the degree of water supply shortfall and for selecting the appropriate demand reduction strategy and goals. During this period it is often when water supply availability is the lowest and water demand is the highest, potentially creating a summer water supply shortage situation.

There may often be no single criterion, trigger, or definition that is used to determine if a water shortage exists. The determination of a water shortfall involves consideration of all the relevant factors listed in the Plan which generally involve both the water supply and demand.

Generally, forecasting water supplies available from all potential sources (e.g. surface water and ground water sources) may involve a range of certainty due to the availability of historic information and variance in weather patterns and subsurface conditions. Using the best available information, the designated official will determine the degree of the water shortfall following a three-step process, which includes:

1. Develop a monthly forecast of water supply available from all sources.
2. Compare the water supply available to the anticipated water demand.
3. Evaluate whether the available water supply is adequate to meet the demand over the projected time period of dry weather conditions, and any anticipated water shortfall.
4. Implement any water shortage/drought response actions as necessary.

### **10.1 Water Quality Restraints**

Groundwater quality in the Turlock Subbasin remains high throughout most of the region. Current knowledge indicates that salinity, nitrates, iron and manganese, boron, arsenic, radionuclides, bacteria, pesticides, trichloroethylene, and other trace organics have been found in the Turlock Subbasin. To combat water quality concerns the City of Ceres performs weekly, monthly, quarterly and annual water quality testing on the wells and several distribution sites located within the water system to ensure they stay below the Maximum Contaminant Level (MCL) per containment. In addition, two wells have wellhead treatment; one for uranium and one for arsenic and manganese.

Of the 13 Wells in operation, 11 are above 50% of MCL for Arsenic. Out of the other 4 wells not above 50% of the MCL for Arsenic, 1 is being treated for high Uranium, and the other 2 are above 50% of the MCL for Nitrate. To combat these issues Well 32 has had its chemical treatment facility upgraded to address Arsenic and Manganese concerns along with projects that include rehabilitating well 20 with Arsenic treatment options.

TCP, or 1,2,3-trichloropropane, which was an impurity in soil fumigants used from the 1950s to the 1980s, has been detected above the Notification Level for TCP of 0.005 ug/L. Of the thirteen wells in production seven or 61% of the water produced is above the notification level. TCP levels in drinking water are currently unregulated, but the State has adopted a Public Health Goal for TCP of 0.0007 ug/L and is in the process of developing a Maximum Contaminant Level (MCL) for TCP. Some people who drink water containing TCP in excess of the Public Health Goal or Notification Level over many years may have an increased risk of getting cancer.



## 11. Triggering criteria and stages of action

One of the key elements of the City's Plan is a framework of incremental or staged triggering criteria for the drought severity and corresponding response actions. Each stage is triggered by an anticipated or actual water shortage condition, and each stage has several triggering criteria. The triggering criteria described below are based on an analysis of the vulnerability of the water source under anticipated drought conditions and system capacity limits. The drought condition stage, water shortage triggering criteria, and corresponding demand reduction goals are presented in the Table below.

**Table 3: Level of water shortage, triggering criteria, and demand reduction goals**

Stage Level	Stage title	Water shortage condition and triggering criteria	Demand reduction goal	Program type
1	Normal	Abnormally dry, minor shortage: 0-10%	10%	Voluntary
2	Critical	Severe drought: 10-50%	20 – 30%	Mandatory
3	Emergency	Extreme drought: over 50%	Over 50%	Mandatory

A water shortage may trigger any stage of response actions and include best management practices for supply management and demand reduction. The designated official will determine the most appropriate stage to implement based on actual conditions at the time of the event. Successive stages of response actions will be declared only after exhausting efforts to make a prior stage successful.

In some cases it may be necessary for the designated official to immediately implement an advanced stage of the Plan. This may occur due to information that indicates likely increased severity in the drought conditions (e.g. to serve as a preemptive action) or when the health and safety of the community are at an increased risk. The response actions are designed to be flexible so that there is an appropriate response to the specific situation occurring at a particular time. The conditions that may trigger specific stages of the Plan are specified below.

### 11.1. Stage 1: Minor/abnormally dry conditions (Normal)

The triggering criteria and conditions for this drought level or stage include:

During a Stage 1 Drought Response condition, the City will increase its public education and outreach efforts to emphasize increased public awareness of the need to implement the following voluntary water conservation practices:

- Limit residential and commercial landscape irrigation to no more than three assigned days per week on a schedule established by the City.
  1. Addresses ending in an even number 0, 2, 4, 6, 8 may water on Tuesday, Thursday, & Saturday.
  2. Addresses ending in an odd number 1, 3, 5, 7, 9 may water on Sunday, Wednesday, & Friday.

3. No outdoor watering on Monday or between the hours of 12:00 noon to 7:00 pm for all residents.

- Stop washing down paved surfaces, including but not limited to sidewalks, driveways, parking lots, tennis courts, or patios, except when it is necessary to alleviate safety or sanitation hazards.
- Stop water waste resulting from inefficient landscape irrigation, such as runoff, low head drainage, or overspray, etc. Similarly, stop water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.
- Irrigate residential and commercial landscape before 12 a.m. and after 7 p.m. only.
- Use a hand-held hose equipped with a positive shut-off nozzle to water landscaped areas, including trees and shrubs located on residential and commercial properties that are not irrigated by a landscape irrigation system during your watering days and times.
- Irrigate nursery and commercial grower's products before 12 a.m. and after 7 p.m. only. Watering is permitted when a drip/micro-irrigation system/equipment is used. Irrigation of nursery propagation beds is permitted at any time. Watering of livestock is permitted at any time.
- Use re-circulated water to operate ornamental fountains.
- Request a water waiver to wash vehicles using a hand-held hose with positive shut-off nozzle, mobile high pressure/low volume wash system, or at a commercial site that re-circulates (reclaims) water on-site.
- Serve and refill water in restaurants and other food service establishments only upon request.
- Repair all water leaks within 24 hours of notification by the City unless other arrangements are made with the Public Works Department.
- Use recycled or non-potable water for construction purposes when available.

**11.2. Stage 2: Severe conditions (Critical)**

The triggering criteria and conditions for this drought level or stage include:

During a Stage 2 Drought Response condition, all persons using City water shall comply with Stage 1 Drought Response water conservation practices during a Stage 2 Drought

Alert, and shall also comply with the following additional mandatory conservation measures:

- Limit residential and commercial landscape irrigation to no more than two assigned days per week on a schedule established by the City.
  1. Addresses ending in an even number 0, 2, 4, 6, 8 may water on Tuesday & Saturday.
  2. Addresses ending in an odd number 1, 3, 5, 7, 9 may water on Wednesday & Sunday.
  3. No outdoor watering on Monday, Thursday and Friday.
  4. No outdoor watering between 12:00 noon to 7:00 pm for all residents.
  5. Outdoor watering is only permitted with the use of a hose or shutoff nozzle.
- This section shall not apply to commercial growers or nurseries.
- Limit lawn watering and landscape irrigation uses of sprinklers to no more than ten (10) minutes per watering station per day.
  1. This provision does not apply to landscape irrigation systems using water efficient devices, including but not limited to: weather based controllers, drip/micro-irrigation systems and stream rotor sprinklers.
- Repair all leaks within 24 hours of notification by the City unless other arrangements are made with the Public Works Department.
- Stop operating ornamental fountains or similar decorative water features unless recycled water is used.
- During the Stage 2 Drought Response the Deputy Director of Public Works shall have the authority to deny Water Waivers to ensure adequate water supply for the general public unless a health or safety condition exist.

### **11.3. Stage 3: Extreme drought (Emergency)**

The triggering criteria and conditions for this drought level or stage include:

During a Stage 3 Drought Response condition, all persons using City water shall comply with Stage 1 and Stage 2 Drought Response conditions and shall also comply with the following additional mandatory conservation measures:

- Stop all outdoor watering.
- This section shall not apply to commercial growers or nurseries.

- Stop filling or re-filling ornamental lakes or ponds, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to declaration of a drought response level under this ordinance.
- Stop washing vehicles except at commercial carwashes that re-circulate water, or by high pressure/low volume wash systems.
- Repair all leaks within 24 hours of notification by the City unless other arrangements are made with the Public Works Department.
- Additionally, no new potable water service shall be provided, no new temporary meters or permanent meters shall be provided, and no statements of immediate ability to serve or provide potable water service (such as, will serve letters, certificates or letters of availability) shall be issued, except under the following circumstances:
  1. A valid, unexpired building permit has been issued for the project; or
  2. The project is necessary to protect the public's health, safety, and welfare; or
  3. The applicant provides substantial evidence of an enforceable commitment that water demands for the project will be offset prior to the provision of a new water meter(s) to the satisfaction of City.
- This provision shall not be construed to preclude the resetting or turn-on of meters to provide continuation of water service or to restore service that has been interrupted for a period of one year or less.
- During Stage 3 of the Drought Response the Deputy Director of Public Works shall have the authority to deny Water Waivers to ensure adequate water supply for the general public unless a health or safety condition exist.

## 12. Response actions

The Plan provides stages of response actions to manage and mitigate the impacts indicated by each triggering criteria and condition. The response actions provide for a combination of best management practices for both water supply management and reduction in water demand. The response approaches are designed to be flexible so that there is an appropriate action to the specific drought situation occurring at a particular time.

The response actions included in each stage are cumulative, meaning that if Stage 2 is implemented then all of the measures in Stage 1 and 2 shall be implemented. Likewise, if ultimately Stage 3 is implemented, all of the measures in Stages 1, 2, and 3 shall be implemented as well.

### 12.1. Stage 1 response actions

#### 12.1.1. Target and public message

**Target:** Achieve a voluntary reduction of 10% of total daily water demand.

**Public message:** *Due to abnormally dry conditions this winter, we are asking all customers to voluntarily cut back on water use by [10%] in order to stretch the available water supply. The water users should stop using water for non-essential purposes and conserve where possible in case the dry period continues through the year. If everyone cooperates and the water supplies are not impacted anymore, we may avoid more stringent water restrictions. Wasting water hurts everyone.*

#### 12.1.2. Communication, coordination, and planning

Communication, coordination, and planning activities include:

A. Initiate public information outreach campaign to:

- Prepare and distribute educational information
- Notify customers of the water shortage, the need to conserve water, and the importance of significant water use reductions
- Notify customers with large landscapes of irrigation restrictions
- Provide customers with practical information on ways to improve water use efficiency
- Request customers to reduce their water use by the percentage listed above

B. Notify Federal (e.g. FEMA, BOR, BIA, IHS, EPA, etc.), State, and Local (County)

entities.

- C. Begin initial evaluation of potential temporary and/or long-term needs for infrastructure improvements and funding opportunities.

#### **12.1.3. Supply management best management practices**

Best management practices for supply management include:

- A. Reduce flushing of water mains.
- B. Initiate leak detection and repair program.
- C. Develop program for water waste patrols; hire and train staff.
- D. Initiate use of reclaimed water for non-potable purposes.

#### **12.1.4. Demand reduction best management practices**

Best management practices for demand reduction include:

- A. Water customers are requested to limit the irrigation of landscaped areas to three days a week. A resident with an address that ends in an even number (0, 2, 4, 6 or 8) may water on Tuesday, Thursday and Saturday. A resident with an address that ends in an odd number (1, 3, 5, 7 or 9) may water on Wednesday, Friday and Sunday. Irrigate landscapes only before 12:00 noon and after 7:00 p.m. on designated watering days. No outdoor watering allowed on Monday's.
- B. Water customers are requested to practice water conservation and to minimize or discontinue water use for non-essential purposes including:
  - 1. Willfully or negligently wasting water;
  - 2. Irrigation or sprinkling systems and devices that are not properly designed, installed, maintained, and operated to prevent wastage of water;
  - 3. Irrigation or sprinkling of any yard, ground, premise, or vegetation unless the watering device is controlled by an automatic shut-off device, or a person is in immediate attendance of the hose or watering device;
  - 4. Irrigation or sprinkling of lawns for a period that exceeds 10 minutes per station at one time, or a total of 30 minutes per station during a 24 hour day, if water is applied either through a sprinkler system or through a hose with or without a sprinkler device;
  - 5. Irrigation or sprinkling of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided under this Plan;
  - 6. Use of water to wash down any sidewalks, walkways, driveways, parking lots, basketball courts, or other hard-surfaced areas;
  - 7. Use of water for dust control;

8. Use of water to wash down buildings or structures for purposes other than immediate fire protection;
9. Flushing gutters or permitting water to run or accumulate in any gutter or street;
10. Use of water to fill, refill, or add to any indoor or outdoor swimming pools or Jacuzzi-type pools;
11. Use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system;
12. Installing or replacing an air-conditioning systems (including portable systems) without a water conservation device which is properly maintained;
13. Failure to repair a controllable leak(s) or faulty water fixture(s) within a reasonable period time; and
14. Use of water from hydrants for construction purposes without a permit or any other purposes other than firefighting.

## **12.2. Stage 2 response actions**

### **12.2.1. Target and public message**

**Target:** Achieve a mandatory reduction of 20 to 30% of total daily water demand.

**Public message:** *It is necessary to impose mandatory restrictions on water use to ensure that throughout the duration of this water shortage an adequate supply of water is maintained for public health and safety purposes. Our overall goal is to reduce water use by 20 to 30%, which can be achieved if everyone cuts back their outdoor watering and other non-essential uses. We are relying on cooperation and support of all water users to abide by all restrictions and to reach this mandated goal. Otherwise, the shortage could deteriorate into a more serious emergency that requires household water allocations to avoid depleting that available water supply.*

### **12.2.2. Communication, coordination, and planning**

Communication, coordination, and planning activities include:

#### **A. Increase public information outreach campaign to:**

- Notify customers of the mandatory reductions
- Notify customers of the water shortage, the need to conserve water, and the importance of significant water use reductions
- Generate publicity about customers demonstrating significant water savings
- Consult with major customers to develop conservation plans
- Publicize weekly water consumption graph/data

#### **B. Identify priorities for water supplies.**

#### **C. Begin to coordinate with Federal (e.g. FEMA, BOR, BIA, IHS, EPA, etc.), State,**

and Local (County) entities and in particular the County Office of Emergency Services (OES).

- D. Initiate evaluation and plan for potential temporary and/or long-term needs for infrastructure improvements and funding opportunities (e.g. FEMA, BOR, BIA, IHS, EPA, USDA/RD, State, etc.).
- E. Develop strategy to mitigate revenue losses.

#### **12.2.3. Supply management best management practices**

Best management practices for supply management include:

- A. Discontinue flushing of water mains; for emergency purposes only.
- B. Intensify leak detection and repair program.
- C. Intensify program for water waste patrols.
- D. Use of reclaimed water for non-potable purposes.
- E. Plan for use of an alternative water source(s).

#### **12.2.4. Demand reduction best management practices**

Best management practices for demand reduction include:

- A. Water customers are required to limit the irrigation of landscaped areas to two days a week. A resident with an address that ends in an even number (0, 2, 4, 6 or 8) may water on Tuesday, and Saturday. A resident with an address that ends in an odd number (1, 3, 5, 7 or 9) may water on Wednesday, and Sunday. Irrigate landscapes only before 12:00 noon and after 7:00 p.m. on designated watering days. No outdoor watering allowed on Monday, Thursday and Friday's.
- B. Use of water to wash any motor vehicle, motorbike, boat, trailer, or other vehicle is prohibited except on designated watering days between the hours of midnight to noon and 7:00 P.M. to midnight on designated watering days. Such washing, when allowed, shall be done with a hand-held bucket and a hand-held hose equipped with a positive shutoff nozzle for quick rinses. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Further, such washing may be exempted from these regulations if the health, safety, and welfare of the public are contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.
- C. Use of water from hydrants shall be limited to firefighting related activities, or



other activities necessary to maintain public health, safety, and welfare, except that use of water from designated fire hydrants for construction purposes may be allowed under special permit from the public water system.

- D. All restaurants are prohibited from serving water to patrons except upon request of the patron.
- E. Water customers are mandated to practice water conservation and to minimize or discontinue water use for non-essential purposes. Prohibitions include:
  - 1. Willfully or negligently wasting water;
  - 2. Irrigation or sprinkling systems and devices that are not properly designed, installed, maintained, and operated to prevent wastage of water;
  - 3. Irrigation or sprinkling of any yard, ground, premise, or vegetation unless the watering device is controlled by an automatic shut-off device, or a person is in immediate attendance of the hose or watering device;
  - 4. Irrigation or sprinkling of lawns for a period that exceeds 10 minutes per station at one time, or a total of 30 minutes per station during a 24 hour day, if water is applied either through a sprinkler system or through a hose with or without a sprinkler device;
  - 5. Irrigation or sprinkling of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided under this Plan;
  - 6. Use of water to wash down any sidewalks, walkways, driveways, parking lots, basketball courts, or other hard-surfaced areas;
  - 7. Use of water for dust control;
  - 8. Use of water to wash down buildings or structures for purposes other than immediate fire protection;
  - 9. Flushing gutters or permitting water to run or accumulate in any gutter or street;
  - 10. Use of water to fill, refill, or add to any indoor or outdoor swimming pools or Jacuzzi-type pools;
  - 11. Use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system;
  - 12. Installing or replacing an air-conditioning systems (including portable systems) without a water conservation device which is properly maintained;
  - 13. Failure to repair a controllable leak(s) or faulty water fixture(s) within a reasonable period time; and
  - 14. Use of water from hydrants for construction purposes without a permit or any other purposes other than firefighting.

### **12.3. Stage 3 response actions**

#### **12.3.1. Target and public message**

**Target:** Achieve a **mandatory** reduction of 50% of total daily water demand.

**Public message:** *The City is confronted with a critical water shortage emergency of unprecedented proportions. At this time, there exists barely enough drinking water for the most essential human health, sanitation, and safety needs. As a result, all outdoor water use is prohibited. We understand the hardship this extraordinary condition poses to every customer, and we appreciate the sacrifices people are making to ensure that water system does not run dry. Everyone is urgently requested to do whatever necessary to maintain water use within or below their allotted amount.*

#### **12.3.2. Communication, coordination, and planning**

Communication, coordination, and planning activities include:

- A. Intensify and expand public information outreach campaign to:
  - Notify customers of the water use allocations
  - Inform customers of ban on outdoor watering
  - Expand and strengthen water conservation education, activities, and programs
- B. Identify priorities for water supplies.
- C. Coordinate with Federal, State, and Local (County) entities, and in particular, the County Office of Emergency Services (OES), and any mutual aid assistance.
- D. Coordinate with local health directors to assess public health treats and take appropriate actions.
- E. Provide regular situational reports to Federal entities and County OES.
- F. Deploy temporary and/or long-term infrastructure improvements for water supply augmentation such as emergency interconnection, rehabilitation of existing water wells, construction of new water wells, re-confirm arrangements for water hauling etc.
- G. Invoke ban on outdoor watering.
- H. Increase customer service training for staff.
- I. Review and adopt enforcement rates and appeals board to process requests for exceptions.

#### **12.3.3. Supply management best management practices**

Best management practices for supply management include:

- A. Discontinue flushing of water mains; for emergency purposes only.
- B. Intensify leak detection and repair program.
- C. Intensify and expand program for water waste patrols; consider expansion to 24/7 with additional staff if necessary.
- D. Use of reclaimed water for non-potable purposes.
- E. Use of an alternative water source(s).

#### **12.3.4. Demand reduction best management practices**

Best management practices for demand reduction include:

- A. Implement Stage 3 water consumption allocations for all customers.
- B. Water customers are required to eliminate outdoor watering to landscaped areas. The use of hose-end sprinklers is prohibited at any time.
- C. Use of water to wash any motor vehicle, motorbike, boat, trailer, or other vehicle is prohibited.
- D. The watering of golf course tees is prohibited unless the golf course utilizes a water source other than that provided by the public water system.
- E. The use of water for construction purposes from designated fire hydrants under special permit is to be discontinued.

### **13. Water use allocations**

#### **13.1. General**

In the event that water shortage conditions threaten public health, safety, and welfare, or to meet state mandated reduction goals the designated official is authorized to allocate water according to the guideline listed in this plan.

The residential water use allocations are based on water use priorities for health and safety and were calculated based on minimum domestic uses including drinking, cooking, personal washing, sanitation, and washing clothes. In addition, these water uses have been compared to actual data, in particular during the wintertime period.

#### **13.2. Residential customer single-family**

The allocation to residential water customers residing in a single-family dwelling shall be based on the persons per household. A "household" means the residential premises served by the customer's water service line and/or water meter. Persons per household include only those persons currently physically residing at the premises and expected to reside there for the entire billing period. It shall be assumed that a particular customer's household is comprised of four persons unless the customer notifies the designated official of a greater number of persons per household.

It shall be the customer's responsibility to call or go to the Public Works Office of the designated official to request a water audit be schedule to modify household water targets; no changes will be made to the residents target without a completed water audit. New customers may claim more persons per household at the time of applying for water service on the form prescribed by the designated official. When the number of persons per household increases so as to place the customer in a different allocation category, the customer may notify the designated official and the change will be implemented in the next practicable billing period after the water audit has been completed.

Residential water customers that exceeded their monthly water usage targets shall pay the following surcharges:

- If target is exceeded by 10% resident will receive a warning.
- If target is exceeded by 25% resident will receive a \$25 fine.
- If target is exceeded by 75% resident will receive a \$75 fine.
- If target is exceeded by 150% resident will receive a \$150 fine.

## 14. Water Conservation and Enforcement

Environmentally sound strategies to meet future water supply and wastewater treatment needs are crucial to protecting and restoring the levels in the groundwater basins in the City and throughout the Central Valley. The City has taken extensive measures to focus on water conservation through modern technology, incentives and education in the form of outreach.

In 2011 the City created a website for its utility customers titled the City of Ceres Water Meter Portal which enables our residents to view and monitor their own water usage. The portal is a live database that is uploaded daily with the previous day's usage and serves as a great tool and educator to help promote accountability and the reduction of water usage. Residents can receive leak notifications, usage reports and target exceedances via email or text message. The portal also lists information on water audits, and rebates offered by the City to its residents. City employees utilize the portal to run monthly reports on high consumption, leaks, tracking of water notices fines, imported photos, waivers and conservation statistics. The portal continues to be updated to foster the most relevant information within our region to promote water conservation. The City currently, has 16% of residents signed up for the portal with the goal of increasing that number annually until we have participation at 100%. This will be accomplished by continued outreach in our school district, a presence at community events and a signup sheets for the portal given to residents to complete once they activate a new water account in the finance department.

In addition, to help meet the goal of Senate Bill X7-7 the 20x2020 Water Conservation Plan of 2009 and newly appointed Senate Bill 407 the City has increased its efforts to promote water conservation by increasing the water conservation campaign from two rebate programs to five rebate programs. These include the following;

- **Dishwasher:** \$75.00 dollar rebate for the replacement of an inefficient model with a model that displays the energy star label and utilizes 4.25 gallons or less per cycle for standard models and 3.50 gallons per cycle for compact models.
- **Smart Irrigation Controller:** \$50.00 dollar rebate for the replacement of a standard model with a model that displays the water sense label and modifies the irrigation schedule based on evapotranspiration.
- **Toilet:** \$75.00 dollar rebate for the replacement of an inefficient model with a model that displays the water sense label and produces 1.6 gallons per flush or less.
- **Washing Machine:** \$75.00 dollar rebate for the replacement of an inefficient model with a model that displays the energy star label and uses no more than 4.5 gallons of water per cubic foot of space.

- **Turf Replacement:** \$1.00 dollar per square foot rebate for lawn removed and replaced with low to drought tolerant plants and landscape.

During the 2015 calendar year the City granted 300 rebates that included; 34 Dishwashers, 2 Smart Irrigation Controllers, 191 toilets, 31 Turf Replacements, and 42 washing machines. In comparison to 2014 where the City granted 140 rebates for 122 toilets and 18 washing machines. In addition, City water employees are handing out a variety of conservation items, literature, and equipment to residents in attendance at presentations, events and home survey's. These items include: positive shut off nozzles for water hoses, five minute shower timers, efficient show heads of 1.5 gallon per minute, 1.5 gallon per minute sink fixtures, 1.0 gallon per minute aerators and rebate literature; to help promote residents to utilize efficient devices for long lasting behavior and infrastructure change. By implementing a preventive maintenance program the City is ensuring that adequate water supply and reliability for all uses; which is essential to the future economic and environmental health of the central valley.

This Plan is designed to place the responsibility for managing the water resources during a water shortage emergency on the entire community. Attention has been taken in the design of the Plan not to penalize any customer who have undertaken good-faith and diligent measures to conserve water. However, for the protection of the water resources and ability to provide sufficient water for public health and safety priorities, enforcement and penalties are required for those customers who knowingly or intentionally use water in a manner contrary to the City's Plan.

Enforcement provisions include the following:

- A. No person shall knowingly or intentionally allow the use of water from the public water system for any purpose in a manner contrary to any provision of the municipal code, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by the designated official in accordance with provisions of this Plan.
- B. Any person who violates this Plan shall be fined:
  - 1. For the first incident, the fine shall be deferred for customers and serve as a warning to refrain from such activities that violate the year around water schedule and or the City's water conservation municipal code.
  - 2. For the second incident, the fine shall be \$20 dollars.
  - 3. For the third incident, the fine shall be \$100 dollars.
  - 4. For the fourth incident, the fine shall be \$250 dollars.
  - 5. For the fifth incident, the fine shall be \$500 dollars.

- i. Each subsequent citation within one calendar year from the warning will constitute a \$500 fine each.
- C. Any person, including a person classified as a water customer of the public water system, in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred in the form of a picture taken by water conservation staff on the person's property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation.
  1. Any such person shall have the right to appeal this notice by written form within ten days of the citation to the Public Works Office to show that he/she did not commit the violation.
- D. Any employee of the public water system, police officer, or other designated official, may issue a citation to a person he/she reasonably believes to be in violation of this Plan. Service of the citation shall be complete upon delivery of the citation to the alleged violator, to an agent or employee of a violator, mailbox, and door hanger or to a person of the violator's residence.

## **15. Variances / Water Waiver Guidelines**

The designated official or designated staff may grant temporary variance in the form of a water waiver for existing water uses otherwise prohibited under this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the public health, sanitation, or fire protection for the public or the person requesting such variance and if one or more of the following conditions are met:

- Health/ Safety: California health and Safety Code.
- Livelihood: Businesses that depend on water usage such as painters, pool contractors, irrigation contractors.
- Irrigation: Check system, installation and maintenance.

Utility customer's requesting an exemption from the provisions of this Plan shall call the Public Works to request a water waiver. All petitions for variances shall be reviewed by the designated official and shall include the following:

- A. Name and address of the petitioner(s).
- B. Description and purpose of water use.
- C. Period of time for which the variance is sought.
- D. Other pertinent information.

Variances granted by the public water system shall be subject to the following conditions, unless waived or modified by the designated official:

- Variances granted shall include a timetable for compliance.
- Variances granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

### **15.1. Water Waiver Guidelines**

Listed below is a set of guidelines when determining approval or disallowance of issuing water waivers. Waivers to the City of Ceres Municipal Code are allowed under certain circumstances.

The City of Ceres Residents can be issued a water waiver for the following reasons:

#### **A. Landscaping**

Waivers to the water schedule may be granted for a period of up to two weeks for new landscaping. New landscape, sod, and grass seed is not to be watered during the restricted hours between 12:00 (noon) and 7:00 pm nor on



Monday's which is a no watering day for all residents. An exception to this would be the day of installation.

In some instances extensions are needed to ensure proper rooting of sod and grass. The first extension should be granted over the phone for up to one week. Requests for additional extensions should be directed to Water Division staff for a site visit to verify if an additional extension is warranted.

Waivers to the water schedule may be granted for one week to revive existing landscaping, except during the restricted hours of 12:00 (noon) and 7:00 pm.

Waivers may be granted to those in emergency and certain unusual circumstances after being reviewed by the Deputy Director of Public Works or his or her designee.

1. Waivers may be granted to mobile home parks upon request based on the address of the mobile home park not the space number or individual addresses.
2. Waivers may be granted to non-residential developments that have maintenance problems. Problems may consist of antiquated irrigation systems that have a tendency to fail or are open to the public where sprinkler heads can be misaligned, and there are no maintenance personnel on staff during the weekends.

**B. Sprinkler repair**

Waivers may be granted to residents that need to work on their sprinkler system if they are unable to perform the necessary repairs during their regular outdoor watering days. Water leaks, once identified must be repaired within 24 hours.

**C. Drain Pools**

Waivers may be granted to property owners who need to drain their pools. Residents will need to be directed to drain the water into the storm drain and not into their alley ways.

**D. Building Exteriors & Hardscapes (asphalt, concrete, patios, walkways, etc.)**

Waivers may be granted for washing down building exteriors and hardscapes with one of the following: a hand-held hose with positive shut-off nozzle, mobile high pressure/low volume wash system, or at a commercial site that re-circulates (reclaims) water on-site when sweeping does not work, or prior to painting.

Waivers may be granted to wash off hardscapes if there are sticky substances and for health and safety reasons. Cleanup may occur when an emergency exist. Routine clean-ups should be done during normal outdoor water use days and during non-restricted hours.

E. Car washes

Waivers may be granted for Car washes / fundraiser events on weekends during restricted hours; grant it the group has prior approval from the business where the event will be held. However, hoses must be equipped with positive shut off nozzles in addition to the use of buckets.

To request a water waiver call the Public Works office at (209) 538-5732 Monday thru Friday, 8:00 a.m. 5:00 p.m. During Drought Stages 2 and 3 the Deputy Director of Public Works shall have the authority to deny Water Waivers to ensure adequate water supply for the general public unless a health or safety condition exist.

## **16. Revenue and expenditure analysis**

### **16.1. Potential revenue impacts**

The public water system receives revenues from water use charges derived from customers in residential and nonresident accounts that include: single family, multi-family, commercial, government, schools, irrigation and industrial accounts. Water service to the utility customer is billed monthly and is based on a service charge per meter and a two tier volumetric charge. Therefore, as customer water use decreases based on the mandatory restrictions and water allocations, the revenue would decrease.

### **16.2. Potential expenditure impacts**

During a water shortage and activation of this Plan, the expenditures for water-related services may be impacted. Expenditures may increase based on numerous factors including:

- Increased water conservation program costs to implement, monitor, and enforce new or more intensive activities.
- Increased staffing costs for operation and maintenance of facilities to ensure efficient operation of available facilities.
- Increased costs for acquisition of alternative water supplies and associated facilities.
- Increased costs for groundwater pumping, if additional groundwater pumping is needed to compensate for decreased surface water supplies or if more energy is required because of increased pumping lifts associated with decreasing groundwater levels.

With assumed increases in certain expenditures, overall water expenditures may increase during the various stages of the Plan. These increases in expenditures, coupled with reductions in revenue, could potentially impact the public water system's budget and financial status.

### **16.3. Proposed measures to overcome revenue and expenditure impacts**

Measures that may be implemented to overcome revenue and expenditure impacts include:

- Water rate increases; and
- Development and use of reserve funds.

## **17. Mechanism for determining actual water use reductions**

The system's water production from ground water wells is continuously monitored and recorded by water division staff and a SCADA system.

During Stage 1 or Stage 2, daily water production figures will be reported to the designated official. The designated official will then compare the monthly production to the target monthly production and verify that the reduction goal is being achieved. If the reduction goals are not met, the designated official will consider potential corrective actions; e.g. implementations of additional water use restrictions.

During Stage 3, the procedure would remain the same, with the addition of a daily report being generated.

## **18. Drought scenario**

For contingency planning purposes, the drought scenario and assumptions include the following:

- A. Drought conditions with below-normal precipitation and snowpack levels have adversely impacted water sources.
- B. Drought conditions progress from abnormally dry to severe conditions through the year with severity increasing into fall (September/October).
- C. Water source(s) capacity reduced by extreme drought at 50% over demand reduction goal.
- D. Anticipated available water source(s) capacity after reductions from drought will be 8.3 million gallons per day or 50% of overall capacity.
- E. During the peak drought conditions, the anticipated water demand level and corresponding water use allocation will be at level 3.
- F. Based on the anticipated drought level, the total water demand, including anticipated water use reductions, will be 4.15 million gallons per day.
- G. New feasible alternative water sources that are being discussed include:
  - o An agreement with Turlock Irrigation District to bring in source water from the Tuolumne River.
  - o Adding new wells to the portable water system.
  - o Treating wells offline for water quality issues.
- H. Likelihood of alternative water sources existing and/or new, if any in combination with current water supply reduced by the drought, could fully meet the anticipated water demand is likely.
- I. Duration of reduced water supply is uncertain and unable to anticipate.



## CITY OF CERES

# WATER SYSTEM EMERGENCY RESPONSE PLAN

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## Introduction

The goal of the City of Ceres is to maintain a minimum service level and to mitigate any health risks that might occur during a disaster or other emergency events. This plan defines how the City of Ceres, Water Division and the City will respond to emergencies and/or disasters that are likely to affect its operations.

Disasters/emergencies that are possible include: earthquake, major fire emergencies, water outage due to loss of electrical power, water contamination, and/or acts of sabotage/terrorism.

In response to the Department of Homeland Security publication of a threat level advisory system, the City of Ceres has instituted a terrorist response plan consistent with the federal notification protocol. This plan has been developed based on guidelines included in the EPA "Large Water System Emergency Response Plan Outline." Protective measures will vary depending on the threat condition as given to this utility by the FBI or the Office of Homeland Defense. When needed, the City will use the Incident Command System (ICS) and the Standardized Emergency Management System (SEMS) as appropriate, according to the State of California regulations.

The distribution of this document will be limited due to the sensitive information it contains. A list of personnel receiving this plan will be kept with the director and all personnel receiving this plan shall insure their copy is readily available but retained in a secure place. This entire document is considered "CONFIDENTIAL" therefore should not be photocopied.



**Large Water System Emergency Response Plan Outline:**  
**Guidance to Assist Community Water Systems in**  
**Complying with the Public Health Security and**  
**Bioterrorism Preparedness and Response Act of 2002**



Office of Water (4601M)  
EPA 810-F-03-007  
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**Large Water System Emergency Response Plan Outline:**  
**Guidance to Assist Community Water Systems in**  
**Complying with the Public Health Security and**  
**Bioterrorism Preparedness and Response Act of 2002**

United States  
Environmental Protection Agency  
Office of Water  
Office of Ground Water and Drinking Water

**Purpose:** Title IV of the Public Health Security and Bioterrorism Preparedness and Response Act, Public Law 107-188, requires drinking water facilities serving populations of more than 3,300 to perform vulnerability assessments and to prepare an Emergency Response Plan that incorporates the results of the vulnerability assessment. Developing an emergency response plan can take a lot of time and effort. The purpose of this Emergency Response Plan (ERP) outline is to make the job easier and help create a plan that works for your water system. This outline is intended for use by large water utility systems due to their complexity and detail. A modified ERP outline will be available for medium and small water utility systems in the near future.

It is important to note that the Water System ERP is a "living" document requiring periodic updates (i.e., at least annually or if there is a major change to the water utility system configuration). It should be maintained in a three ring binder notebook to accommodate revisions and appendices. The ERP document should be flexible and easily implemented during an emergency with the ability to use removable checklists.

This document provides guidance and recommendations to aid facilities in the preparation of Emergency Response Plans required under the Public Health Security and Bioterrorism and Response Act. The Bioterrorism Act requires drinking water utilities to identify plans, procedures, and equipment that can be implemented or utilized in the event of a terrorist or intentional attack, or that can obviate or significantly lessen the impact of a terrorist or other intentional attack, on the utility. These are addressed in Sections IV and V of this outline. The Bioterrorism Act also calls for coordination with Local Emergency Planning Committees, which is addressed in Section I of this outline. It is understood that numerous states have specific emergency management planning guidelines as outlined in applicable statutes. Facilities must comply with both the federal and state laws. Certain state requirements may take precedence over this ERP outline. For example, the State of California has a Standardized Emergency Management System (SEMS) or Incident Command/Management System (ICS). Use of SEMS/ICS is mandatory in the State of California and applicable to other states.

**Disclaimer:** This outline is provided as guidance only. It contains nationally recognized standards on the types of information that should be contained in an emergency response plan. EPA recognizes that all of the sections may not be applicable to your system and all potential situations may not be identified in the outline. It is your responsibility to evaluate the potential vulnerabilities related to your system and determine the appropriate responses for your site. As site-specific needs dictate, this outline can be modified to meet your needs.

## Water System Emergency Response Plan Outline

### I. Introduction

*Safe and reliable drinking water is vital to every community. Emergency response planning is an essential part of managing a drinking water system. The introduction should identify the requirement to have a documented emergency response plan (ERP), the goal(s) of the plan (e.g., be able to quickly identify an emergency and initiate timely and effective response action, be able to quickly respond and repair damages to minimize system downtime), and how access to the plan is limited. Plans should be numbered for control. Recipients should sign and date a statement that includes their (1) ERP number, (2) agreement not to reproduce the ERP, and (3) they have read the ERP.*

*ERPs do not necessarily need to be one document. They may consist of an overview document, individual Emergency Action Procedures, check lists, additions to existing operations manuals, appendices, etc. There may be separate, more detailed plans for specific incidents. There may be plans that do not include particularly sensitive information and those that do. Existing applicable documents should be referenced in the ERP (e.g., chlorine Risk Management Program, contamination response).*

### II. Emergency Planning Process

#### A. Planning Partnerships

*The planning process should include those parties who will need to help the utility in an emergency situation (e.g., first responders, law enforcement, public health officials, nearby utilities, local emergency planning committees, testing laboratories, etc.). Partnerships should track from the Water Utility Department up through local, state, regional, and federal agencies, as applicable and appropriate, and could also document compliance with governmental requirements.*

#### B. General Emergency Response Policies, Procedures, Actions, Documents

*A short synopsis of the overall emergency management structure, how other utility emergency response, contingency, and risk management plans fit into the ERP for water emergencies, and applicable policies, procedures, actions plans, and reference documents should be cited. Policies should include interconnect agreements with adjacent communities and just how the ERP may affect them. Policies should also address how to handle services to other public utility providers such as gas, electric, etc.*

#### C. Scenarios

*Use your Vulnerability Assessment (VA) findings to identify-specific emergency action steps required for response, recovery, and remediation for each of the five (5) incident types (if applicable) outlined in The Guidance for Water Utility Response, Recovery & Remediation Actions for Man-Made and/or Technological Emergencies, Office of Water (4610M) EPA 810-R-02-001, April 2002 available at [www.epa.gov/safewater](http://www.epa.gov/safewater). In this section, a short paragraph referencing the VA and findings should be provided. Specific details identifying vulnerabilities should not be included. In Section V of this plan, specific emergency actions procedures addressing each of the incident types should be addressed.*

### III. Emergency Response Plan - Policies

#### A. System Specific Information

*In an emergency, a water system needs to have basic information for system personnel and external parties such as law enforcement, emergency responders, repair contractors/vendors, the media, and others. The information needs to be clearly formatted and readily accessible so system staff can find and distribute it quickly to those who may be involved in responding to the emergency. Basic information that may be presented in the emergency response plan are the system's ID number, system name, system address or location, directions to the system, population served, number of service connections, system owner, and information about the person in charge of managing the emergency. Distribution maps, detailed plan drawings, site plans, source water locations, and operations manuals may be attached to this plan as appendices or referenced.*

1. PWS ID, Owner, Contact Person
2. Population served and service connections
3. System Components
  - a) Pipes and constructed conveyances,
  - b) Physical barriers,
  - c) Isolation valves,
  - d) Water collection, pretreatment, treatment, storage and distribution facilities,
  - e) Electronic, computer, or other automated systems which are utilized by the public water system,
  - f) Emergency power generators (onsite & portable),
  - g) The use, storage, or handling of various chemicals, and
  - h) The operation and maintenance of such system components.

**B. Identification of Alternative Water Sources**

1. Amount of water needed for various durations
2. Emergency water shipments
3. Emergency water supply sources
4. Identification of alternate storage and treatment sources
5. Regional Aid Agreements (interconnections)

*Also consider in this section, a discussion of backup wells, adjacent water systems, certified bulk water haulers, etc.*

**C. Chain-of-Command Chart Developed in Coordination with Local Emergency Planning Committee (Internal and/or External Emergency Responders, or both)**

1. Contact Name
2. Organization and Emergency Response Responsibility
3. Telephone number(s) (hardwire, cell phones, faxes, e-mail)
4. State 24-hour Emergency Communications Center Telephone

**D. Communication Procedures: Who, What, When**

*During most emergencies, it will be necessary to quickly notify a variety of parties both internal and external to the water utility. Using the Chain-of-Command Chart and all appropriate personnel from the lists below, indicate who activates the plan, the order in which notification occurs, and the members of the Emergency Response Team. All contact information should be available for routine updating and readily available. The following lists are not intended to be all inclusive—they should be adapted to your specific needs.*

1. Internal Notification Lists
  - a) Utilities Dispatch
  - b) Water Source Manager
  - c) Water Treatment Manager
  - d) Water Distribution Manager
  - e) Facility Managers
  - f) Chief Water Utility Engineer
  - g) Director of Water Utility
  - h) Data (IT) Manager
  - i) Wastewater Treatment Plant
  - j) Other
2. Local Notification
  - a) Head of local government (i.e., Mayor, City Manager, Chairman of Board, etc.)
  - b) Public Safety Officials—Fire, Local Law Enforcement (LLE), Police, EMS, Safety  
*If a malevolent act is suspected, LLE should be immediately notified and in turn will notify the FBI, if required. The FBI is the primary agency for investigating sabotage to water systems or terrorist incidents.*
  - c) Other Government Entities: Health, Schools, Parks, Finance, Electric, etc.
3. External Notification Lists
  - a) State PWSS regulatory agency (or agencies)

- b) Regional water authority (where one exists)
- c) EPA
- d) State Police
- e) State Health Department (lab)
- f) Critical customers (Special considerations for hospitals, Federal, State and County government centers, etc.)
- g) Service/Mutual Aid
- h) Water Information Sharing and Analysis Center (ISAC)
- i) Residential and commercial customers not previously notified

4. Public/Media Notification: When and How to Communicate

*Effective communications is a key element of emergency response, and a media or communications plan is essential to good communications. Be prepared by organizing basic facts about the crisis and your water system. Develop key messages to use with the media that are clear, brief, and accurate. Make sure your messages are carefully planned and have been coordinated with local and state officials. Considerations should be given to establishing protocols for both field and office staff to respectfully defer questions to the utility spokesperson.*

*Be prepared to list geographic boundaries of the affected area, (e.g. west of highway a, east of highway b, north of highway c and south of highway d to ensure the public clearly understands the system boundaries.)*

E. Personnel Safety

*This should provide direction as to how operations staff, emergency responders, and the public should respond to a potential toxic release (e.g., chlorine plume release from a water treatment plant or other chemical agents), including facility evacuation, personnel accountability, proper Personnel Protective Equipment as dictated by the Risk Management Program and Process Safety Management Plan, and whether the nearby public should be "in-place sheltered" or evacuated.*

F. Equipment

*The ERP should identify equipment that can obviate or significantly lessen the impact of terrorist attacks or other intentional actions on the public health and protect the safety and supply of drinking water provided to communities and individuals. The water utility should maintain an updated inventory of current equipment and repair parts for normal maintenance work.*

*Because of the potential for extensive or catastrophic damage that could result from a malevolent act, additional equipment sources should be identified for the acquisition and installation of equipment and repair parts in excess of normal usage. This should be based on the results of the specific scenarios and critical assets identified in the vulnerability assessment that could be destroyed. For example, numerous high-pressure pumps, specifically designed for the water utility, could potentially be destroyed. A certain number of "long-lead" procurement equipment should be inventoried and the vendor information for such unique and critical equipment maintained. In addition, mutual aid agreements with other utilities, and the equipment available under the agreement, should be addressed. Inventories of current equipment, repair parts, and associated vendors should be indicated under Item 29 "Equipment Needs/Maintenance of Equipment" of Section IV "Emergency Action Procedures".*

G. Property Protection

*A determination should be made as to what water system facilities should be immediately "locked down," specific access control procedures implemented, initial security perimeter established, a possible secondary malevolent event considered. The initial act may be a divisionary act.*

H. Training, Exercises, and Drills

*Emergency response training is essential. The purpose of the training program is to inform employees of what is expected of them during an emergency situation. The level of training on an ERP directly affects how well a utility's employees can respond to an emergency. This may take the form of orientation scenarios, table-top workshops, functional exercises, etc.*

I. Assessment

*To evaluate the overall ERP's effectiveness and to ensure that procedures and practices developed under the ERP are adequate and are being implemented, the water utility staff should audit the program on a periodic basis.*

IV. Emergency Action Procedures (EAPs)

*These are detailed procedures used in the event of an operational emergency or malevolent act. EAPs may be applicable across many different emergencies and are typically common core elements of the overall municipality ERP (e.g., responsibilities, notifications lists, security procedures etc.) and can be referenced.*

- A. Event classification/severity of emergency
- B. Responsibilities of Emergency Director
- C. Responsibilities of Incident Commander
- D. Emergency Operations Center (EOC) activation
- E. Division internal communications and reporting
- F. External communications and notifications
- G. Emergency telephone list (division internal contacts)
- H. Emergency telephone list (off-site responders, agencies, state 24-hr emergency phone number, and others to be notified)
- I. Mutual Aid Agreements
- J. Contact list of available emergency contractor services/equipment
- K. Emergency equipment list (including inventory for each facility)
- L. Security and access control during emergencies
- M. Facility evacuation and lockdown and personnel accountability
- N. Treatment and transport of injured personnel (including chemical/biological exposure)
- O. Chemical records – to compare against historical results for base line
- P. List of available laboratories for emergency use
- Q. Emergency sampling and analysis (chemical/biological/radiological)
- R. Water use restrictions during emergencies
- S. Alternate temporary water supplies during emergencies
- T. Isolation plans for supply, treatment, storage, and distribution systems
- U. Mitigation plans for neutralizing, flushing, disinfecting tanks, pump stations, or distribution systems, including shock chlorination
- V. Protection of vital records during emergencies
- W. Record keeping and reporting (FEMA, OSHA, EPA, and other requirements) *(It is important to maintain accurate financial records of expenses associated with the emergency event for possible federal reimbursement.)*
- X. Emergency program training, drills/and tabletop exercises
- Y. Assessment of emergency management plan and procedures
- Z. Crime scene preservation training and plans
- AA. Communication Plans:
  - 1. Police
  - 2. Fire
  - 3. Local Government
  - 4. Media
  - 5. Etc.
- BB. Administration and logistics, including EOC, when established
- CC. Equipment needs/maintenance of equipment
- DD. Recovery and restoration of operations
- EE. Emergency event closeout and recovery

V. Incident-Specific Emergency Action Procedures (EAPs)

*Incident-Specific EAPs are action procedures that identify specific steps in responding to an operational emergency or malevolent act. The Guidance for Water Utility Response, Recovery & Remediation Actions for Man-Made and/or Technological Emergencies, Office of Water (4610M) EPA 810-R-02-001, April 2002, identifies three major steps in developing procedures—response, recovery, and remediation with a list of initial and recovery notifications required. “Response” refers to actions immediately following awareness of the incident, “recovery” refers to actions to bring the system back into operations, and “remediation” refers to long-term restoration actions. When developing an EAP for those incidents identified in Section V.2, the EAP must consider the impact of the incident on system elements and the potential impacts on upstream and downstream components of the incident location. **If during the VA process, a specific incident type was judged as not credible then it should be noted as to why it is not applicable to the ERP. If additional incident types were identified, then these should be included in the ERP.** For those that use the Sandia National Laboratory methodology (RAM-W) the adversary sequence diagrams provide incident-specific malevolent acts, which may fit under Section V.2.*

- A. General Response to Terrorist Threats (Other than Bomb Threat and Incident-Specific Threats)
- B. Incident-Specific Response to Man-Made or Technological Emergencies
  - 1. Contamination Event (Articulated Threat with Unspecified Materials)
  - 2. Contamination Threat at a Major Event
  - 3. Notification from Health Officials of Potential Water Contamination
  - 4. Intrusion through Supervisory Control and Data Acquisition (SCADA)
- C. Significant structural damage resulting from intentional act
- D. Customer complaints
- E. Severe weather response (snow, ice, temperature, lightning)
- F. Flood response
- G. Hurricane and/or tornado response
- H. Fire response
- I. Explosion response
- J. Major vehicle accident response
- K. Electrical power outage response
- L. Water supply interruption response
- M. Transportation accident response – barge, plane, train, semi-trailer/tanker
- N. Contaminated/tampered with water treatment chemicals
- O. Earthquakes response
- P. Disgruntled employees response (i.e., workplace violence)
- Q. Vandals response
- R. Bomb threat response
- S. Civil disturbance/riot/strike
- T. Armed intruder response
- U. Suspicious mail handling and reporting
- V. Hazardous chemical spill/release response (including Material Safety Data Sheets)
- W. Cyber-security/Supervisory Control and Data Acquisition (SCADA) system attack response (other than incident-specific, e.g., hacker)

VI. Next Steps

- A. Plan Review and Approval
- B. Practice and Plan to Update (as necessary; once every year recommended)
  - 1. Training requirements
  - 2. Who is responsible for conducting training, exercises, and emergency drills
  - 3. Update and assessment requirements
  - 4. Incident-specific exercises/drills

VII. Annexes:

- A. Facility and Location Information
  - 1. Facility maps
  - 2. Facility drawings



3. Facility descriptions/layout
4. Etc.

#### VIII. References and Links

- A. Department of Homeland Security — <http://www.dhs.gov/dhspublic>
- B. Environmental Protection Agency — <http://www.epa.gov>
- C. The American Water Works Association (AWWA) — <http://www.awwa.org>
- D. The Center for Disease Control and Prevention — <http://www.bt.cdc.gov>
- E. Federal Emergency Management Agency — <http://www.fema.gov>
- F. Local Emergency Planning Committees — <http://www.epa.gov/ceppo/lepclist.htm>





Office of Water (4601M)  
EPA 810-F-03-007  
[www.epa.gov/safewater/security](http://www.epa.gov/safewater/security)  
July 2003

### **California Health & Safety Code Section 116460 (Emergency Notification Requirement)**

No person shall operate a public water system without an emergency notification plan that has been submitted to and approved by the department. The emergency notification plan shall provide for immediate notice to the customers of the public water system of any significant rise in the bacterial count of water or other failure to comply with any primary drinking water standard that represents an imminent danger to the health of the water users.

No permit, variance, or exemption may be issued or amended under this chapter until an emergency notification plan has been approved by the department.

The department shall adopt regulations to implement the provisions of this section. The regulations may provide for the exclusion of public water systems from the requirements of this section when, in the judgment of the department, the exclusion will best serve the public interest.

### **California Health & Safety Code Section 116460 (Operational Requirements)**

(a) Any person who owns a public water system shall ensure that the system does all of the following:

- (1) Complies with primary and secondary drinking water standards.
- (2) Will not be subject to backflow under normal operating conditions.
- (3) Provides a reliable and adequate supply of pure, wholesome, healthful, and potable water.
- (4) Employs or utilizes only water treatment operators or water treatment operators-in-training that have been certified by the department at the appropriate grade.
- (5) Complies with the operator certification program established pursuant to Chapter 4 (commencing with Section 106875).

(b) Any person who owns a community water system or a nontransient noncommunity water system shall do all of the following:

- (1) Employ or utilize only water distribution system operators who have been certified by the department at the appropriate grade for positions in responsible charge of the distribution system.
- (2) Place the direct supervision of the water system, including water treatment plants, water distribution systems, or both under the responsible charge of an operator or operators holding a valid certification equal to or greater than the classification of the treatment plant and the distribution system.

### **California Health & Safety Code Section 116750 (Tampering with Public Water Systems)**

(a) Any person who tampers with a public water system is guilty of a felony and shall be punished by imprisonment in the state prison for three, four, or five years, subject to a fine not to exceed thirty thousand dollars (\$30,000), or both.

(b) Any person who tampers with or makes a threat to tamper with a public water system is guilty of a felony and shall be punished by imprisonment in the state prison for 16 months, two, or three years, subject to a fine not to exceed twenty thousand dollars (\$20,000), or both.

(c) For purposes of this section, the term "tamper" means either of the following:

- (1) To introduce a contaminant into a public water system with the intention of harming persons.
- (2) To otherwise interfere with the operation of a public water system with the intention of harming persons.

***Who should be on my external non-CWS notification list?***

Your external non-CWS notification list should ensure that all appropriate first responders and affected customers or critical users are notified. Procedures should also be established as to who should be notified, when they should be notified, and who is responsible to make the notifications from your CWS.

Below is a short list of possible first responders. These organizations are not listed in any particular order of preference.

⌚ Local

- Local 911
- Police
- Fire
- Local Emergency Planning Committee (LEPC)
- Elected Officials
- Power Utility
- Hazardous Materials (HAZMAT) personnel

⌚ State

- Drinking Water Primacy Agency
- Department of Health
- State 24-hr Emergency Communications Center Telephone
- State Office of Homeland Security
- HAZMAT
- State Police

⌚ Federal

- FBI
- EPA Headquarters and Regional Office
- Department of Homeland Security (DHS)
- Department of Health and Human Services (HHS)
- National Response Center (800-424-8802, <http://www.nrc.uscg.mil/>)

⌚ Other

- Water Information Sharing & Analysis Center (<http://www.waterisac.org/>)

## Emergency Planning Process

### Emergency Response Policies

The City of Ceres Public Works Director or designee is in charge of declaring a water emergency. The Director has the authority and responsibility for initiating contingency plans and policies to quickly respond to any health, property, and/or terrorist threat affecting the City's water system. Plans that are available for use in emergencies include:

- Fire Emergency Response Plan
- Bomb Threat Plan
- Earthquake Plan
- Water Contamination Plan
- Emergency Water Quality Monitoring
- Widespread Electrical Outage

## **California DHS-DWFOB**

### **Check List of Security Measures for Water Utilities**

When assuring the safety of any facility, consider the credo "detect, delay, and respond" (Sandia, 2000). Basically, some saboteurs will be deterred if they think what they might do would be detected; others will be deterred if they are delayed for a significant amount of time before reaching their end goal because they fear detection. If an intruder does obtain his goal of sabotage, be it contamination of the water or physical destruction of system facilities, then utility staff must respond quickly and appropriately to keep the consequences of the saboteur's action to a minimum.

Immediate action you can take to secure your facilities includes:

- At your office, well houses, treatment plants and vaults, make it a rule that doors are locked and alarms set.
- Tell your employees to ask questions of strangers in your facilities.
- Limit access to facilities. Indicate restricted areas by posting "Employees Only" signs.
- Increase lighting in parking lots, treatment bays, and other areas with limited staffing.
- DO NOT leave keys in equipment at any time.
- Invite local law enforcement to become familiar with facilities and establish a protocol for reporting and responding to threats.
- Discuss detection, response, and notification issues with public health officials and establish a protocol.
- Establish a chain of command and emergency call list in case of emergencies.
- Provide copies of operational procedures to law enforcement and emergency management personnel.
- Limit access to water supply reservoirs.
- Fence and lock vulnerable areas such as wellheads and meter pits.



## CITY OF CERES

### EMERGENCY PLANNING PROCESS

### FIRE EMERGENCY RESPONSE PLAN

#### Municipal Utilities Employees

All employees must follow these procedures in the event of a fire or building evacuation. These rules have been created for the safety of our employees and any rescue/fire workers responding to an emergency. Any emergency should be reported to 911 as soon as safely possible. Do not assume someone else has called in the emergency!

#### Location: Ceres Corporation Yard

##### **If you discover a fire:**

- **Alert people in the area of the need to evacuate**
- **Activate the nearest fire alarm**
- **Call Public Safety at 911**

##### **If a building fire alarm is sounding or you receive notification of a fire emergency:**

- If exiting a closed door, feel the door or doorknob. If it feels hot, do not open it- the fire may be on the other side of the door. If you are trapped, put a cloth or towel under the door to help prevent the entry of smoke. Dial 911 and tell the dispatcher your location and telephone extension and inform them you are trapped in the room and need rescue. Stay on the phone until instructed otherwise.
- If the door is not hot, open it slowly. If the path is clear of smoke, walk to the nearest fire exit and evacuate to the outside. If the path is blocked by smoke or debris, try another exit.



- Close all doors behind you.
- All employees should make their way to the upwind side of the fire. Any municipal Services employees who are not based at this office but were in the building at the time of the alarm should also report this area. The senior manager or supervisor in this area should generate a list of all employees who have evacuated the building. This list should be given as soon as possible to the incident commander along with the names of any people injured and/ or known to be left in the building. Employees should not leave this area or re-enter the building until released by supervisory or emergency response personnel.



## CITY OF CERES

### EMERGENCY PLANNING PROCESS

### BOMB THREAT PLAN

#### Municipal Utilities Employees

All employees must follow these procedures in the event of a bomb threat. These rules have been created for the safety of our employees and any rescue workers responding to an emergency. Any emergency should be reported to 911 as soon as safety possible. Do not assume someone else has called in the emergency!

#### Location: Ceres Corporation Yard

When an evacuation is due to a bomb threat, all employees should report to City Hall. The senior manager or supervisor in this area should generate a list of all employees who have evacuated the building. The list should be given as soon as possible to the incident commander along with the names of any people injured and/ or known to be left in the building. Employees should not leave this area until released by supervisory or emergency response personnel.



## CITY OF CERES

### EMERGENCY PLANNING PROCESS

### EARTHQUAKE PLAN

#### Municipal Utilities Employees

All employees must follow these procedures in the event of a severe earthquake. These rules have been created for the safety of our employees and any rescue workers responding to an emergency. Any emergency should be reported to 911 as soon as safely possible. Do not assume someone else has called in the emergency!

#### Location: Ceres Corporation Yard

During an earthquake, **do not leave the building!** Stay away from any windows and find protection under a desk or in a doorframe. Once the earthquake has stopped, leave from the nearest safe exit and proceed to the parking lot. The senior manger or supervisor in this area should generate a list of all employees who have evacuated the building. This list should be given as soon as possible to the incident commander along with the names of any people injured and/ or known to be left in the building. Employees should not leave this area or re-enter the building until released by supervisory or emergency response personnel.



## CITY OF CERES

### EMERGENCY PLANNING PROCESS

#### WATER CONTAMINATION PLAN

The following steps should be taken if the water system has been contaminated by a natural event (non terrorist). If terrorism is suspect, refer to the Emergency Water Quality Monitoring Plan. Use the Emergency Notification Plan as necessary to alert the Department of Health Services and others. Be sure to notify the Water Quality Control Plant that they will be receiving contaminated water.

1. If the source of contamination is known, immediately isolate the area by closing street valves as necessary and eliminate the source of contamination.
2. If the source of contamination is unknown, sample each well that was on line at the time the contamination was discovered and any well that may have been on line before the contamination showed up.
3. Along with the well samples, several samples from the distribution system should also be taken.
4. As soon as possible, have the samples analyzed by the laboratory and have them report the results to the Director immediately. Use the results of the lab tests to pinpoint the area of contamination. Additional testing will likely be needed to confirm the source.
5. When a clean source(s) of water supply is available and the contamination has been isolated, flush the system starting at the source of clean water and continue outwards until the whole system has been flushed. Notify homeowners that they should flush all of their internal lines and outside landscaping fixtures including garden hoses.
6. Check with the Department of Health Services for any further requirements they might have to resolve the situation.



## CITY OF CERES

### EMERGENCY PLANNING PROCESS

### EMERGENCY WATER QUALITY MONITORING

#### **Natural Disaster**

Any natural disaster that results in the potential for wide spread water contamination will require frequent water monitoring. Foreseeable events that could affect the City of Ceres water system include earthquake and loss of system pressure. Sampling will primarily consist of testing for bacteriological contamination with additional tests for turbidity and chlorine residual as needed.

#### **Terrorist or Contamination Event**

If a threat warning is made, the police and FBI must be notified immediately. Once the threat is confirmed and found credible, it will be necessary to collect water quality samples. **City employees must not collect these samples.** Contact the local Department of Health Services in Stockton as soon as possible (see Water Quality Emergency Notification Plan). The District Engineer has emergency sample kits available and should be able to provide a qualified team that has the proper personal protection material necessary to safely collect these samples. This team will have field screening kits that will help identify the required laboratory resources. The District Engineer should also contact the appropriate laboratory resources and prepare them for delivery of these samples. Sample results may take days to weeks to complete depending on the complexity of analysis.



## CITY OF CERES

### EMERGENCY PLANNING PROCESS

### WIDESPREAD ELECTRICAL OUTAGE

The following steps should be taken in any emergency where a large portion of the City loses electrical power.

1. Send personnel to Wells 1, 20, and 24, and to the storage reservoir to confirm that the emergency generators have come on line. If they have not automatically been brought on line, manually start the engines and bring them on line as soon as possible.
2. Once it has been confirmed that all generators are on line, check the system water pressure. If water pressure in any area has dropped below 15 psig, notify all customers that the water may be contaminated. Immediately sample for Total Coliform and start feeding C12 to the water system. Check with the Department of Health Services for any additional requirements they may have.
3. Check with TID and if the electrical outage is expected to last for more than an hour, plans for refueling the generators should be initiated. Because of the small fuel tanks at the wells, frequent refilling will be required. The City diesel tanker will need to supply fuel to each well site **every 9 hours** or more often (10 gallons per hour usage) for a 150 HP motor. The propane tank at the reservoir will need to be refilled every 20 hours (11 gallons per hour) for a 100 HP motor. Call E.R. Vine and Sons Company and set up a delivery schedule (537-0723) for fuel supplies.
4. Institute strict water rationing until the main electrical system is functioning properly.
5. Once electrical service has been restored, discontinue chlorine feed if there have been no positive Total Coliform tests.

# Emergency Planning Process

## Alternative Water Sources

# SEMS/ICS Integration and Organization





## **GUARDING AGAINST TERRORIST AND SECURITY THREATS**

### **Suggested Measures for Drinking Water and Wastewater Utilities (Water Utilities)**

The Department of Homeland Security (DHS) established a five-tiered Homeland Security Advisory System to provide a national framework for notification about the nature and degree of terrorist threats. The system establishes a set of graduated levels that change in response to increases or decreases in terrorist threats. The threat levels are colored coded, beginning with green, and increasing in severity through blue, yellow, orange, and red. While the threat may not be specific to water utilities, the water sector, as one of the thirteen critical sectors identified by DHS, may consider themselves potential targets.

#### **Why is EPA offering these suggestions?**

Water utilities are in the forefront of ensuring that our nation's water systems are protected against terrorist threats. Many utilities have already developed safeguards. This document provides model guidelines for water utilities to increase security based on threat conditions described by the five-tiered Homeland Security Advisory System. Please note that the attached document is a guide; it is not a requirement under any regulation or legislation.

This document provides suggested steps water utilities should consider implementing in the areas of detection, preparedness, prevention, and protection. The suggested measures are additive in that higher threat levels should also include those measures outlined in the document for lower threat levels. These suggestions are based on practices employed by various systems across the nation. The ability to implement them at the system level will vary. Note that these general recommendations should be adapted by the utility depending on the system size, status of emergency response planning at the utility, and identified system vulnerabilities. These suggestions should not be viewed as a complete source of information on protecting water utilities. Facility managers and utility security directors should consider the full range of resources available, as well as the specific nature of the threats, when responding to changes in threat condition levels.

Based on strong recommendations from the water sector, EPA is making this document available to water utilities and to the secure WaterISAC ([www.waterisac.org](http://www.waterisac.org)). EPA is also providing this document to the state drinking water administrators. Some state homeland security and emergency response programs have issued suggestions to their critical infrastructures, including water. State drinking water administrators are encouraged to coordinate with state homeland security and emergency response programs and modify these suggested measures as appropriate to ensure consistency. **Please do not post this document on publicly available web sites.**

## Homeland Security Threat Matrix

Condition	Consequence (Real or Threatened)	Protective Measures	SEMS / ICS Activation(s)
LOW (Green)	Lowest risk of terrorist attack	Conduct on going facility assessments, develop, test, and implement emergency plans	ICS activated as needed in the field
GUARDED (Blue)	General risk of terrorist attack	Activate employee and public information information plan as needed; exercise communication channel with response teams and local agencies; review and exercise emergency plans.	ICS activated as needed in the field
ELEVATED (Yellow)	Significant risk of terrorist attack; water utilities are a potential target.	Increase surveillance of critical facilities; coordinate response plans with allied utilities and response agencies; and Implement emergency plans, as Appropriate.	Activate SEMS/ICS teams as needed; EOC partially activated as needed.
HIGH (Orange)	High risk of terrorist attack; California utilities are potential targets.	Limit facility access to essential staff only. Coordinate security efforts with Armed forces or local law enforcement.	Activate emergency Operations Center (EOC) and needed ICS Teams; EOC Action Plan as required.
SEVERE (Red)	Severe risk of terrorist attack, this utility has been identified.	Decision to close facility. Redirect staff Resources to critical operations only.	All Field Centers and EOC activated. Action Plan Coordinated with counties.

CONDITION	CONSIDER ADOPTING THESE MEASURES	
<p><b>LOW (GREEN)</b> Low Risk of Terrorist Attack</p> <p>signifies a low risk of terrorist attacks. Protective measures should focus on ongoing facility assessments and the development, testing, and implementation of emergency plans. In addition to THREAT LEVEL GREEN, there are four higher threat levels: blue, yellow, orange, and red. (Please refer to the other fact sheets for information on suggested steps to be taken during other threat condition levels.)</p>	Detection	<ul style="list-style-type: none"> <li>• Monitor water quality at the source water, leaving the plant, and in distribution and storage systems. Establish baseline results. Review operational and analytical data to detect unusual variations.</li> <li>• Follow-up on customer complaints concerning water quality and/or suspicious behavior on the facilities.</li> <li>• Confirm communication protocol with public health officials concerning potential waterborne illnesses.</li> </ul>
	Preparedness	<ul style="list-style-type: none"> <li>• Post emergency evacuation plans in accessible, but secure, location near entrance for immediate access by law enforcement, fire response, and other first responders.</li> <li>• Inventory spare parts and on-hand chemicals. Check if sufficient.</li> <li>• Identify sensitive populations within the service area (e.g., hospitals, nursing homes, daycare centers, schools, etc.) for notification, as appropriate, in the event of a specific threat against the utility.</li> <li>• Back-up critical files such as plans and drawings, as-builts, sampling results, billing, and other critical information.</li> <li>• Conduct appropriate background investigations of staff, contractors, operators, and others with access to the facility.</li> <li>• Prepare vulnerability assessments and revise to incorporate changes made (e.g., assets added/replaced or new countermeasures implemented).</li> <li>• Ensure that employees understand appropriate emergency notification procedures.</li> </ul>
	Prevention	<ul style="list-style-type: none"> <li>• Train staff in safety procedures, such as handling hazardous materials and maintaining and using self-contained breathing apparatus.</li> <li>• Secure equipment such as vehicles and spare parts.</li> <li>• Monitor requests for potentially sensitive information.</li> </ul>
	Protection	<ul style="list-style-type: none"> <li>• Check all chemical deliveries for driver identification and verification of load.</li> <li>• Maintain vigilance and be alert to suspicious activity. Inspect buildings in regular use for suspicious packages and evidence of unauthorized entry. Report any suspicious activity to appropriate authorities.</li> <li>• Prosecute intruders, trespassers, and those detained for tampering to the fullest extent possible under applicable laws.</li> <li>• Review request for tours and identify protocols for managing the tour.</li> <li>• Implement controls for construction activities at critical sites.</li> <li>• Maintain disinfectant residuals as required by regulations.</li> <li>• Implement best management practices for optimizing drinking water treatment.</li> </ul>

CONDITION	CONSIDER ADOPTING THESE MEASURES (and those at lower threat levels)	
<b>GUARDED (BLUE)</b> <small>General Risk of Terrorist Attacks</small>  signifies a guarded risk of terrorist attacks. Protective measures should focus on activating employee and public information plans; exercising communication channels with response teams and local agencies; and reviewing and exercising emergency plans.	<b>Detection</b>	<ul style="list-style-type: none"> <li>▪ Test security alarms and systems for reliability.</li> </ul>
	<b>Preparedness</b>	<ul style="list-style-type: none"> <li>▪ Reaffirm communication and coordination protocols (embedded in the utility's emergency response plan) with local authorities such as police and fire departments, IIAZMAT teams, hospitals, and other first responders.</li> <li>▪ Prepare and/or revise emergency response plans associated communication protocols. Include appropriate local officials concerned with law enforcement, emergency response and public health.</li> <li>▪ On a regular basis post employee reminders about events that constitute security violations and ensure employees understand notification protocol in the event of a security breach.</li> <li>▪ Prepare draft press releases, public notices and other communications for a variety of incidents. Route through appropriate channels of review to ensure pieces are clear and consistent.</li> </ul>
	<b>Prevention</b>	<ul style="list-style-type: none"> <li>▪ Secure buildings, rooms, and storage areas not in regular use. Maintain a list of secured areas or facilities and monitor activity in these areas.</li> </ul>
	<b>Protection</b>	<ul style="list-style-type: none"> <li>▪ Control access to mission critical facilities.</li> </ul>



CONDITION	CONSIDER ADOPTING THESE MEASURES (and those at lower threat levels)	
<p><b>ELEVATED (YELLOW)</b></p> <p>Significant Risk of Terrorist Attack</p> <p>signifies an elevated risk of terrorist attacks. Protective measures should focus on increasing surveillance of critical facilities; coordinating response plans with allied utilities and response teams and local agencies; and implementing emergency plans, as appropriate.</p>	Detection	<ul style="list-style-type: none"> <li>• To the extent possible, increase the frequency and extent of monitoring activities and review results against baseline.</li> <li>• Increase review of operational and analytical data (including customer complaints) with an eye toward detecting unusual variability (as an indicator of unexpected changes in the product). Variations due to natural or routine operational variability should be considered first.</li> <li>• Increase surveillance activities in source and finished water areas.</li> </ul>
	Preparedness	<ul style="list-style-type: none"> <li>• Review and update emergency response procedures and communication protocols.</li> <li>• Establish unannounced security spot checks (e.g., verification of personal identification and door security) at access control points for critical facilities.</li> <li>• Increase frequency for posting employee reminders of the threat situation and about events that constitute security violations.</li> <li>• Ensure employees understand notification protocol in the event of a security breach.</li> <li>• Conduct security audit of physical security assets, such as fencing and lights, and repair or replace missing/broken assets. Remove debris from along fence-lines that could be stacked to facilitate scaling.</li> <li>• Maximize physical control of all equipment and vehicles inoperable when not in-use, (e.g., lock steering wheels, secure keys, chain and padlock on front-end loaders, etc.).</li> <li>• Review draft communications on potential incidents, brief media relations personnel of potential for press contact and/or issuance of release.</li> <li>• Review and update list of sensitive populations within the service area, such as hospitals, nursing homes, daycare centers, schools, etc., for notification, as appropriate, in the event of a specific threat against the utility.</li> <li>• Contact neighboring water utilities to review coordinated response plans and mutual aid during emergencies.</li> <li>• Review whether critical replacement parts are available and accessible.</li> </ul>
	Prevention	<ul style="list-style-type: none"> <li>• Carefully review all facility tour requests before approving. If allowed, implement security measures to include list of names prior to tour, request identification of each attendee prior to tour, prohibit backpacks/duffle bags, cameras and identify parking restrictions.</li> <li>• On a daily basis, inspect the interior and exterior of buildings in regular use for suspicious activity or packages, signs of tampering, or indications of unauthorized entry.</li> <li>• Implement mailroom security procedures. Follow guidance provided by the United States Postal Service.</li> </ul>
	Protection	<ul style="list-style-type: none"> <li>• Verify the identity of all personnel entering the water utility. Mandate visible use of identification badges. Randomly check identification badges and cards of those on the premises.</li> <li>• At the discretion of the facility manager or security director, remove all vehicles and objects (e.g., trash containers) located near mission critical facility security perimeters and other sensitive areas.</li> <li>• Verify the security of critical information systems (e.g., Supervisory Control and Data Acquisition (SCADA), Internet, email, etc.) and review safe computer and internet access procedures with employees to prevent cyber intrusion.</li> <li>• Consider steps needed to control access to all areas under the jurisdiction of the water utility.</li> </ul>

CONDITION	CONSIDER ADOPTING THESE MEASURES (and those at lower threat levels)	
<p><b>HIGH (ORANGE)</b> High Risk of Terrorist Attack</p> <p>signifies a high risk of terrorist attacks. Protective measures should focus on limiting facility access to essential staff and contractors, and coordinating security efforts with local law enforcement officials and the armed forces, as appropriate.</p>	Detection	<ul style="list-style-type: none"> <li>• Increase the frequency and extent of monitoring activities. Review results against baseline.</li> <li>• Confirm that county and state health officials are on high alert and will inform water utilities of any potential waterborne illnesses.</li> <li>• If a neighborhood watch-type program is in place, notify the community and request increased awareness.</li> </ul>
	Preparedness	<ul style="list-style-type: none"> <li>• Confirm emergency response and laboratory analytical support network are ready for deployment 24 hours per day, 7 days a week.</li> <li>• Reaffirm liaison with local police, intelligence, and security agencies to determine likelihood of an attack on the water utility personnel and facility and consider appropriate protective measures (e.g., road closing, extra surveillance, etc.).</li> <li>• Practice communications protocol with local authorities and others cited in the facility's emergency response plan.</li> <li>• Post frequent reminders for staff and contractors of the threat level, along with a reminder of what events constitute security violations.</li> <li>• Ensure employees are fully aware of emergency response communication protocols and have access to contact information for relevant law enforcement, public health, environmental protection, and emergency response organizations.</li> <li>• Inspect and practice activation of available emergency interconnections with neighboring water agencies.</li> <li>• Have alternative water supply plan ready to implement (e.g., bottled water delivery).</li> </ul>
	Prevention	<ul style="list-style-type: none"> <li>• Discontinue tours and prohibit public access to all operational facilities.</li> <li>• Consider requesting increased law enforcement surveillance, particularly of critical assets and otherwise unprotected areas.</li> </ul>
	Protection	<ul style="list-style-type: none"> <li>• Evaluate need to staff water treatment/production facility at all times.</li> <li>• Consider the need to prohibit recreational use of surface water reservoirs.</li> <li>• Increase security patrol activity to the maximum level sustainable and ensure tight security in the vicinity of mission critical facilities. Vary the timing of security patrols.</li> <li>• Request employees change password on critical information management systems.</li> </ul>

CONDITION	CONSIDER ADOPTING THESE MEASURES (and those at lower threat levels)	
<p><b>SEVERE (RED)</b> Severe Risk of Terrorist Attack</p> <p>signifies a severe risk of terrorist attacks. Protective measures should focus on the decision to close specific facilities and the redirection of staff resources to critical operations.</p>	Detection	<ul style="list-style-type: none"> <li>• Ensure that list of sensitive populations (e.g., hospitals, nursing homes, daycare centers, schools, etc.) within the service area is accurate and shared with appropriate public health officials.</li> <li>• Reconfirm that county and state health officials are on high alert and will inform water utilities of any potential waterborne illnesses.</li> </ul>
	Preparedness	<ul style="list-style-type: none"> <li>• Post daily notices to staff regarding threat level and appropriate security practices</li> <li>• Where appropriate, place back-up operational capacity on-line (water treatment plant filters, turbines, etc.).</li> <li>• Ensure key utility personnel are on duty.</li> <li>• Where appropriate, provide public notification for citizens to store emergency water supply or to implement other preparatory measures.</li> <li>• Evaluate the need for opening an emergency operations center.</li> </ul>
	Prevention	<ul style="list-style-type: none"> <li>• As appropriate, request increased law enforcement and/or security agency surveillance, particularly of critical assets and otherwise unprotected areas (e.g., consider if National Guard assistance is needed and make appropriate request).</li> <li>• Limit access to facilities and activities to essential personnel.</li> <li>• Consider whether mail and packages should go to a central, secure location and be inspected before distribution. Remind mailroom personnel of the need for heightened awareness when sorting and distributing all incoming mail.</li> </ul>
	Protection	<ul style="list-style-type: none"> <li>• Ensure existing security policies, procedures, and equipment are effectively implemented.</li> <li>• Recheck security of all on-site chemical storage and utilization areas.</li> <li>• Implement frequent and staggered inspections of the exterior of buildings (to include roof areas) and parking areas.</li> <li>• Re-check the security of critical information systems (e.g., SCADA, Internet, email, etc.) and have staff change computer passwords.</li> <li>• Consider placing staff at remote (typically unmanned) facilities.</li> </ul>

# Concept Of Operations



## Communication Procedures

## **PUBLIC NOTICE**

### **CONSUMER ALERT DURING WATER OUTAGES OR PERIODS OF LOW PRESSURE**

1. If you are experiencing water outages or low water pressure, immediately discontinue any non-essential water usage. This includes all outdoor irrigation and car washing. Minimizing usage will reduce the potential for the water system to lose pressure or completely run out of water. Please notify your water system of the outage or low pressure.
2. If the water looks cloudy or dirty, you should not drink it. Upon return of normal water service, you should flush the hot and cold water lines until the water appears clear and the water quality returns to normal.
3. If you are concerned about the water quality or are uncertain of its safety, you may add eight drops of household bleach to one gallon of water and let it sit for 30 minutes or alternatively, if you are able, water can be boiled for one minute at a rolling boil to ensure its safety.
4. Use of home treatment devices does not guarantee the water supply is safe after low pressure situations.
5. Do not be alarmed if you experience higher than normal chlorine concentrations in your water supply since the California Department of Public Health is advising public water utilities to increase chlorine residuals in areas subject to low pressure or outages.
6. The California Department of Public Health has also advised public water systems to increase the bacteriological water quality monitoring of the distribution system in areas subject to low pressure. They may be collecting samples in your area to confirm that the water remains safe. You will be advised if the sampling reveals a water quality problem.
7. Your water system is committed to make certain that an adequate quantity of clean, wholesome, and potable water is delivered to you. We recommend that you discuss the information in this notice with members of your family to ensure that all family members are prepared should water outages or low water pressure occur.

## Restoration and Recovery

# Emergency Response Training

**CALIFORNIA STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS)  
APPROVED COURSE OF INSTRUCTION**

<b>COURSE NAME</b>	<b>TARGET AUDIENCE</b>	<b>INSTRUCTIONAL GOAL</b>	<b>NO. MODULES DURATION</b>	<b>TYPE COURSE</b>
<b>Introductory Course</b>	For all water agency personnel that may become involved in multi-agency or multi-jurisdictional response at any level	Provides basic understanding of SEMS, common terms, and information required to work within and support a SEMS response	Three modules 1-2 hours	Self study with instructor option Test is optional
<b>Field (ICS) Course ICS orientation I-100</b>	Intended as a progressive program A general Orientation to ICS for water agency personnel working in field support roles, and for personnel who require a minimum ICS orientation.	Review ICS organization, basic terminology for resources and facilities and responsibilities related to an incident	Module #1 1 hour	Self study. Optional Test
<b>ICS Basic I-200</b>	Water agency personnel who respond to an incident to assist or support the organizations but do not normally supervise others	Covers features and principles of ICS, organization, incident resources facilities, and common responsibilities	Modules 2-6 12 hours	Instructor based with exercises and tests
<b>ICS intermediate I-300</b>	Water agency personnel who supervise an ICS branch, division, group, or unit, or are members of the Command Staff.	Covers Incident organization, resource management air operations, incident and event planning	Modules 7-11 22 hours	Instructor based with exercises and tests
<b>ICS Advanced I-400</b>	Water agency personnel who will supervise sections; Command staff; Incident or Area Commanders; also those who may assume key agency management roles over incidents	Covers General and Command Staff roles in depth, major incident management, Unified and Area Command. Also addresses California Mutual Aid and coordination between the field, local government and Op. Area EOC's	Modules 12-17 22 hours	Instructor based with exercises and tests
<b>Emergency Operations Center Course</b>	Water agency personnel who will fill support, supervisory, or management roles in the agency EOC or EOC at a regional or service area level	Covers principles of disaster and EOC management, field and local EOC interface, SEMS functional areas, concepts and procedures, intelligence, and mutual aid for all EOC levels.	9 Modules *12 hours * 8 hours of intro. Course taken previously	Instructor -based. Five modules for all EOC's. 4 additional modules to cover each SEMS EOC level.
<b>Executive Course</b>	Water agency executives, administrators and policy makers within agencies that are required to support a SEMS emergency response	Provides background of the law, common terms, basic elements of SEMS, organizational roles and titles, and the need for executive support.	2 modules 2 to 3 hours	Self study or instructional based

**NOTE:** Course delivery times may vary substantially depending on the experience level of the audience  
SEMS User Organizations must assess internal training needs and make adjustments as required.

## APPENDIX H

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### Water Rates

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## **CITY COUNCIL MINUTES**

**January 28, 2013**

Mayor Vierra called the January 28, 2013 City Council Meeting to order at 7:00 p.m. with the following in attendance:

**ROLL CALL** Council Members Durossette, Ingwerson, Kline, Lane, Mayor Vierra

**INVOCATION** by Pastor Mark Whitehead, Victory Assembly of God

**PLEDGE OF ALLEGIANCE** to the flag led by Mayor Vierra

### **PRESENTATIONS**

- A. Proclamation declaring February 2013 African American History Month in the City of Ceres.  
*Continued to the meeting of February 11, 2013.*
- B. Council Update from Dr. Dan Lucky and Mr. Frank Johnson, NAACP. *Continued to the meeting of February 11, 2013.*
- C. Ceres Youth Commission report to Council.

**APPROVAL OF THE MINUTES** of the regular meeting of January 14, 2013. (All present)

**ACTION:** Moved by Durossette/Seconded by Kline to approve the minutes of the regular meeting of January 14, 2013. **Motion Carried Unanimously. (5/0)**

**CITIZEN COMMUNICATIONS** – None.

### **APPROVAL OF AGENDA AS POSTED (OR AMENDED) AND CERTIFICATION OF POSTING**

**ACTION:** Moved by Ingwerson/Seconded by Kline to approve the agenda as posted (or amended) and certification of posting. **Motion Carried Unanimously. (5/0)**

**APPOINTMENTS TO BOARDS/COMMISSIONS** – None.

**CONFLICT OF INTEREST DECLARATION** – None.

### **CONSENT CALENDAR**

- 1. General Correspondence – Information Only
  - a. Public Works monthly report for December 2012.
- 2. Register of Audited Demands for period covering January 11-16, 2013.

**ACTION:** Moved by Lane/Seconded by Kline to approve Consent Calendar Items 1a -2 as recommended by staff. **Motion Carried Unanimously. (5/0)**

**CONSIDERATION OF ITEM(S) REMOVED FROM THE CONSENT CALENDAR** – None.



**UNFINISHED BUSINESS – None.**

**PUBLIC HEARINGS**

3. **PUBLIC HEARING** - to consider necessary adjustments to the fees for Water and Sewer Rates, Determination of protests, and consideration of Resolution No. 2013-07, Adopting changes to the Water and Sewer Service fee rate structure, effective July 1, 2013.

Mr. Toby Wells, Deputy City Manager presented a brief staff report.

7:22 p.m. The Public Hearing was opened.

Those speaking in opposition to the proposed water and sewer rate increase:

- Jerry Davis, resident – rates are too costly for low income families.
- Yetta Purdue, resident – the City should have a program to help low-income families. *She will be contacting staff to check for a leak on her property.*
- David Yonan, resident – the City is penalizing residents with large lots and/or swimming pools.
- Scott Kane, Las Casitas Mobile Home Park – sewer rates are out of proportion to the water rates. *Staff recommended Mr. Kane install a separate water meter for landscaping only, that would reduce his sewer rates.*

Other speakers:

- Jim Bergamaschi, resident – commented that he was not connected to City services for many years and considers himself fortunate to have City water and sewer.
- Albert Avila, resident – the rate increase is fair to all residents. Regardless the lot size, if you use more water you should pay more.

7:54 p.m. There being no one else wishing to speak, Mayor Vierra closed the Public Hearing.

Mayor Vierra asked the City Clerk if she had calculated the number of protest received both prior to and during the protest hearing.

Cindy Heidorn, City Clerk responded: "The total number of protests received against the proposed increase of water rate is 24. The total number of protests received against the proposed sewer rate is 24."

Mayor Vierra stated: "The City would need to receive 6,359 protests to reach a majority protest. The number of protests received do not constitute a majority protest of the proposed increase in either water or sewer rates."

After some Council discussion the following motion was made:

**ACTION:** Moved by Kline/Seconded by Lane to approve Resolution No. 2013-07, adopting changes to the Water and Sewer Service fee rate structure, effective July 1, 2013, with the following modification:

**Volumetric Charges – per 1,000 gallons  
Single Family**

Existing	New
Tier 1 – 0 to 50,000	Tier 1 – 0 to 75,000
Tier 2 – over 50,000	Tier 2 – over 75,000

**Motion Carried Unanimously. (5/0)**

**NEW BUSINESS – None.**

**COUNCILMEMBER REFERRALS – None.**

**REPORTS**

Toby Wells, Deputy City Manager, reported on the February 11, 2013 Study Session which will be an update on the Stanislaus County Vision presented by StanCOG. County Supervisor, Jim DeMartini reported that the County Board of Supervisors would be voting on the finance plan for Monterey Park at their next meeting.

8:39 p.m. There being no further business, Mayor Vierra adjourned the City Council Meeting.

/s/ Mayor Chris Vierra

/s/ Cindy Heidorn, CMC, City Clerk

**RESOLUTION NO. 2013- 07**

**RESOLUTION ADOPTING NECESSARY CHANGES TO THE WATER AND SEWER SERVICE FEE RATE STRUCTURE**

**EFFECTIVE JULY 1, 2013**

**City Council  
CITY OF CERES**

**WHEREAS, the quality and security of our local water supply and the proper maintenance of our sewer system is essential to our community's health and safety; and**

**WHEREAS, evolving state and federal regulations impact our aging water and sewer systems and our City must comply with mandates or face costly fines or environmental lawsuits; and**

**WHEREAS, no State or Federal funds are available to cities to meet these new regulatory demands; and**

**WHEREAS, the City's water and sewer infrastructure is old and has deteriorated; water from some water wells must be treated to improve the water quality, and others need to be upgraded or replaced completely; and**

**WHEREAS, our local water system must be properly maintained and protected to ensure clean, safe drinking water and secure, adequate water capacity in the event of a major earthquake, fire, or catastrophic emergency; and**

**WHEREAS, Ceres has had difficulty meeting peak flow water demands and infrastructure improvements are needed to improve capacity and ensure safety; and**

**WHEREAS, as sewer lines age, they must be maintained more frequently and deficient pipes, pump stations, and undersized and aging infrastructure at the Waste Water Treatment Plant (WWTP) must be replaced and/or rehabilitated; and**

**WHEREAS, now, like surrounding jurisdictions, the City of Ceres must make significant capital and infrastructure improvements to its aging water and sewer systems; and**

**WHEREAS, in response to the condition of the City's water and sewer systems and the increasing demands of State and Federal regulation of those systems, the City Council has directed a review of the City's costs of providing water and sewer services for Fiscal Year 2012-13 through Fiscal year 2017-18, including whether fees for services must be adjusted to account for increases in costs, compliance with State and Federal Regulation, and to undertake necessary improvements to the City's aging water and sewer systems; and**

**WHEREAS, the City Council received a presentation from staff and independent experts at several study sessions, lastly on July 23, 2012 for sewer and on August 27, 2012 and September 24, 2012 for water, addressing issues including changes in the regulatory environment for water and sewer services, increases in the cost of providing services through the time periods listed above, and necessary changes to the fees that the City charges for those services to pay for increasing costs; and**

**WHEREAS, the presentations included a written analysis of water service prepared by West Yost Associates and HF & H Consultants ("Water Rate Study") and a written analysis of sewer service prepared by Stantec Consulting Services, Inc and G. Aronow consulting ("Sewer Rate Study") (together the "Rate Studies"). The Rate Studies show that:**

- (a) Revenues derived from the proposed fees will not exceed the funds required to provide water and sewer services.**

- (b) Revenues derived from the proposed fees will not be used for any purpose other than paying for water and sewer services.
- (c) The amount of the proposed fees will not exceed the proportional cost of the water or sewer service attributable to the customer's use of the service.
- (d) The proposed fees will be imposed only for a customer's actual use of water and sewer services.
- (e) The proposed fees will not be imposed for general governmental services; and

**WHEREAS**, at the regularly scheduled City Council meeting on November 26, 2012, City Council adopted Resolution No. 2012-163 directing staff to schedule a Public Hearing for January 28, 2013 to consider necessary adjustments to fees for water and sewer service and established the rules for counting protests; and

**WHEREAS**, the City Council duly held a Public Hearing at the regular meeting of January 28, 2013, where interested persons were all given the opportunity to address the Council regarding the matter and to file written protests to the proposed new rate structure prior to the close of the public hearing.

**NOW, THEREFORE**, the City Council of the City of Ceres does make the following findings:

1. That written notice of the Public Hearing regarding the proposed water and sewer service rate structure was duly given by mail on December 7, 2012.
2. That the Public Hearing to consider the proposed new water and sewer service rate structure was held at least forty-five (45) days after mailing of the Notice of Public Hearing.
3. That the Notice of Public Hearing identified the amount of the proposed fees, the basis on which the proposed fees were calculated and the reason for the implementation of the new water and sewer service rate structure, as required by California Constitution, Art. XIII D, § 6(a)(1).
4. The Council actions taken by this resolution are not subject to review under the California Environmental Quality Act because they will not have a direct or reasonably foreseeable indirect physical change on the environment (14 Cal. Code Regs. §15060(c)); and, for the further reason that the Council actions are statutorily exempt from CEQA as they involve the approval of rates, tolls, fares and charges for the purpose of meeting operating expenses. (14 Cal Code Regs. §15273).
5. That all interested persons attending the Public Hearing were given an opportunity to address the City Council regarding the proposed new water and sewer service fee structure and to file written protests prior to the close of the Public Hearing.
6. That the City has determined that the total number of parcels affected by the new sewer and water service rate structure is 12,716.
7. That following the closing of the Public Hearing, the City Clerk of the City of Ceres determined that the number of parcels for which valid written protests were filed protesting the proposed new water and sewer rate structure was:
  - a. Number of parcels protesting water rate change: 24
  - b. Number of parcels protesting sewer rate change: 24
8. The City Council therefore finds that the number of valid written protests are insufficient to constitute a majority protest of the proposed increases to either water or sewer rates.

NOW, THEREFORE, IT IS HEREBY RESOLVED by the City Council of the City of Ceres that the new water and sewer service rate structure attached hereto as Exhibit "A" is adopted and approved.

BE IT FURTHER RESOLVED that the new water and sewer service rate structure shall become effective as of July 1, 2013.

PASSED AND ADOPTED this 28<sup>th</sup> day of January 2013, by the following vote:

AYES: Councilmembers Durossette, Ingwerson, Kline, Lane, Mayor Vierra

NOES: None

ABSENT: None



Chris Vierra, Mayor

ATTEST:

  
Cindy Heldorn, CMC, City Clerk

## Exhibit A

Monthly Water Rate Summary (Inside City)<sup>1</sup>

Fiscal Year (Rates become effective on July 1 of each year)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
	Current	Proposed	Proposed	Proposed	Proposed	Proposed
<b>Service Charges - per meter</b>						
5/8" & 3/4" Meter	\$20.42	\$20.38	\$20.30	\$20.25	\$20.19	\$20.13
1" Meter	\$24.91	\$23.96	\$23.00	\$22.04	\$21.09	\$20.13
1 1/2" Meter	\$31.38	\$34.16	\$36.95	\$39.73	\$42.51	\$45.30
2" Meter	\$50.22	\$56.28	\$62.34	\$68.41	\$74.47	\$80.53
3" Meter	\$84.23	\$115.65	\$137.07	\$158.49	\$179.91	\$201.33
4" Meter	\$157.08	\$206.20	\$255.31	\$304.43	\$353.54	\$402.66
6" Meter	\$313.78	\$412.08	\$510.39	\$608.70	\$707.01	\$805.31
8" Meter	\$502.51	\$688.34	\$874.17	\$1,060.00	\$1,245.84	\$1,431.67
<b>Volumetric Charges - per 1,000 gallons</b>						
<u>Single Family</u>						
Tier 1 - 0 to 75,000 gallons	\$0.72	\$1.00	\$1.29	\$1.59	\$1.78	\$2.00
Tier 2 - over 75,000 gallons	\$0.72	\$1.45	\$1.88	\$2.31	\$2.69	\$2.90
<u>All Other Customers</u>						
For all metered water use	\$1.45	\$1.45	\$1.48	\$1.59	\$1.78	\$2.00

<sup>1</sup> Customers outside the City limits pay 1.50 times Inside-City rates because of the increased cost of service.

## Exhibit B

## Sewer Rate Summary

Current Rate		***** Calculated Rates (2) *****									
		2013-14		2014-15		2015-16		2016-17		2017-18	
Fixed/ Base	per 1,000 Gal	Fixed/ Base	per 1,000 Gal	Fixed/ Base	per 1,000 Gal	Fixed/ Base	per 1,000 Gal	Fixed/ Base	per 1,000 Gal	Fixed/ Base	per 1,000 Gal
<b>MAIN CITY</b>											
<b>Residential</b>											
Residential per Unit	\$43.99	\$44.99		\$49.33		\$52.96		\$56.30		\$59.03	
<b>Non-Residential Flat Rate (1)</b>											
Group 1 per Account	\$43.99	\$44.99		\$49.33		\$52.96		\$56.30		\$59.03	
Group 2 per Account	\$63.16	\$64.92		\$71.10		\$76.40		\$81.27		\$85.22	
Group 3 per Account	\$82.36	\$84.86		\$92.88		\$99.84		\$108.23		\$111.40	
Group 4 per Account	\$99.98	\$92.81		\$101.57		\$109.19		\$118.20		\$121.85	
Group 5 per Account	\$74.70	\$78.88		\$84.17		\$90.48		\$96.25		\$100.93	
Group 6 per Account	\$48.29	\$47.38		\$51.94		\$55.77		\$59.30		\$62.17	
<b>Non-Residential Metered (1)</b>											
Group 1 per Account	\$35.19 \$1.45	\$35.69 \$1.71	\$39.46 \$1.87	\$42.36 \$2.01	\$45.04 \$2.14	\$47.22 \$2.24					
Group 2 per Account	\$60.65 \$2.08	\$51.94 \$2.46	\$58.88 \$2.70	\$61.12 \$2.90	\$65.01 \$3.08	\$68.17 \$3.23					
Group 3 per Account	\$65.90 \$2.71	\$87.89 \$3.22	\$74.30 \$3.52	\$79.87 \$3.79	\$84.99 \$4.03	\$89.12 \$4.23					
Group 4 per Account	\$71.88 \$2.96	\$74.25 \$3.52	\$81.25 \$3.85	\$87.35 \$4.14	\$92.96 \$4.41	\$97.48 \$4.62					
Group 5 per Account	\$59.78 \$2.46	\$61.51 \$2.92	\$67.33 \$3.19	\$72.37 \$3.43	\$77.00 \$3.65	\$80.74 \$3.83					
Group 6 per Account	\$37.03 \$1.52	\$37.91 \$1.80	\$41.55 \$1.97	\$44.81 \$2.12	\$47.44 \$2.25	\$49.74 \$2.36					
<b>NORTH CERES</b>											
Current Rate		***** Calculated Rates *****									
		2013-14		2014-15		2015-16		2016-17		2017-18	
Fixed/ Base	per 1,000 Gal	Fixed/ Base	per 1,000 Gal	Fixed/ Base	per 1,000 Gal	Fixed/ Base	per 1,000 Gal	Fixed/ Base	per 1,000 Gal	Fixed/ Base	per 1,000 Gal
<b>Residential</b>											
Residential per Unit	\$54.84	\$46.43		\$50.10		\$52.33		\$53.48		\$54.89	
<b>Non-Residential Flat Rate (1)</b>											
Group 1 per Account	\$54.84	\$46.43		\$50.10		\$52.33		\$53.48		\$54.89	
Group 2 per Account	\$78.77	\$87.00		\$72.21		\$75.49		\$77.20		\$78.95	
Group 3 per Account	\$102.70	\$87.57		\$84.33		\$88.65		\$100.91		\$103.21	
Group 4 per Account	\$112.17	\$95.78		\$103.15		\$107.90		\$110.38		\$112.89	
Group 5 per Account	\$93.13	\$79.34		\$85.48		\$89.39		\$91.43		\$93.50	
Group 6 per Account	\$57.82	\$48.90		\$52.78		\$55.10		\$56.31		\$57.57	
<b>Non-Residential Metered (1)</b>											
Group 1 per Account	\$43.87 \$1.60	\$37.14 \$1.78	\$40.08 \$1.90	\$41.88 \$1.99	\$42.78 \$2.03	\$43.75 \$2.07					
Group 2 per Account	\$63.01 \$2.59	\$53.60 \$2.54	\$57.77 \$2.74	\$60.39 \$2.88	\$61.78 \$2.83	\$63.18 \$2.89					
Group 3 per Account	\$82.16 \$3.38	\$70.05 \$3.32	\$75.46 \$3.58	\$78.82 \$3.74	\$80.73 \$3.83	\$82.57 \$3.92					
Group 4 per Account	\$89.74 \$3.69	\$78.62 \$3.63	\$82.62 \$3.91	\$86.32 \$4.09	\$88.30 \$4.19	\$90.31 \$4.28					
Group 5 per Account	\$74.50 \$3.08	\$63.47 \$3.01	\$68.39 \$3.24	\$71.51 \$3.39	\$73.14 \$3.47	\$74.80 \$3.55					
Group 6 per Account	\$46.25 \$1.90	\$39.12 \$1.86	\$42.20 \$2.00	\$44.08 \$2.09	\$45.05 \$2.14	\$46.06 \$2.18					

(1) Groups defined as follows:

Group 1: No food, just toilets or washing facilities

Group 2: Commercial laundromats, Service Stations, Hotels with no food

Group 3: Industrial laundromats, hotels with food

Group 4: Restaurants, Bakeries, Auto Steam, Markets

Group 5: Multi-User Accounts

Group 6: Schools

(2) Step 1 costs only

## **APPENDIX I**

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Water Audit



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# AWWA Water Loss Control Committee (WLCC) Free Water Audit Software v4.2

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WAS v4.2

**PURPOSE:** This spreadsheet-based water audit tool is designed to help quantify and track water losses associated with water distribution systems and identify areas for improved efficiency and cost recovery. It provides a "top-down" summary water audit format, and is not meant to take the place of a full-scale, comprehensive water audit format.

**USE:** The spreadsheet contains several separate worksheets. Sheets can be accessed using the tabs towards the bottom of the screen, or by clicking the buttons on the left below. Descriptions of each sheet are also given below.

**THE FOLLOWING KEY APPLIES THROUGHOUT:**

	Value can be entered by user
	Value calculated based on input data
	These cells contain recommended default values

Please begin by providing the following information, then proceed through each sheet in the workbook:

NAME OF CITY OR UTILITY:	City of Ceres	COUNTRY:	Stanislaus		
REPORTING YEAR:	2015	START DATE (MM/YYYY):	01/2015	END DATE (MM/YYYY):	12/2015
NAME OF CONTACT PERSON:	Loretta Webb	E-MAIL:	loretta.webb@ci.ceres.ca.us	TELEPHONE:	209-538-5688
				Ext.	n/a
PLEASE SELECT PREFERRED REPORTING UNITS FOR WATER VOLUME:	Million gallons (US)				

Click to advance to sheet...

Click here: ? for help about units and conversions

<a href="#">Instructions</a>	The current sheet
<a href="#">Reporting Worksheet</a>	Enter the required data on this worksheet to calculate the water balance
<a href="#">Water Balance</a>	The values entered in the Reporting Worksheet are used to populate the water balance
<a href="#">Grading Matrix</a>	Depending on the confidence of audit inputs, a grading is assigned to the audit score
<a href="#">Service Connections</a>	Diagrams depicting possible customer service connection configurations
<a href="#">Definitions</a>	Use this sheet to understand terms used in the audit process
<a href="#">Loss Control Planning</a>	Use this sheet to interpret the results of the audit validity score and performance indicators

**Comments:**

Add comments here to track additional supporting information, sources or names of participants

--

If you have questions or comments regarding the software please contact us at: [wlc@awwa.org](mailto:wlc@awwa.org)

# AWWA WLCC Free Water Audit Software: Reporting Worksheet

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WAS v4.2

[Back to Instructions](#)

[?](#) Click to access definition

Water Audit Report for: **City of Ceres**

Reporting Year: **2015** **1/2015 - 12/2015**

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: **MILLION GALLONS (US) PER YEAR**

## WATER SUPPLIED

<< Enter grading in column 'E'

Volume from own sources:	<a href="#">?</a>	<a href="#">10</a>	<input type="text" value="2,105.000"/>	Million gallons (US)/yr (MG/Yr)
Master meter error adjustment (enter positive value):	<a href="#">?</a>	<a href="#">10</a>	<input type="text" value=""/>	MG/Yr
Water imported:	<a href="#">?</a>	<a href="#">n/a</a>	<input type="text" value="0.000"/>	MG/Yr
Water exported:	<a href="#">?</a>	<a href="#">n/a</a>	<input type="text" value="0.000"/>	MG/Yr
<b>WATER SUPPLIED:</b>			<input type="text" value="2,105.000"/>	MG/Yr

## AUTHORIZED CONSUMPTION

Billed metered:	<a href="#">?</a>	<a href="#">10</a>	<input type="text" value="1,943.751"/>	MG/Yr	Click here: <a href="#">?</a> for help using option buttons below  Use buttons to select percentage of water supplied OR value
Billed unmetered:	<a href="#">?</a>	<a href="#">n/a</a>	<input type="text" value="0.000"/>	MG/Yr	
Unbilled metered:	<a href="#">?</a>	<a href="#">10</a>	<input type="text" value="21.050"/>	MG/Yr	
Unbilled unmetered:	<a href="#">?</a>	<a href="#">10</a>	<input type="text" value="26.313"/>	MG/Yr	
Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed					Pcnt: <a href="#">1.25%</a> Value: <input type="text" value=""/> Use buttons to select percentage of water supplied OR value
<b>AUTHORIZED CONSUMPTION:</b>	<a href="#">?</a>		<input type="text" value="1,991.114"/>	MG/Yr	

## WATER LOSSES (Water Supplied - Authorized Consumption)

MG/Yr

## Apparent Losses

Unauthorized consumption:	<a href="#">?</a>	<a href="#">10</a>	<input type="text" value="5.263"/>	MG/Yr	Pcnt: <a href="#">0.25%</a> Value: <input type="text" value=""/> Use buttons to select percentage of water supplied OR value  Choose this option to enter a percentage of billed metered consumption. This is NOT a default value
Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed					
Customer metering inaccuracies:	<a href="#">?</a>	<a href="#">7</a>	<input type="text" value="29.921"/>	MG/Yr	
Systematic data handling errors:	<a href="#">?</a>	<a href="#">10</a>	<input type="text" value="0.100"/>	MG/Yr	
Apparent Losses:	<a href="#">?</a>		<input type="text" value="35.283"/>		

## Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses:	<a href="#">?</a>		<input type="text" value="78.603"/>	MG/Yr
<b>WATER LOSSES:</b>			<input type="text" value="113.887"/>	MG/Yr

## NON-REVENUE WATER

**NON-REVENUE WATER:** [?](#)  MG/Yr

= Total Water Loss + Unbilled Metered + Unbilled Unmetered

## SYSTEM DATA

Length of mains:	<a href="#">?</a>	<a href="#">10</a>	<input type="text" value="154.0"/>	miles
Number of active AND inactive service connections:	<a href="#">?</a>	<a href="#">9</a>	<input type="text" value="11,646"/>	
Connection density:			<input type="text" value="76"/>	conn./mile main
Average length of customer service line:	<a href="#">?</a>	<a href="#">10</a>	<input type="text" value="30.0"/>	ft (pipe length between curbstop and customer meter or property boundary)
Average operating pressure:	<a href="#">?</a>	<a href="#">10</a>	<input type="text" value="50.0"/>	psi

## COST DATA

Total annual cost of operating water system:	<a href="#">?</a>	<a href="#">10</a>	<input type="text" value="\$3,574,198"/>	\$/Year
Customer retail unit cost (applied to Apparent Losses):	<a href="#">?</a>	<a href="#">8</a>	<input type="text" value="\$0.32"/>	\$/1000 gallons (US)
Variable production cost (applied to Real Losses):	<a href="#">?</a>	<a href="#">10</a>	<input type="text" value="\$303.19"/>	\$/Million gallons

## PERFORMANCE INDICATORS

### Financial Indicators

Non-revenue water as percent by volume of Water Supplied:	<input type="text" value="7.7%"/>
Non-revenue water as percent by cost of operating system:	<input type="text" value="1.4%"/>
Annual cost of Apparent Losses:	<input type="text" value="\$11,291"/>
Annual cost of Real Losses:	<input type="text" value="\$23,832"/>

### Operational Efficiency Indicators

Apparent Losses per service connection per day:	<input type="text" value="8.30"/>	gallons/connection/day
Real Losses per service connection per day*:	<input type="text" value="18.49"/>	gallons/connection/day
Real Losses per length of main per day*:	<input type="text" value="N/A"/>	
Real Losses per service connection per day per psi pressure:	<input type="text" value="0.37"/>	gallons/connection/day/psi
<a href="#">?</a> Unavoidable Annual Real Losses (UARL):	<input type="text" value="56.14"/>	million gallons/year
From Above, Real Losses = Current Annual Real Losses (CARL):	<input type="text" value="78.60"/>	million gallons/year
<a href="#">?</a> Infrastructure Leakage Index (ILI) [CARL/UARL]:	<input type="text" value="1.40"/>	

\* only the most applicable of these two indicators will be calculated

## WATER AUDIT DATA VALIDITY SCORE:

**\*\*\* YOUR SCORE IS: 92 out of 100 \*\*\***

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

## PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

- 1: Unauthorized consumption
- 2: Customer metering inaccuracies
- 3: Customer retail unit cost (applied to Apparent Losses)

[For more information, click here to see the Grading Matrix worksheet](#)

## **APPENDIX J**

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### **UWMP Adoption Resolution**

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**RESOLUTION NO. 2016-077**

**PUBLIC HEARING TO CONSIDER THE APPROVAL OF RESOLUTION NO. 2016-077, ADOPTING THE 2015 URBAN WATER MANAGEMENT PLAN INCLUDING THE METHOD FOR DETERMINING URBAN WATER USE TARGETS AS REQUIRED BY THE WATER CONSERVATION ACT OF 2009.**

**THE CITY COUNCIL**  
City of Ceres

**WHEREAS**, the Urban Water Management Planning Act (Act) requires water suppliers with 3,000 connections or more or supplying 3,000 or more acre-feet of water per year to prepare an Urban Water Management Plan (UWMP) every five years ; and,

**WHEREAS**, the UWMP assists water suppliers in mapping out long-term water resource planning to ensure an adequate water supply is available to meet existing and future water demands over a 20-year planning horizon ; and,

**WHEREAS**, the water suppliers are required to report, describe, and evaluate water deliveries and uses, existing and future water supply sources, efficient water uses, demand management measures, water shortage contingency planning and drought response actions ; and,

**WHEREAS**, the City must adopt the method for determining urban water use targets as required by the Water Conservation Act of 2009 (SB X7-7), which requires cities to achieve a 20% per capita per day reduction by 2020 ; and,

**WHEREAS**, a public notice was noticed in the Modesto Bee and Ceres Courier two times each two weeks prior to the public hearing; and,

**WHEREAS**, the City of Ceres has prepared the 2015 UWMP in compliance with the Act and will submit the report to the State of California's Department of Water Resources by July 1, 2016.

**NOW THEREFORE BE IT HEREBY RESOLVED** that the City Council of the City of Ceres does hereby adopts:

1. The 2015 Urban Water Management Plan Update.
2. Target Method 1 for calculating the final 2020 urban water use target.

**PASSED AND ADOPTED** by the Ceres City Council at a regular meeting thereof held on the 27<sup>th</sup> day of June, by the following vote:

**AYES:** Council Members: Durossette, Kline, Mayor Vierra

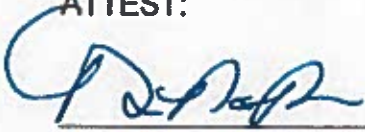
**NOES:** Council Members: None

**ABSENT:** Council Members: Lane, Ryno



Chris Vierra, Mayor

ATTEST:



Diane Nayares-Perez, City Clerk