



## Appendix A

### Legislative Requirements



## WATER CODE - WAT

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

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

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

### 10608.

The Legislature finds and declares all of the following:

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

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

### 10608.4

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

- (a) Require all water suppliers to increase the efficiency of use of this essential resource.
- (b) Establish a framework to meet the state targets for urban water conservation identified in this part and called for by the Governor.
- (c) Measure increased efficiency of urban water use on a per capita basis.
- (d) Establish a method or methods for urban retail water suppliers to determine targets for achieving increased water use efficiency by the year 2020, in accordance with the Governor's goal of a 20-percent reduction.
- (e) Establish consistent water use efficiency planning and implementation standards for urban water suppliers and agricultural water suppliers.
- (f) Promote urban water conservation standards that are consistent with the California Urban Water Conservation Council's adopted best management practices and the requirements for demand management in Section 10631.
- (g) Establish standards that recognize and provide credit to water suppliers that made substantial capital investments in urban water conservation since the drought of the early 1990s.
- (h) Recognize and account for the investment of urban retail water suppliers in providing recycled water for beneficial uses.
- (i) Require implementation of specified efficient water management practices for agricultural water suppliers.
- (j) Support the economic productivity of California's agricultural, commercial, and industrial sectors.
- (k) Advance regional water resources management.

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



## **10608.8**

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

(2) Because an urban agency is not required to meet its urban water use target until 2020 pursuant to subdivision

(a) of Section 10608.24, an urban retail water supplier's failure to meet those targets shall not establish a violation of law for purposes of any state administrative or judicial proceeding prior to January 1, 2021.

Nothing in this paragraph limits the use of data reported to the department or the board in litigation or an administrative proceeding. This paragraph shall become inoperative on January 1, 2021.

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

(b) This part does not limit or otherwise affect the application of Chapter 3.5 (commencing with Section 11340), Chapter 4 (commencing with Section 11370), Chapter 4.5 (commencing with Section 11400), and Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

(c) This part does not require a reduction in the total water used in the agricultural or urban sectors, because other factors, including, but not limited to, changes in agricultural economics or population growth may have greater effects on water use. This part does not limit the economic productivity of California's agricultural, commercial, or industrial sectors.

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

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



## **WATER CODE - WAT**

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

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

**CHAPTER 9. Urban Water Use Objectives and Water Use Reporting [10609 - 10609.38]** ( *Chapter 9 added by Stats. 2018, Ch. 15, Sec. 7.* )

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

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

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

(A) Indoor residential use.

(B) Outdoor residential use.

(C) CII water use.

(D) Water losses.

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

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

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

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

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

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

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

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

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

(4) This chapter preserves the Legislature's authority over long-term water use efficiency target setting and ensures appropriate legislative oversight of the implementation of this chapter by doing all of the following:

(A) Requiring the Legislative Analyst to conduct a review of the implementation of this chapter, including compliance with the adopted standards and regulations, accuracy of the data, use of alternate data, and other

issues the Legislative Analyst deems appropriate.

(B) Stating legislative intent that the director of the department and the chairperson of the board appear before the appropriate Senate and Assembly policy committees to report on progress in implementing this chapter.

(C) Providing one-time-only authority to the department and board to adopt water use efficiency standards, except as explicitly provided in this chapter. Authorization to update the standards shall require separate legislation.

(c) It is the intent of the Legislature that the following principles apply to the development and implementation of long-term standards and urban water use objectives:

(1) Local urban retail water suppliers should have primary responsibility for meeting standards-based water use targets, and they shall retain the flexibility to develop their water supply portfolios, design and implement water conservation strategies, educate their customers, and enforce their rules.

(2) Long-term standards and urban water use objectives should advance the state's goals to mitigate and adapt to climate change.

(3) Long-term standards and urban water use objectives should acknowledge the shade, air quality, and heat-island reduction benefits provided to communities by trees through the support of water-efficient irrigation practices that keep trees healthy.

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

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

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

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

(1) Outdoor residential water use.

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

(3) A volume for water loss.

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

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

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

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

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

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

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

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

management, including potable water usage, wastewater, recycling and reuse systems, infrastructure, operations, and supplies.

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

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

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

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

(B) The standards shall apply to irrigable lands.

(C) The standards shall include provisions for swimming pools, spas, and other water features. Ornamental water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, shall be analyzed separately from swimming pools and spas.

(b) The department shall, by January 1, 2021, provide each urban retail water supplier with data regarding the area of residential irrigable lands in a manner that can reasonably be applied to the standards adopted pursuant to this section.

(c) The department shall not recommend standards pursuant to this section until it has conducted pilot projects or studies, or some combination of the two, to ensure that the data provided to local agencies are reasonably accurate for the data's intended uses, taking into consideration California's diverse landscapes and community characteristics.

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

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

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

(c) The standards shall include an exclusion for water for commercial agricultural use meeting the definition of subdivision (b) of Section 51201 of the Government Code.

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

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

(a) Evapotranspiration adjustment factors, as applicable.

(b) Landscape area.

(c) Maximum applied water allowance.

(d) Reference evapotranspiration.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) Identify urban water reporting requirements shared by both agencies, and post on each agency's Internet Web site how the data is used for planning, regulatory, or other purposes.

(b) Analyze opportunities for more efficient publication of urban water reporting requirements within each agency, and analyze how each agency can integrate various data sets in a publicly accessible location, identify priority actions, and implement priority actions identified in the analysis.

(c) Make appropriate data pertaining to the urban water reporting requirements that are collected by either agency available to the public according to the principles and requirements of the Open and Transparent Water Data Act (Part 4.9 (commencing with Section 12400)).

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

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

(a) Determining the irrigable lands within the urban retail water supplier's service area.

(b) Updating and revising methodologies described pursuant to subparagraph (A) of paragraph (1) of subdivision (h) of Section 10608.20, as appropriate, including methodologies for calculating the population in an urban retail water supplier's service area.

(c) Using landscape area data provided by the department or alternative data.

(d) Incorporating precipitation data and climate data into estimates of a urban retail water supplier's outdoor irrigation budget for its urban water use objective.

(e) Estimating changes in outdoor landscape area and population, and calculating the urban water use objective, for years when updated landscape imagery is not available from the department.

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

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

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

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

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

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

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

(1) Aggregate estimated efficient indoor residential water use.

(2) Aggregate estimated efficient outdoor residential water use.

(3) Aggregate estimated efficient outdoor irrigation of landscape areas with dedicated irrigation meters or equivalent technology in connection with CII water use.

(4) Aggregate estimated efficient water losses.

(5) Aggregate estimated water use in accordance with variances, as appropriate.

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

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

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

(A) The bonus incentive shall not exceed 15 percent of the urban water supplier's water use objective for any potable reuse water produced at an existing facility.

(B) The bonus incentive shall not exceed 10 percent of the urban water supplier's water use objective for any potable reuse water produced at any facility that is not an existing facility.

(4) For purposes of this subdivision, "existing facility" means a facility that meets all of the following:

(A) The facility has a certified environmental impact report, mitigated negative declaration, or negative declaration on or before January 1, 2019.

(B) The facility begins producing and delivering potable reuse water on or before January 1, 2022.

(C) The facility uses microfiltration and reverse osmosis technologies to produce the potable reuse water.

(e) (1) The calculation of the urban water use objective shall be made using landscape area and other data provided by the department and pursuant to the standards, guidelines, and methodologies adopted by the board. The department shall provide data to the urban water supplier at a level of detail sufficient to allow the urban water supplier to verify its accuracy at the parcel level.

(2) Notwithstanding paragraph (1), an urban retail water supplier may use alternative data in calculating the urban water use objective if the supplier demonstrates to the department that the alternative data are equivalent, or superior, in quality and accuracy to the data provided by the department. The department may provide technical assistance to an urban retail water supplier in evaluating whether the alternative data are appropriate for use in calculating the supplier's urban water use objective.

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

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

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

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

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

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

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

(1) Aggregate residential water use.

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

(3) Aggregate water losses.

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

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

(1) The urban water use objective calculated pursuant to Section 10609.20 along with relevant supporting data.

(2) The actual urban water use calculated pursuant to Section 10609.22 along with relevant supporting data.

(3) Documentation of the implementation of the performance measures for CII water use.

(4) A description of the progress made towards meeting the urban water use objective.

(5) The validated water loss audit report conducted pursuant to Section 10608.34.

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

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

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

**10609.25.** As part of the first report submitted to the department by an urban retail water supplier no later than January 1, 2024, pursuant to subdivision (a) of Section 10609.24, each urban retail water supplier shall provide a

narrative that describes the water demand management measures that the supplier plans to implement to achieve its urban water use objective by January 1, 2027.

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

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

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

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

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

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

(c) (1) On and after January 1, 2026, the board may issue a conservation order to an urban retail water supplier that does not meet its urban water use objective. A conservation order may consist of, but is not limited to, referral to the department for technical assistance, requirements for education and outreach, requirements for local enforcement, and other efforts to assist urban retail water suppliers in meeting their urban water use objective.

(2) In issuing a conservation order, the board shall identify specific deficiencies in an urban retail water supplier's progress towards meeting its urban water use objective, and identify specific actions to address the deficiencies.

(3) The board may request that the department provide an urban retail water supplier with technical assistance to support the urban retail water supplier's actions to remedy the deficiencies.

(d) A conservation order issued in accordance with this chapter may include requiring actions intended to increase water-use efficiency, but shall not curtail or otherwise limit the exercise of a water right, nor shall it require the imposition of civil liability pursuant to Section 377.

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

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

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

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

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

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

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

**10609.30.** On or before January 10, 2024, the Legislative Analyst shall provide to the appropriate policy committees of both houses of the Legislature and the public a report evaluating the implementation of the water use efficiency

standards and water use reporting pursuant to this chapter. The board and the department shall provide the Legislative Analyst with the available data to complete this report.

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

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

(2) The accuracy of the data and estimates being used to calculate urban water use objectives.

(3) Indications of the economic impacts, if any, of the implementation of this chapter on urban water suppliers and urban water users, including CII water users.

(4) The frequency of use of the bonus incentive, the volume of water associated with the bonus incentive, value to urban water suppliers of the bonus incentive, and any implications of the use of the bonus incentive on water use efficiency.

(5) The early indications of how implementing this chapter might impact the efficiency of statewide urban water use.

(6) Recommendations, if any, for improving statewide urban water use efficiency and the standards and practices described in this chapter.

(7) Any other issues the Legislative Analyst deems appropriate.

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

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

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

(b) What enforcement actions have been taken, if any.

(c) The accuracy of the data and estimates being used to calculate urban water use objectives.

(d) Indications of the economic impacts, if any, of the implementation of this chapter on urban water suppliers and urban water users, including CII water users.

(e) The frequency of use of the bonus incentive, the volume of water associated with the bonus incentive, value to urban water suppliers of the bonus incentive, and any implications of the use of the bonus incentive on water use efficiency.

(f) An assessment of how implementing this chapter is affecting the efficiency of statewide urban water use.

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

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

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

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

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

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

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

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

consideration the breadth of the damage and the time necessary for the damaged areas to recover from the disaster.

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



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

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

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

[10610](#) This part shall be known and may be cited as the “Urban Water Management Planning Act.”

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

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

(1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.

(2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.

(3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate, and increasing long-term water conservation among Californians, improving water use efficiency within the state's communities and agricultural production, and strengthening local and regional drought planning are critical to California's resilience to drought and climate change.

(4) As part of its long-range planning activities, every urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years now and into the foreseeable future, and every urban water supplier should collaborate closely with local land-use authorities to ensure water demand forecasts are consistent with current land-use planning.

(5) Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.

(6) Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.

(7) Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.

(8) Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.

(9) The quality of source supplies can have a significant impact on water management strategies and supply reliability.

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

(*Amended by Stats. 201B, Ch. 14, Sec. 18. (SB 606) Effective January 1, 201 9.*)

[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.



**CHAPTER 2. Definitions [10611 - 10618] ( Chapter 2 added by Stats. 1983, Ch. 1009, iec. 1. )**

[10611.](#) Unless the context otherwise requires, the definitions of this chapter govern the construction of this part.

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

[10611.3](#) “Customer” means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.

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

[10611.5](#) “Demand management” means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.

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

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

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

[10613.](#) “Efficient use” means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable method of use.

*(Added by Stats. 1983, Ch. 1009, Exec. 1.)*

[10614.](#) “Person” means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.

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

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

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

[10616.](#) “Public agency” means any board, commission, county, city and county, city, regional agency, district, or other public entity.

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

[10616.5](#) “Recycled water” means the reclamation and reuse of wastewater for beneficial use.

*(Added by Stats. 1995, Ch. 854, Sec. 5. Effective January 1, 1996)*

[10617.](#) “Urban water supplier” means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water



supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

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

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

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

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

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



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

**ARTICLE 1. General Provisions [10620 - 1 0621] ( Article 1 added by Stats. 1 983, Ch. 1009, Sec. 1. )**

- [10620.](#) (a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).
- (b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.
- (c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.
- (d) (l) An urban water supplier may satisfy the requirements of this part by participation in areawide, regional, watershed, or basinwide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation, efficient water use, and improved local drought resilience.
- (2) Notwithstanding paragraph (1), each urban water supplier shall develop its own water shortage contingency plan, but an urban water supplier may incorporate, collaborate, and otherwise share information with other urban water suppliers or other governing entities participating in an areawide, regional, watershed, or basinwide urban water management plan, an agricultural management plan, or groundwater sustainability plan development.
- (3) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.
- (e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.
- (f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.
- (Amended by Stats. 2018, Ch. 14, Sec. 24. (SB 606) Effective January 1, 2019.)*

- [10621](#) (a) Each urban water supplier shall update its plan at least once every five years on or before July 1, in years ending in six and one, incorporating updated and new information from the five years preceding each update.
- (b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days before the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.
- (c) An urban water supplier regulated by the Public Utilities Commission shall include its most recent plan and water shortage contingency plan as part of the supplier's general rate case filings.
- (d) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640)
- (e) Each urban water supplier shall update and submit its 2015 plan to the department by July1, 2016



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

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



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

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

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

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

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

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

[10631](#) A plan shall be adopted in accordance with this chapter that shall do all of the following:

(a) Describe the service area of the supplier, including current and projected population, climate, and other social, economic, and demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available. The description shall include the current and projected land uses within the existing or anticipated service area affecting the supplier's water management planning. Urban water suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land use information, including, where appropriate, land use information obtained from local or regional land use authorities, as developed pursuant to Article 5 (commencing with Section 65300) of Chapter 3 of Division 1 of Title 7 of the Government Code.

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

(1) A detailed discussion of anticipated supply availability under a normal water year, single dry year, and droughts lasting at least five years, as well as more frequent and severe periods of drought, as described in the drought risk assessment. For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.

(2) When multiple sources of water supply are identified, a description of the management of each supply in correlation with the other identified supplies.

(3) For any planned sources of water supply, a description of the measures that are being undertaken to acquire and develop those water supplies.

(4) If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information:

The current version of any groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720), any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management for basins underlying the urban water supplier's service area.



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

(B) 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.

(C) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

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

(d) (I) For an urban retail water supplier, quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following:

(A) Single-family residential.

(B) Multifamily.

(C) Commercial.

(D) Industrial.

(E) Institutional and governmental.

(F) Landscape.

(G) Sales to other agencies.

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

(I) Agricultural.

(J) Distribution system water loss.

(2) The water use projections shall be in the same five-year increments described in subdivision (a).

(3) (A) The distribution system water loss shall be quantified for each of the five years preceding the plan update, in accordance with rules adopted pursuant to Section 10608.34.

(B) The distribution system water loss quantification shall be reported in accordance with a worksheet approved or developed by the department through a public process. The water loss quantification worksheet shall be based on the water system balance methodology developed by the American Water Works Association.

(C) In the plan due July 1, 2021, and in each update thereafter, data shall be included to show whether the urban retail water supplier met the distribution loss standards enacted by the board pursuant to Section 10608.34.

(4) (A) Water use projections, where available, shall display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use



plans identified by the urban water supplier, as applicable to the service area.

(B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following:

(i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections.

(ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.

(e) Provide a description of the supplier's water demand management measures. This description shall include all of the following:

(1) (A) For an urban retail water supplier, as defined in Section 10608.12, a narrative description that addresses the nature and extent of each water demand management measure implemented over the past five years. The narrative shall describe the water demand management measures that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.

(B) For the supplement required of urban retail water suppliers by paragraph (2) of subdivision (f) of Section 10621, a narrative that describes the water demand management measures that the supplier plans to implement to achieve its urban water use objective by January 1, 2027, pursuant to Chapter 9 (commencing with Section 10609) of Part 2.55.

(C) 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 (C) of paragraph (1), and a narrative description of its distribution system asset management and wholesale supplier assistance programs.

(f) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use, as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in normal and single-dry water years and for a period of drought lasting five consecutive water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.

(g) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.



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

*(Amended by Stats. 2018, Ch. 14, Sec. 28. (SB 606) Effective January 1, 2019.)*

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

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

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

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

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

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

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

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

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

- (1) The analysis of water supply reliability conducted pursuant to Section 10635.
- (2) The procedures used in conducting an annual water supply and demand assessment



that include, at a minimum, both of the following:

(A) The written decision making process that an urban water supplier will use each year to determine its water supply reliability.

(B) The key data inputs and assessment methodology used to evaluate the urban water supplier's water supply reliability for the current year and one dry year, including all of the following:

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

(ii) Current year available supply, considering hydrological and regulatory conditions in the current year and one dry year. The annual supply and demand assessment may consider more than one dry year solely at the discretion of the urban water supplier.

(iii) Existing infrastructure capabilities and plausible constraints.

(iv) A defined set of locally applicable evaluation criteria that are consistently relied upon for each annual water supply and demand assessment.

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

(3) (A) Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50 percent shortages and greater than 50 percent shortage. Urban water suppliers shall define these shortage levels based on the suppliers' water supply conditions, including percentage reductions in water supply, changes in groundwater levels, changes in surface elevation or level of subsidence, or other changes in hydrological or other local conditions indicative of the water supply available for use. Shortage levels shall also apply to catastrophic interruption of water supplies, including, but not limited to, a regional power outage, an earthquake, and other potential emergency events.

(B) An urban water supplier with an existing water shortage contingency plan that uses different water shortage levels may comply with the requirement in subparagraph (A) by developing and including a cross-reference relating its existing categories to the six standard water shortage levels.

(4) Shortage response actions that align with the defined shortage levels and include, at a minimum, all of the following:

(A) Locally appropriate supply augmentation actions. Locally appropriate demand reduction actions to adequately respond to shortages.

(B) Locally appropriate operational changes.

(C) Additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions.

(D) For each action, an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.

(5) Communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding, at a minimum, all of the following:

(A) Any current or predicted shortages as determined by the annual water supply and demand assessment described pursuant to Section 10632.1.

(B) Any shortage response actions triggered or anticipated to be triggered by the annual water supply and demand assessment described pursuant to Section 10632.1.

(C) Any other relevant communications.

(6) For an urban retail water supplier, customer compliance, enforcement, appeal, and exemption



procedures for triggered shortage response actions as determined pursuant to Section 10632.2.

(7) (A) A description of the legal authorities that empower the urban water supplier to implement and enforce its shortage response actions specified in paragraph (4) that may include, but are not limited to, statutory authorities, ordinances, resolutions, and contract provisions.

(B) A statement that an urban water supplier shall declare a water shortage emergency in accordance with Chapter 3 (commencing with Section 350) of Division 1.

(C) A statement that an urban water supplier shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency, as defined in Section 8558 of the Government Code.

(8) A description of the financial consequences of, and responses for, drought conditions, including, but not limited to, all of the following:

(A) A description of potential revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).

(B) A description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).

(C) A description of the cost of compliance with Chapter 3.3 (commencing with Section 365) of Division 1.

(9) For an urban retail water supplier, monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.

(10) Reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the water shortage contingency plan in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.

(b) For purposes of developing the water shortage contingency plan pursuant to subdivision (a), an urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

(c) The urban water supplier shall make available the water shortage contingency plan prepared pursuant to this article to its customers and any city or county within which it provides water supplies no later than 30 days after adoption of the water shortage contingency plan.

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

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

*(Added by Stats. 2018, Ch. 14, Sec. 33. (SB 606) Effective January 1, 2019.)*

[10632.2](#) An urban water supplier shall follow, where feasible and appropriate, the prescribed procedures and implement determined shortage response actions in its water shortage contingency plan, as identified in subdivision

(a) of Section 10632, or reasonable alternative actions, provided that descriptions of the alternative actions are submitted with the annual water shortage assessment report pursuant to Section



10632.1. Nothing in this section prohibits an urban water supplier from taking actions not specified in its water shortage contingency plan, if needed, without having to formally amend its urban water management plan or water shortage contingency plan.

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

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

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

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

(b) An urban water supplier shall update the seismic risk assessment and mitigation plan when updating its urban water management plan as required by Section 10621.

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

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

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

(a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

(b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.

(c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.

(d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

(e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

(f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.

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



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

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

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



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

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

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

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

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

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

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

(e) Nothing in this article is intended to change existing law concerning an urban water supplier's obligation to provide water service to its existing customers or to any potential future customers

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



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

**ARTICLE 3. Adoption and Implementation of Plans [1 0640 - 10645] Article 3 added by Stats. 1983, Ch. 1009, Sec. 1.)**

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

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

*(Amended by Stats. 2018, Ch. 14, Sec. 37. (SB 606a Effective January 1, 20J 9.g*

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

*(Amended by Stats. 2018, Ch. 14, Sec. 38. (SB 606a Effective January 1, 20J 9.g*

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

*(Amended by Stats. 2018, Ch. 14, Sec. 39. (SB 606\$ Effective January 1, 70J 9.g*

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

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

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

(2) The plan, or amendments to the plan, submitted to the department pursuant to paragraph (1)



shall be submitted electronically and shall include any standardized forms, tables, or displays specified by the department.

(b) If an urban water supplier revises its water shortage contingency plan, the supplier shall submit to the department a copy of its water shortage contingency plan prepared pursuant to subdivision (a) of Section 10632 no later than 30 days after adoption, in accordance with protocols for submission and using electronic reporting tools developed by the department.

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

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

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

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

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

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

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

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

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



**CHAPTER 4. Miscellaneous Provisions [1 0650 - 10657] ( Chapter 4 added by :itats. 1 983, Ch. 1009, iec. 1. )**

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

(a) An action or proceeding alleging failure to adopt a plan or a water shortage contingency plan shall be commenced within 18 months after that adoption is required by this part.

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

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

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

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

[10652](#) The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part or to the implementation of actions taken pursuant to Section 10632. Nothing in this part shall be interpreted as exempting from the California Environmental Quality Act any project that would significantly affect water supplies for fish and wildlife, or any project for implementation of the plan, other than projects implementing Section 10632, or any project for expanded or additional water supplies.

*(Amended by Stats. 1995, Ch. 854, Sec. 6. Effective January 1, 1996.)*

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

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

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

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

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



*(Amended by Stats. 1983, Ch. 1009, Sec. 1)*

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

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

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

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



## Appendix B

### DWR 2020 Urban Water Management Plan Tables

Submittal Table 2-1 Retail Only: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2020	Volume of Water Supplied 2020 *
<i>Add additional rows as needed</i>			
CA3110004	City of Lincoln	19,661	10,567
<b>TOTAL</b>		<b>19,661</b>	<b>10,567</b>
<b>* Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.</b>			
NOTES: Volume of water supplied is in acre-feet (AF).			

Submittal Table 2-2: Plan Identification		
Select Only One	Type of Plan	Name of RUWMP or Regional Alliance <i>if applicable</i> (select from drop down list)
<input checked="" type="checkbox"/>	<b>Individual UWMP</b>	
	<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"/>	<b>Regional Urban Water Management Plan (RUWMP)</b>	

Submittal Table 2-3: Supplier Identification	
Type of Supplier (select one or both)	
<input type="checkbox"/>	Supplier is a wholesaler
<input checked="" type="checkbox"/>	Supplier is a retailer
Fiscal or Calendar Year (select one)	
<input checked="" type="checkbox"/>	UWMP Tables are in calendar years
<input type="checkbox"/>	UWMP Tables are in fiscal years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
Units of measure used in UWMP * (select from drop down)	
Unit	AF
* <b>Units of measure (AF, CCF, MG)</b> must remain consistent throughout the UWMP as reported in Table 2-3.	

Submittal Table 2-4 Retail: Water Supplier Information Exchange
The retail Supplier has informed the following wholesale supplier(s) of projected water use in accordance with Water Code Section 10631.
Wholesale Water Supplier Name
<i>Add additional rows as needed</i>
Placer County Water Agency
Nevada Irrigation District
NOTES: Although the City is conservatively assuming that it will not utilize supply from the Nevada Irrigation District (NID) in the future, projected City water use within NID's service area was provided to NID for use in its planning efforts.

Submittal Table 3-1 Retail: Population - Current and Projected						
Population Served	2020	2025	2030	2035	2040	2045(opt)
		49,317	57,100	61,300	68,000	74,700
<p>NOTES: 2020 population from California Department of Finance, E-4 Historical Population Estimates for Cities, Counties, and the State, 2011-2020, with 2010 Census Benchmark. Published May 2020.</p> <p>Population projections for 2025 through 2045 are based on housing development projections provided by City Community Development staff and assume an average household size of 2.67 people.</p>						

Submittal Table 4-1 Retail: Demands for Potable and Non-Potable Water - Actual			
Use Type	2020 Actual		
<p><b>Drop down list</b> May select each use multiple times These are the only Use Types that will be recognized by the WUedata online submittal tool</p>	Additional Description (as needed)	Level of Treatment When Delivered Drop down list	Volume*
Add additional rows as needed			
Single Family		Drinking Water	7,674
Multi-Family		Drinking Water	227
Commercial		Drinking Water	546
Industrial		Drinking Water	86
Landscape		Drinking Water	838
Other	Hydrant Water	Drinking Water	203
Other	Metered Use with Unknown Use Type	Drinking Water	174
Losses		Drinking Water	819
<b>TOTAL</b>			<b>10,567</b>
<p><b>* Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.</b></p>			
<p>NOTES: Units are in acre-feet (AF). Does not include raw water delivered by NID or PCWA to customers within the City's potable water service area. Existing Institutional and Governmental use may be included under Commercial or Other (Metered Use with Unknown Use Type).</p>			

**Submittal Table 4-2 Retail: Use for Potable and Non-Potable Water - Projected**

Use Type	Additional Description (as needed)	Projected Water Use*				
		Report To the Extent that Records are Available				
<u>Drop down list</u> May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool		2025	2030	2035	2040	2045 (opt)
Add additional rows as needed						
Single Family	See Note A	8,770	9,320	10,350	11,380	12,410
Multi-Family		230	310	410	510	610
Commercial	See Note B	580	720	950	1,180	1,420
Industrial		90	90	270	450	630
Institutional/Governmental	See Note C	0	20	50	70	100
Landscape	See Note D	830	1,000	1,140	1,270	1,120
Other	Hydrant Water	200	200	200	200	200
Other	Metered Use with Unknown Use Type	170	170	170	170	170
Losses	See Note E	950	1,060	1,250	1,450	1,640
<b>TOTAL</b>		<b>11,820</b>	<b>12,890</b>	<b>14,790</b>	<b>16,680</b>	<b>18,300</b>

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

NOTES: Units are in acre-feet (AF). Projections rounded to nearest ten AF.

A) Includes Country Estates, Low Density Residential, and Medium Density Residential land use types.

B) Includes Commercial, Business Professional, and Mixed Use land use types.

C) Existing Institutional and Governmental use may be included under Commercial or Other (Metered Use with Unknown Use Type).

D) Includes existing landscape use plus projected future use for Parks and Recreation land use type. Projected future landscaping use for other land use types is included under the respective use type.

E) Equal to 2020 water loss plus assumed future development water loss rate of 10 percent.

<b>Submittal Table 4-3 Retail: Total Water Use (Potable and Non-Potable)</b>						
	2020	2025	2030	2035	2040	2045 (opt)
Potable Water, Raw, Other Non-potable <i>From Tables 4-1R and 4-2 R</i>	10,567	11,820	12,890	14,790	16,680	18,300
Recycled Water Demand <sup>1</sup> <i>From Table 6-4</i>	2,522	3,050	3,090	3,140	3,180	3,510
Optional Deduction of Recycled Water Put Into Long-Term Storage <sup>2</sup>						
<b>TOTAL WATER USE</b>	13,089	14,870	15,980	17,930	19,860	21,810
<p><sup>1</sup> Recycled water demand fields will be blank until Table 6-4 is complete</p> <p><sup>2</sup> Long term storage means water placed into groundwater or surface storage that is not removed from storage in the same year. Supplier <i>may</i> deduct recycled water placed in long-term storage from their reported demand. This value is manually entered into Table 4-3.</p>						
NOTES: Units are in acre-feet (AF). Projections rounded to nearest ten AF.						

Submittal Table 4-4 Retail: Last Five Years of Water Loss Audit Reporting	
Reporting Period Start Date (mm/yyyy)	Volume of Water Loss <sup>1,2</sup>
01/2016	989
01/2017	995
01/2018	807
01/2019	949
01/2020	819
<sup>1</sup> Taken from the field "Water Losses" (a combination of apparent losses and real losses) from the AWWA worksheet. <sup>2</sup> Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.	
NOTES: Units are in acre-feet (AF). The City's 2020 water audit has not yet been prepared. City water loss for 2020 is estimated using data presented in Table 4-2 (DWR Table 4-1).	

Submittal Table 4-5 Retail Only: Inclusion in Water Use Projections	
<b>Are Future Water Savings Included in Projections?</b> (Refer to Appendix K of UWMP Guidebook) <i>Drop down list (y/n)</i>	No
If "Yes" to above, state the section or page number, in the cell to the right, where citations of the codes, ordinances, or otherwise are utilized in demand projections are found.	
<b>Are Lower Income Residential Demands Included In Projections?</b> <i>Drop down list (y/n)</i>	Yes

<b>Submittal Table 5-1 Baselines and Targets Summary</b> <b>From SB X7-7 Verification Form</b> <i>Retail Supplier or Regional Alliance Only</i>				
Baseline Period	Start Year *	End Year *	Average Baseline GPCD*	Confirmed 2020 Target*
10-15 year	2000	2009	241	193
5 Year	2005	2009	239	
<i>*All cells in this table should be populated manually from the supplier's SBX7-7 Verification Form and reported in Gallons per Capita per Day (GPCD)</i>				

<b>Submittal Table 5-2: 2020 Compliance</b> <b>From SB X7-7 2020 Compliance Form</b> <i>Retail Supplier or Regional Alliance Only</i>				
2020 GPCD			2020 Confirmed Target GPCD*	Did Supplier Achieve Targeted Reduction for 2020? Y/N
Actual 2020 GPCD*	2020 TOTAL Adjustments*	Adjusted 2020 GPCD* <i>(Adjusted if applicable)</i>		
191	0	191	193	Y
<i>*All cells in this table should be populated manually from the supplier's SBX7-7 2020 Compliance Form and reported in Gallons per Capita per Day (GPCD)</i>				

Submittal Table 6-1 Retail: Groundwater Volume Pumped						
<input type="checkbox"/>	Supplier does not pump groundwater. The supplier will not complete the table below.					
<input type="checkbox"/>	All or part of the groundwater described below is desalinated.					
Groundwater Type <i>Drop Down List</i> May use each category multiple times	Location or Basin Name	2016*	2017*	2018*	2019*	2020*
<i>Add additional rows as needed</i>						
Alluvial Basin	Sacramento Valley – North American Subbasin	543	734	344	660	628
<b>TOTAL</b>		543	734	344	660	628
* <b>Units of measure (AF, CCF, MG)</b> must remain consistent throughout the UWMP as reported in Table 2-3.						
NOTES: Units are in acre-feet (AF).						

Submittal Table 6-2 Retail: Wastewater Collected Within Service Area in 2020						
<input type="checkbox"/>	There is no wastewater collection system. The supplier will not complete the table below.					
	Percentage of 2015 service area covered by wastewater collection system (optional)					
	Percentage of 2015 service area population covered by wastewater collection system (optional)					
Wastewater Collection			Recipient of Collected Wastewater			
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? <i>Drop Down List</i>	Volume of Wastewater Collected from UWMP Service Area 2020 *	Name of Wastewater Treatment Agency Receiving Collected Wastewater	Treatment Plant Name	Is WWTP Located Within UWMP Area? <i>Drop Down List</i>	Is WWTP Operation Contracted to a Third Party? <i>(optional) Drop Down List</i>
City of Lincoln	Metered	3,380	City of Lincoln	Wastewater Treatment and Reclamation Facility	Yes	No
<b>Total Wastewater Collected from Service Area in 2020:</b>		3,380				
* Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3 .						
NOTES: Units are in acre-feet (AF). Wastewater Collected within UWMP Service Area is equal to total wastewater influent to WWTRF less wastewater flow from Placer County's Sewer Maintenance District No. 1.						

Submittal Table 6-3 Retail: Wastewater Treatment and Discharge Within Service Area in 2020											
<input type="checkbox"/>	No wastewater is treated or disposed of within the UWMP service area. The supplier will not complete the table below.										
Wastewater Treatment Plant Name	Discharge Location Name or Identifier	Discharge Location Description	Wastewater Discharge ID Number <i>(optional) 2</i>	Method of Disposal <i>Drop down list</i>	Does This Plant Treat Wastewater Generated Outside the Service Area? <i>Drop down list</i>	Treatment Level <i>Drop down list</i>	2020 volumes <sup>1</sup>				
							Wastewater Treated	Discharged Treated Wastewater	Recycled Within Service Area <sub>3</sub>	Recycled Outside of Service Area	Instream Flow Permit Requirement
WWTRF	001	Auburn Ravine Creek		River or creek outfall	Yes	Tertiary	4,950	1,970	172	2,350	0
<b>Total</b>							4,950	1,970	172	2,350	0
<sup>1</sup> Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3. <sup>2</sup> If the Wastewater Discharge ID Number is not available to the UWMP preparer, access the SWRCB CIWQS regulated facility website at <a href="https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/CiwqsReportServlet?InCommand=reset&amp;reportName=RegulatedFacility">https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/CiwqsReportServlet?InCommand=reset&amp;reportName=RegulatedFacility</a>											
NOTES: Units are in acre-feet (AF). Volume of wastewater treated includes wastewater collected from Placer County's Sewer Maintenance District No. 1.											

**Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area**

Recycled water is not used and is not planned for use within the service area of the supplier. The supplier will not complete the table below.

Name of Supplier Producing (Treating) the Recycled Water:	City of Lincoln
Name of Supplier Operating the Recycled Water Distribution System:	City of Lincoln
Supplemental Water Added in 2020 (volume) <i>Include units</i>	
Source of 2020 Supplemental Water	

Beneficial Use Type <i>Insert additional rows if needed.</i>	Potential Beneficial Uses of Recycled Water (Describe)	Amount of Potential Uses of Recycled Water (Quantity) <i>Include volume units<sup>1</sup></i>	General Description of 2020 Uses	Level of Treatment <i>Drop down list</i>	2020 <sup>1</sup>	2025 <sup>1</sup>	2030 <sup>1</sup>	2035 <sup>1</sup>	2040 <sup>1</sup>	2045 <sup>1</sup> (opt)
Agricultural irrigation	Irrigation of farmland near WWTRF		Rice and Fodder crops (not within current City limits)	Tertiary	2,350	2,840	2,840	2,840	2,840	2,840
Landscape irrigation (exc golf courses)	Irrigation of City parks and landscaping within western portion of City		Landscape medians, Foskett Regional Park	Tertiary	105	150	190	240	280	610
Golf course irrigation										
Commercial use										
Industrial use	Cooling and process water for industrial processes		Sierra Pacific Industries	Tertiary	65	60	60	60	60	60
Geothermal and other energy production										
Seawater intrusion barrier										
Recreational impoundment										
Wetlands or wildlife habitat										
Groundwater recharge (IPR)										
Reservoir water augmentation (IPR)										
Direct potable reuse										
Other (Description Required)	Construction dust control		Construction dust control	Tertiary	2	0	0	0	0	0
<b>Total:</b>					<b>2,522</b>	<b>3,050</b>	<b>3,090</b>	<b>3,140</b>	<b>3,180</b>	<b>3,510</b>

**2020 Internal Reuse**

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

NOTES: Units are in acre-feet (AF). Projections are rounded to the nearest ten AF. Projected recycled water use for 2040 is based on the projections for the Near-Term Development scenario presented in Table 6-10 of the City's Reclamation Master Plan. Landscape Irrigation projections for 2030 and 2035 are a linear progression between the 2020 and 2040 development scenarios. Landscape Irrigation projection for 2045 is based on a linear progression between the 2040 projection and the Long-Term Development scenario presented in Table 6-10 of the City's Reclamation Master Plan, assuming that the Long-Term Development scenario represents 2065 conditions.

**Submittal Table 6-5 Retail: 2015 UWMP Recycled Water Use Projection Compared to 2020 Actual**

Recycled water was not used in 2015 nor projected for use in 2020. The supplier will not complete the table below. If recycled water was not used in 2020, and was not predicted to be in 2015, then check the box and do not complete the table.

Beneficial Use Type	2015 Projection for 2020 <sup>1</sup>	2020 Actual Use <sup>1</sup>
<i>Insert additional rows as needed.</i>		
Agricultural irrigation	1,800	2,350
Landscape irrigation (exc golf courses)		
Golf course irrigation		
Commercial use		
Industrial use		
Geothermal and other energy production		
Seawater intrusion barrier		
Recreational impoundment		
Wetlands or wildlife habitat		
Groundwater recharge (IPR)		
Reservoir water augmentation (IPR)		
Direct potable reuse		
Other (Description Required)	1,500	172
<b>Total</b>	3,300	2,522

<sup>1</sup> Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.

NOTE: Units are in acre-feet (AF).  
 Projected 2020 recycled water use other than for agricultural irrigation was not broken out by use type in the City's 2015 UWMP

Submittal Table 6-6 Retail: Methods to Expand Future Recycled Water Use			
<input 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.		
See Section 6.2.5.3	Provide page location of narrative in UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use *
<i>Add additional rows as needed</i>			
<b>Total</b>			0
<b>*Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.</b>			
NOTES: Refer to Section 6.2.5.3 for expansion efforts explanation in narrative format.			

Submittal 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.					
Section 6.2.8	Provide page location of narrative in the UWMP					
Name of Future Projects or Programs	Joint Project with other suppliers?		Description (if needed)	Planned Implementation Year	Planned for Use in Year Type <i>Drop Down List</i>	Expected Increase in Water Supply to Supplier* <i>This may be a range</i>
	<i>Drop Down List (y/n)</i>	<i>If Yes, Supplier Name</i>				
<i>Add additional rows as needed</i>						
Recycled Water System Expansion	No			Ongoing	All Year Types	500
<b>*Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.</b>						
NOTES: Units are in acre-feet (AF). See text for narrative description of the Future Groundwater Wells project.						

**Submittal Table 6-8 Retail: Water Supplies — Actual**

Submittal Table 6-8 Retail: Water Supplies — Actual				
Water Supply	Additional Detail on Water Supply	2020		
<b>Drop down list</b> May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool		Actual Volume*	Water Quality Drop Down List	Total Right or Safe Yield* (optional)
Add additional rows as needed				
Purchased or Imported Water	PCWA	8,430	Drinking Water	
Purchased or Imported Water	NID	1,509	Drinking Water	
Groundwater (not desalinated)	City-owned Wells	628	Drinking Water	
Recycled Water	Produced at City's WWTRF	2,522	Recycled Water	
<b>Total</b>		<b>13,089</b>		<b>0</b>
<i>*Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.</i>				
NOTES: Units are in acre-feet (AF). Does not include raw water delivered by NID or PCWA to customers within the City's potable water service area.				

**Submittal Table 6-9 Retail: Water Supplies — Projected**

Water Supply	Additional Detail on Water Supply	Projected Water Supply * Report To the Extent Practicable									
		2025		2030		2035		2040		2045 (opt)	
		Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)
Add additional rows as needed											
Purchased or Imported Water	PCWA	10,640		11,600		13,310		15,020		16,480	
Purchased or Imported Water	NID	0		0		0		0		0	
Groundwater (not desalinated)	City-owned Wells	1,180		1,290		1,480		1,660		1,820	
Recycled Water	Produced at City's WWTRF	3,050		3,090		3,140		3,180		3,510	
<b>Total</b>		<b>14,870</b>	<b>0</b>	<b>15,980</b>	<b>0</b>	<b>17,930</b>	<b>0</b>	<b>19,860</b>	<b>0</b>	<b>21,810</b>	<b>0</b>

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

NOTES: Units are in acre-feet (AF). Projections rounded to nearest ten AF.

The City plans to meet 90 percent of potable demands with purchased surface water and 10 percent of potable demands with local groundwater. It is conservatively assumed that the City will not receive supply from NID in the future.

Recycled water demand projections are based on the City's Reclamation Master Plan.

Table O-1A: Recommended Energy Reporting - Water Supply Process Approach											
Enter Start Date for Reporting Period	1/1/2020		Urban Water Supplier Operational Control								
End Date	12/31/2020		Water Management Process					Non-Consequential Hydropower (if applicable)			
<input type="checkbox"/> s upstream embedded in the values reported?											
	Water Volume Units Used	Extract and Divert	Place into Storage	Conveyance	Treatment	Distribution	Total Utility	Hydropower	Net Utility		
Volume of Water Entering Process	AF	628	0	0	0	10567	10567		10567		
Energy Consumed (kWh)	N/A	444322	0	0	0	21207	465529		465529		
Energy Intensity (kWh/vol. converted to MG)	N/A	2171.3	0.0	0.0	0.0	6.2	135.2	0.0	135.2		
<b>Quantity of Self-Generated Renewable Energy</b>											
<input type="text"/> kWh											
<b>Data Quality</b> (Estimate, Metered Data, Combination of Estimates and Metered Data)											
Metered Data <input type="text"/>											
<b>Data Quality Narrative:</b>											
Energy consumption data provided by PG&E bills.											
<b>Narrative:</b>											
Extract and Divert includes City groundwater wells. Distribution includes the City's single booster pump station and other misc. instrumentation.											

**Table O-2: Recommended Energy Reporting - Wastewater & Recycled Water**

Enter Start Date for Reporting Period <b>1/1/2020</b>		<b>Urban Water Supplier Operational Control</b>				
End Date <b>12/31/2020</b>						
<b>Water Management Process</b>						
<input type="checkbox"/>	Is upstream embedded in the values reported?		Collection / Conveyance	Treatment	Discharge / Distribution	Total
			<b>Volume of Water Units Used</b>	AF		
<i>Volume of Wastewater Entering Process (volume units selected above)</i>			4950	4950	1970	4950
<i>Wastewater Energy Consumed (kWh)</i>			168477	7980430	2442	8151349
<i>Wastewater Energy Intensity (kWh/volume)</i>			104.5	4947.7	3.8	5053.7
<i>Volume of Recycled Water Entering Process (volume units selected above)</i>			0	0	2522	2522
<i>Recycled Water Energy Consumed (kWh)</i>			0	0	199922	199922
<i>Recycled Water Energy Intensity (kWh/volume converted to MG)</i>			0.0	0.0	243.3	243.3

**Quantity of Self-Generated Renewable Energy related to recycled water and wastewater operations**

kWh

**Data Quality** (*Estimate, Metered Data, Combination of Estimates and Metered Data*)

*Metered Data*

**Data Quality Narrative:**

Energy consumption data provided by PG&E bills.

**Narrative:**

Collection system process includes energy consumption for lift stations.  
 Wastewater treatment process includes treatment of all collected wastewater to meet the standards for unrestricted recycled water use under DDW Title 22. Some of this reclaimed water is discharged to Auburn Ravine, the remainder is distributed through the recycled water system. Also includes some energy consumption from pump stations which distribute recycled water.  
 Discharge and Distribution includes energy consumption for discharge and recycled water distribution pump stations.

**Submittal Table 7-1 Retail: Basis of Water Year Data for PCWA Water Supply (Reliability)**

Year Type	Base Year If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2019-2020, use 2020	Available Supplies if Year Type Repeats	
		<input type="checkbox"/>	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location _____
		<input checked="" type="checkbox"/>	Quantification of available supplies is provided in this table as either volume only, percent only, or both.
		Volume Available *	% of Average Supply
Average Year	See Notes		100%
Single-Dry Year	1977		100%
Consecutive Dry Years 1st Year	1988		100%
Consecutive Dry Years 2nd Year	1989		100%
Consecutive Dry Years 3rd Year	1990		100%
Consecutive Dry Years 4th Year	1991		100%
Consecutive Dry Years 5th Year	1992		100%

*Supplier may use multiple versions of Table 7-1 if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If a Supplier uses multiple versions of Table 7-1, in the "Note" section of each table, state that multiple versions of Table 7-1 are being used and identify the particular water source that is being reported in each table.*

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

NOTES: Units are in acre-feet (AF).

Multiple versions of Table 7-1 are being used, this table reports the reliability of PCWA supplies. PCWA uses modeling of the long-term hydrologic record to determine available supplies in an average year.

**OPTIONAL Table 7-1 Retail: Basis of Water Year Data for Groundwater Supply (Reliability)**

Year Type	Base Year If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2019-2020, use 2020	Available Supplies if Year Type Repeats	
		<input type="checkbox"/>	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location _____
		<input checked="" type="checkbox"/>	Quantification of available supplies is provided in this table as either volume only, percent only, or both.
		<b>Volume Available *</b>	<b>% of Average Supply</b>
Average Year	See Notes		100%
Single-Dry Year	1977		100%
Consecutive Dry Years 1st Year	1988		100%
Consecutive Dry Years 2nd Year	1989		100%
Consecutive Dry Years 3rd Year	1990		100%
Consecutive Dry Years 4th Year	1991		100%
Consecutive Dry Years 5th Year	1992		100%

*Supplier may use multiple versions of Table 7-1 if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If a Supplier uses multiple versions of Table 7-1, in the "Note" section of each table, state that multiple versions of Table 7-1 are being used and identify the particular water source that is being reported in each table.*

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

NOTES: Units are in acre-feet (AF).  
Multiple versions of Table 7-1 are being used, this table reports the reliability of supplies from the City operated groundwater wells.  
PCWA uses modeling of the long-term hydrologic record to determine available supplies in an average year.

**OPTIONAL Table 7-1 Retail: Basis of Water Year Data for Recycled Water Supply (Reliability)**

Year Type	Base Year If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2019-2020, use 2020	Available Supplies if Year Type Repeats	
		<input type="checkbox"/>	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location _____
		<input checked="" type="checkbox"/>	Quantification of available supplies is provided in this table as either volume only, percent only, or both.
		<b>Volume Available *</b>	<b>% of Average Supply</b>
Average Year	See Notes		100%
Single-Dry Year	1977		100%
Consecutive Dry Years 1st Year	1988		100%
Consecutive Dry Years 2nd Year	1989		100%
Consecutive Dry Years 3rd Year	1990		100%
Consecutive Dry Years 4th Year	1991		100%
Consecutive Dry Years 5th Year	1992		100%

*Supplier may use multiple versions of Table 7-1 if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If a Supplier uses multiple versions of Table 7-1, in the "Note" section of each table, state that multiple versions of Table 7-1 are being used and identify the particular water source that is being reported in each table.*

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

NOTES: Units are in acre-feet (AF).  
Multiple versions of Table 7-1 are being used, this table reports the reliability of the City's recycled water supplies.  
PCWA uses modeling of the long-term hydrologic record to determine available supplies in an average year.

<b>Submittal Table 7-2 Retail: Normal Year Supply and Demand Comparison</b>					
	2025	2030	2035	2040	2045 (Opt)
Supply totals (autofill from Table 6-9)	14,870	15,980	17,930	19,860	21,810
Demand totals (autofill from Table 4-3)	14,870	15,980	17,930	19,860	21,810
Difference	0	0	0	0	0
NOTES: Units are in acre-feet (AF). Table references refer to DWR table numbers.					

<b>Submittal Table 7-3 Retail: Single Dry Year Supply and Demand Comparison</b>					
	2025	2030	2035	2040	2045 (Opt)
Supply totals*	14,870	15,980	17,930	19,860	21,810
Demand totals*	14,870	15,980	17,930	19,860	21,810
Difference	0	0	0	0	0
<i>*Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.</i>					
NOTES: Units are in acre-feet (AF).					

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

		2025*	2030*	2035*	2040*	2045* (Opt)
First year	Supply totals	14,870	15,980	17,930	19,860	21,810
	Demand totals	14,870	15,980	17,930	19,860	21,810
	Difference	0	0	0	0	0
Second year	Supply totals	14,870	15,980	17,930	19,860	21,810
	Demand totals	14,870	15,980	17,930	19,860	21,810
	Difference	0	0	0	0	0
Third year	Supply totals	14,870	15,980	17,930	19,860	21,810
	Demand totals	14,870	15,980	17,930	19,860	21,810
	Difference	0	0	0	0	0
Fourth year	Supply totals	14,870	15,980	17,930	19,860	21,810
	Demand totals	14,870	15,980	17,930	19,860	21,810
	Difference	0	0	0	0	0
Fifth year	Supply totals	14,870	15,980	17,930	19,860	21,810
	Demand totals	14,870	15,980	17,930	19,860	21,810
	Difference	0	0	0	0	0
Sixth year (optional)	Supply totals	14,870	15,980	17,930	19,860	21,810
	Demand totals	14,870	15,980	17,930	19,860	21,810
	Difference	0	0	0	0	0

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

NOTES: Units are in acre-feet (AF).

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

<b>2021</b>		<b>Total</b>
Total Water Use		13,450
Total Supplies		13,450
Surplus/Shortfall w/o WSCP Action		0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)		
WSCP - supply augmentation benefit		
WSCP - use reduction savings benefit		
Revised Surplus/(shortfall)		0
Resulting % Use Reduction from WSCP action		0%
<b>2022</b>		
<b>Total</b>		
Total Water Use		13,800
Total Supplies		13,800
Surplus/Shortfall w/o WSCP Action		0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)		
WSCP - supply augmentation benefit		
WSCP - use reduction savings benefit		
Revised Surplus/(shortfall)		0
Resulting % Use Reduction from WSCP action		0%
<b>2023</b>		
<b>Total</b>		
Total Water Use		14,160
Total Supplies		14,160
Surplus/Shortfall w/o WSCP Action		0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)		
WSCP - supply augmentation benefit		
WSCP - use reduction savings benefit		
Revised Surplus/(shortfall)		0
Resulting % Use Reduction from WSCP action		0%
<b>2024</b>		
<b>Total</b>		
Total Water Use		14,510
Total Supplies		14,510
Surplus/Shortfall w/o WSCP Action		0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)		
WSCP - supply augmentation benefit		
WSCP - use reduction savings benefit		
Revised Surplus/(shortfall)		0
Resulting % Use Reduction from WSCP action		0%
<b>2025</b>		
<b>Total</b>		
Total Water Use		14,870
Total Supplies		14,870
Surplus/Shortfall w/o WSCP Action		0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)		
WSCP - supply augmentation benefit		
WSCP - use reduction savings benefit		
Revised Surplus/(shortfall)		0
Resulting % Use Reduction from WSCP action		0%
NOTES: Units are in acre-feet (AF).		

**OPTIONAL Table 7-5 Five-year Drought Risk Assessment Tables to address Water Code Section 10635(b) - Potable**

<b>2021</b>	<b>Total</b>
Total Water Use - <i>Potable</i>	10,820
Total Supplies - <i>Potable</i>	10,820
Surplus/Shortfall w/o WSCP Action	0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%
<b>2022</b>	<b>Total</b>
Total Water Use [Use Worksheet]	11,070
Total Supplies [Supply Worksheet]	11,070
Surplus/Shortfall w/o WSCP Action	0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%
<b>2023</b>	<b>Total</b>
Total Water Use [Use Worksheet]	11,320
Total Supplies [Supply Worksheet]	11,320
Surplus/Shortfall w/o WSCP Action	0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%
<b>2024</b>	<b>Total</b>
Total Water Use [Use Worksheet]	11,570
Total Supplies [Supply Worksheet]	11,570
Surplus/Shortfall w/o WSCP Action	0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	
Resulting % Use Reduction from WSCP action	0%
<b>2025</b>	<b>Total</b>
Total Water Use [Use Worksheet]	11,820
Total Supplies [Supply Worksheet]	11,820
Surplus/Shortfall w/o WSCP Action	0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%

NOTES: Units are in acre-feet (AF).

**OPTIONAL Table 7-5 Five-year Drought Risk Assessment Tables to address Water Code Section 10635(b) - Non-Potable**

<b>2021</b>	<b>Total</b>
Total Water Use - Non-potable	2,630
Total Supplies	2,630
Surplus/Shortfall w/o WSCP Action	0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%
<b>2022</b>	<b>Total</b>
Total Water Use [Use Worksheet]	2,730
Total Supplies [Supply Worksheet]	2,730
Surplus/Shortfall w/o WSCP Action	0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%
<b>2023</b>	<b>Total</b>
Total Water Use [Use Worksheet]	2,840
Total Supplies [Supply Worksheet]	2,840
Surplus/Shortfall w/o WSCP Action	0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%
<b>2024</b>	<b>Total</b>
Total Water Use [Use Worksheet]	2,940
Total Supplies [Supply Worksheet]	2,940
Surplus/Shortfall w/o WSCP Action	0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%
<b>2025</b>	<b>Total</b>
Total Water Use [Use Worksheet]	3,050
Total Supplies [Supply Worksheet]	3,050
Surplus/Shortfall w/o WSCP Action	0
<b>Planned WSCP Actions</b> (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0%
NOTES: Units are in acre-feet (AF).	

**Submittal Table 8-1**  
**Water Shortage Contingency Plan Levels**

<b>Shortage Level</b>	<b>Percent Shortage Range</b>	<b>Shortage Response Actions</b> <i>(Narrative description)</i>
1	Up to 10%	Voluntary Water Conservation
2	Up to 20%	Mandatory Water Conservation
3	Up to 30%	Water Shortage Emergency
4	Up to 40%	Water Shortage Emergency
5	Up to 50%	Water Shortage Emergency
6	>50%	Water Shortage Emergency

**Submittal Table 8-2: Demand Reduction Actions**

Shortage Level	Demand Reduction Actions <i>Drop down list</i> <i>These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <i>For Retail Suppliers Only</i> <i>Drop Down List</i>
<i>Add additional rows as needed</i>				
1	Pools and Spas - Require covers for pools and spas	Evapotranspiration of approximate surface area of pools		Yes
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Boosts the effectiveness of other methods - not readily quantifiable	Water leaks shall be repaired within five days or sooner if required by City.	Yes
1	Water Features - Restrict water use for decorative water features, such as fountains	Boosts other methods as a public display of drought conservation, difficult to quantify	Operation of ornamental fountains that do not have a recirculating system is prohibited.	Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation	Difficult to quantify, City has permanent ordinance which prohibits runoff of water in unreasonable amounts		Yes
1	Landscape - Other landscape restriction or prohibition	Difficult to quantify, dependent on number of precipitation events.	Outdoor irrigation shall not occur during precipitation events or within 24 hours of a rain event that produced .20 inches of precipitation or more.	Yes
1	Other - Require automatic shut of hoses	Difficult to quantify, City has permanent ordinance which prohibits watering of lawns and gardens with an open hose.		Yes
1	CII - Other CII restriction or prohibition	Boosts other methods as a public display of drought conservation, difficult to quantify	Operators of hotels, motels, and other commercial establishments offering lodging shall post in each room and at each site, a Notice of Drought Condition, approved by the Director of Public Services.	Yes
1	CII - Restaurants may only serve water upon request	50 gal/day/commercial connection		Yes
2	Landscape - Limit landscape irrigation to specific times	Depends on times that irrigation will be allowed, but can reduce water use by 20-25 gallons per day per household	Outdoor irrigation is prohibited between the hours of 8:00 AM and 9:00 PM.	Yes
2	Landscape - Limit landscape irrigation to specific days	22 percent reduction in irrigation demands	Outdoor irrigation of ornamental turf shall be limited to no more than three days per week. The allowable days for irrigation will be established by City Council.	Yes
2	Other - Prohibit use of potable water for washing hard surfaces	Boosts other methods - not readily quantifiable		Yes
3	Water Features - Restrict water use for decorative water features, such as fountains	Boosts other methods as a public display of drought conservation, difficult to quantify	Operation of all ornamental fountains is prohibited.	Yes
3	Landscape - Other landscape restriction or prohibition	Boosts the effectiveness of other methods - not readily quantifiable	Planting or seeding of new ornamental turf is prohibited, including new turf planted or seeded to replace existing turf.	Yes
3	Landscape - Limit landscape irrigation to specific days	33 percent reduction in irrigation demands	Outdoor irrigation of ornamental turf shall be limited to no more than two days per week. The allowable days for irrigation will be established by City Council.	Yes
4	Other water feature or swimming pool restriction	Boosts the effectiveness of other methods - not readily quantifiable	Introduction of water into swimming pools and spas is prohibited except to maintain structural integrity of such facilities.	Yes
4	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	100-200 gal/year/residential connection		Yes
5	Landscape - Prohibit certain types of landscape irrigation	90 percent reduction in irrigation demands	Irrigation of yards or other landscaped areas containing lawn or turf grass is prohibited. Irrigation of trees is allowed.	Yes
6	Other	Up to shortage gap	Potable water to be used for health and safety purposes only.	Yes

NOTES: Demand reduction actions to be implemented for a given shortage level include all demand reduction actions listed for earlier shortage levels.

Submittal Table 8-3: Supply Augmentation and Other Actions			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier <i>Drop down list</i> <i>These are the only categories that will be accepted by the WUdata online submittal tool</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>
<i>Add additional rows as needed</i>			
1	Expand Public Information Campaign	Up to shortage gap	City will expand volume and breadth of public outreach.
2	Other Actions (describe)	Up to shortage gap	City will expand leak detection program to reduce water system losses.
3 - 6	New Recycled Water	Up to shortage gap	City will expedite connecting new users to recycled water system to reduce potable water demand.

Submittal Table 10-1 Retail: Notification to Cities and Counties		
City Name	60 Day Notice	Notice of Public Hearing
<i>Add additional rows as needed</i>		
Lincoln	Yes	Yes
County Name <i>Drop Down List</i>	60 Day Notice	Notice of Public Hearing
<i>Add additional rows as needed</i>		
Placer County	Yes	Yes
<p>NOTES: Other agencies provided notice include California American Water District, City of Roseville, Nevada Irrigation District, Placer County Water Agency, Sacramento Area Council of Governments, and South Sutter Water District.</p>		

DWR 2020 Urban Water Management Plan Checklist

## Appendix C

### UWMP Checklist



Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (For Agency Review Use)
X	X	Chapter 1	10615	A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities.	Introduction and Overview	Executive Summary
X	X	Chapter 1	10630.5	Each plan shall include a simple description of the supplier's plan including water availability, future requirements, a strategy for meeting needs, and other pertinent information. Additionally, a supplier may also choose to include a simple description at the beginning of each chapter.	Summary	Executive Summary
X	X	Section 2.2	10620(b)	Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.	Plan Preparation	Section 2.1
X	X	Section 2.6	10620(d)(2)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan Preparation	Section 2.5
X	X	Section 2.6.2	10642	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan and contingency plan.	Plan Preparation	Section 2.5.2
X		Section 2.6, Section 6.1	10631(h)	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
	X	Section 2.6	10631(h)	Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.	System Supplies	NA
X	X	Section 3.1	10631(a)	Describe the water supplier service area.	System Description	Section 3.2
X	X	Section 3.3	10631(a)	Describe the climate of the service area of the supplier.	System Description	Section 3.3
X	X	Section 3.4	10631(a)	Provide population projections for 2025, 2030, 2035, 2040 and optionally 2045.	System Description	Section 3.5.1
X	X	Section 3.4.2	10631(a)	Describe other social, economic, and demographic factors affecting the supplier's water management planning.	System Description	Section 3.5.2
X	X	Sections 3.4 and 5.4	10631(a)	Indicate the current population of the service area.	System Description and Baselines and Targets	Section 3.5.1
X	X	Section 3.5	10631(a)	Describe the land uses within the service area.	System Description	Section 3.6

## Appendix C UWMP Checklist



Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (For Agency Review Use)
X	X	Section 4.2	10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Section 4.2
X	X	Section 4.2.4	10631(d)(3)(C)	Retail suppliers shall provide data to show the distribution loss standards were met.	System Water Use	Section 4.4
X	X	Section 4.2.6	10631(d)(4)(A)	In projected water use, include estimates of water savings from adopted codes, plans, and other policies or laws.	System Water Use	Section 4.2.3
X	X	Section 4.2.6	10631(d)(4)(B)	Provide citations of codes, standards, ordinances, or plans used to make water use projections.	System Water Use	Section 4.2.3
X	optional	Section 4.3.2.4	10631(d)(3)(A)	Report the distribution system water loss for each of the 5 years preceding the plan update.	System Water Use	Section 4.4
X	optional	Section 4.4	10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	Section 4.5
X	X	Section 4.5	10635(b)	Demands under climate change considerations must be included as part of the drought risk assessment.	System Water Use	Section 4.6
X		Chapter 5	10608.20(e)	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	Baselines and Targets	Sections 5.2, 5.3, 5.4, 5.5, 5.6
X		Chapter 5	10608.24(a)	Retail suppliers shall meet their water use target by December 31, 2020.	Baselines and Targets	Section 5.6
	X	Section 5.1	10608.36	Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions.	Baselines and Targets	NA
X		Section 5.2	10608.24(d)(2)	If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary events, it shall provide the basis for, and data supporting the adjustment.	Baselines and Targets	NA
X		Section 5.5	10608.22	Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5-year baseline. This does not apply if the suppliers base GPCD is at or below 100.	Baselines and Targets	Section 5.2
X		Section 5.5 and Appendix E	10608.4	Retail suppliers shall report on their compliance in meeting their water use targets. The data shall be reported using a standardized form in the SBX7-7 2020 Compliance Form.	Baselines and Targets	Appendix I
X	X	Sections 6.1 and 6.2	10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought.	System Supplies	Section 6.2.1.1, 6.2.1.2, 7.1.2

## Appendix C UWMP Checklist



Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (For Agency Review Use)
X	X	Sections 6.1	10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought, <i>including changes in supply due to climate change</i> .	System Supplies	Section 6.2.1.1, 6.2.1.2, 6.2.10, 7.1.2
X	X	Section 6.1	10631(b)(2)	When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies.	System Supplies	Section 6.2
X	X	Section 6.1.1	10631(b)(3)	Describe measures taken to acquire and develop planned sources of water.	System Supplies	Section 6.2.8
X	X	Section 6.2.8	10631(b)	Identify and quantify the existing and planned sources of water available for 2020, 2025, 2030,2035, 2040 and optionally 2045.	System Supplies	Section 6.2.9
X	X	Section 6.2	10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Section 6.2.2
X	X	Section 6.2.2	10631(b)(4)(A)	Indicate whether a groundwater sustainability plan or groundwater management plan has been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System Supplies	Section 6.2.2.2
X	X	Section 6.2.2	10631(b)(4)(B)	Describe the groundwater basin.	System Supplies	Section 6.2.2.1
X	X	Section 6.2.2	10631(b)(4)(B)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the supplier has the legal right to pump.	System Supplies	Section 6.2.2.2
X	X	Section 6.2.2.1	10631(b)(4)(B)	For unadjudicated basins, indicate whether or not the department has identified the basin as a high or medium priority. Describe efforts by the supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions.	System Supplies	Section 6.2.2.2
X	X	Section 6.2.2.4	10631(b)(4)(C)	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	System Supplies	Section 6.2.2.4
X	X	Section 6.2.2	10631(b)(4)(D)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System Supplies	Section 6.2.2.5
X	X	Section 6.2.7	10631(c)	Describe the opportunities for exchanges or transfers of water on a short-term or long- term basis.	System Supplies	Section 6.2.7
X	X	Section 6.2.5	10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System Supplies (Recycled Water)	Section 6.2.5.1
X	X	Section 6.2.5	10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Section 6.2.5.2

## Appendix C UWMP Checklist



Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (For Agency Review Use)
X	X	Section 6.2.5	10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System Supplies (Recycled Water)	Section 6.2.5.3
X	X	Section 6.2.5	10633(e)	Describe the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	Section 6.2.5.2, Section 6.2.5.3
X	X	Section 6.2.5	10633(f)	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System Supplies (Recycled Water)	Section 6.2.5.3, Section 6.2.8.2
X	X	Section 6.2.5	10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	Section 6.2.5.3, Section 6.2.8.2
X	X	Section 6.2.6	10631(g)	Describe desalinated water project opportunities for long-term supply.	System Supplies	Section 6.2.6
X	X	Section 6.2.5	10633(a)	Describe the wastewater collection and treatment systems in the supplier's service area with quantified amount of collection and treatment and the disposal methods.	System Supplies (Recycled Water)	Section 6.2.5.1
X	X	Section 6.2.8, Section 6.3.7	10631(f)	Describe the expected future water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and for a period of drought lasting 5 consecutive water years.	System Supplies	Section 6.2.8
X	X	Section 6.4 and Appendix O	10631.2(a)	The UWMP must include energy information, as stated in the code, that a supplier can readily obtain.	System Suppliers, Energy Intensity	Section 6.3
X	X	Section 7.2	10634	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Water Supply Reliability Assessment	Section 7.1.1.3
X	X	Section 7.2.4	10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water Supply Reliability Assessment	Section 7.1.4
X	X	Section 7.3	10635(a)	Service Reliability Assessment: Assess the water supply reliability during normal, dry, and a drought lasting five consecutive 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 7.1.3
X	X	Section 7.3	10635(b)	Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects.	Water Supply Reliability Assessment	Section 7.2

## Appendix C

### UWMP Checklist



Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (For Agency Review Use)
X	X	Section 7.3	10635(b)(1)	Include a description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts 5 consecutive years.	Water Supply Reliability Assessment	Section 7.2.1
X	X	Section 7.3	10635(b)(2)	Include a determination of the reliability of each source of supply under a variety of water shortage conditions.	Water Supply Reliability Assessment	Section 7.2.2
X	X	Section 7.3	10635(b)(3)	Include a comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.	Water Supply Reliability Assessment	Section 7.2.3
X	X	Section 7.3	10635(b)(4)	Include considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.	Water Supply Reliability Assessment	Section 7.2
X	X	Chapter 8	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Water Shortage Contingency Planning	Chapter 8 and Appendix K
X	X	Chapter 8	10632(a)(1)	Provide the analysis of water supply reliability (from Chapter 7 of Guidebook) in the WSCP	Water Shortage Contingency Planning	Appendix K Section 1
X	X	Section 8.10	10632(a)(10)	Describe reevaluation and improvement procedures for monitoring and evaluation the water shortage contingency plan to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented.	Water Shortage Contingency Planning	Appendix K Section 9
X	X	Section 8.2	10632(a)(2)(A)	Provide the written decision- making process and other methods that the supplier will use each year to determine its water reliability.	Water Shortage Contingency Planning	Appendix K Section 2.1
X	X	Section 8.2	10632(a)(2)(B)	Provide data and methodology to evaluate the supplier's water reliability for the current year and one dry year pursuant to factors in the code.	Water Shortage Contingency Planning	Appendix K Sections 2.2 and 2.3
X	X	Section 8.3	10632(a)(3)(A)	Define six standard water shortage levels of 10, 20, 30, 40, 50 percent shortage and greater than 50 percent shortage. These levels shall be based on supply conditions, including percent reductions in supply, changes in groundwater levels, changes in surface elevation, or other conditions. The shortage levels shall also apply to a catastrophic interruption of supply.	Water Shortage Contingency Planning	Appendix K Section 3.0
X	X	Section 8.3	10632(a)(3)(B)	Suppliers with an existing water shortage contingency plan that uses different water shortage levels must cross reference their categories with the six standard categories.	Water Shortage Contingency Planning	NA
X	X	Section 8.4	10632(a)(4)(A)	Suppliers with water shortage contingency plans that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	Water Shortage Contingency Planning	Appendix K Section 4.3

## Appendix C UWMP Checklist



Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (For Agency Review Use)
X	X	Section 8.4	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Water Shortage Contingency Planning	Appendix K Section 4.1
X	X	Section 8.4	10632(a)(4)(C)	Specify locally appropriate operational changes.	Water Shortage Contingency Planning	Appendix K Section 4.4
X	X	Section 8.4	10632(a)(4)(D)	Specify additional mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions are appropriate to local conditions.	Water Shortage Contingency Planning	Appendix K Section 4.2
X	X	Section 8.4	10632(a)(4)(E)	Estimate the extent to which the gap between supplies and demand will be reduced by implementation of the action.	Water Shortage Contingency Planning	Appendix K Section 4.1 and 4.3
X	X	Section 8.4.6	10632.5	The plan shall include a seismic risk assessment and mitigation plan.	Water Shortage Contingency Plan	Section 8.2 (website link provided due to document size)
X	X	Section 8.5	10632(a)(5)(A)	Suppliers must describe that they will inform customers, the public and others regarding any current or predicted water shortages.	Water Shortage Contingency Planning	Appendix K Section 5.0
X	X	Section 8.5 and 8.6	10632(a)(5)(B) 10632(a)(5)(C)	Suppliers must describe that they will inform customers, the public and others regarding any shortage response actions triggered or anticipated to be triggered and other relevant communications.	Water Shortage Contingency Planning	Appendix K Section 5.0
X		Section 8.6	10632(a)(6)	Retail supplier must describe how it will ensure compliance with and enforce provisions of the WSCP.	Water Shortage Contingency Planning	Appendix K Section 6.0
X	X	Section 8.7	10632(a)(7)(A)	Describe the legal authority that empowers the supplier to enforce shortage response actions.	Water Shortage Contingency Planning	Appendix K Section 7.0
X	X	Section 8.7	10632(a)(7)(B)	Provide a statement that the supplier will declare a water shortage emergency Water Code Chapter 3.	Water Shortage Contingency Planning	Appendix K Section 7.0
X	X	Section 8.7	10632(a)(7)(C)	Provide a statement that the supplier will coordinate with any city or county within which it provides water for the possible proclamation of a local emergency.	Water Shortage Contingency Planning	Appendix K Section 7.0
X	X	Section 8.8	10632(a)(8)(A)	Describe the potential revenue reductions and expense increases associated with activated shortage response actions.	Water Shortage Contingency Planning	Appendix K Section 8.0
X	X	Section 8.8	10632(a)(8)(B)	Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions.	Water Shortage Contingency Planning	Appendix K Section 8.0
X		Section 8.8	10632(a)(8)(C)	Retail suppliers must describe the cost of compliance with Water Code Chapter 3.3: Excessive Residential Water Use During Drought	Water Shortage Contingency Planning	Appendix K Section 8.0

## Appendix C UWMP Checklist



Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (For Agency Review Use)
X		Section 8.9	10632(a)(9)	Retail suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance.	Water Shortage Contingency Planning	Appendix K Section 9.0
X		Section 8.11	10632(b)	Analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.	Water Shortage Contingency Planning	Appendix K Section 11.0
X	X	Sections 8.12 and 10.4	10635(c)	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 30 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	Appendix K Section 12.0
X	X	Section 8.14	10632(c)	Make available the Water Shortage Contingency Plan to customers and any city or county where it provides water within 30 after adopted the plan.	Water Shortage Contingency Planning	Appendix K Section 12.0
	X	Sections 9.1 and 9.3	10631(e)(2)	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	Demand Management Measures	NA
X		Sections 9.2 and 9.3	10631(e)(1)	Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand Management Measures	Section 9.2
X		Chapter 10	10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets (recommended to discuss compliance).	Plan Adoption, Submittal, and Implementation	Section 10.3
X	X	Section 10.2.1	10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. Reported in Table 10-1.	Plan Adoption, Submittal, and Implementation	Section 10.2.1
X	X	Section 10.4	10621(f)	Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.	Plan Adoption, Submittal, and Implementation	Section 10.4
X	X	Sections 10.2.2, 10.3, and 10.5	10642	Provide supporting documentation that the urban water supplier made the plan and contingency plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan and contingency plan.	Plan Adoption, Submittal, and Implementation	Section 10.2.2, Section 10.3
X	X	Section 10.2.2	10642	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	Section 10.2.1
X	X	Section 10.3.2	10642	Provide supporting documentation that the plan and contingency plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Section 10.3.2, Appendix N

## Appendix C UWMP Checklist



Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (For Agency Review Use)
X	X	Section 10.4	10644(a)	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
X	X	Section 10.4	10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	Section 10.4
X	X	Sections 10.4.1 and 10.4.2	10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	Section 10.4
X	X	Section 10.5	10645(a)	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Section 10.5
X	X	Section 10.5	10645(b)	Provide supporting documentation that, not later than 30 days after filing a copy of its water shortage contingency plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Section 10.5
X	X	Section 10.6	10621(c)	If supplier is regulated by the Public Utilities Commission, include its plan and contingency plan as part of its general rate case filings.	Plan Adoption, Submittal, and Implementation	NA
X	X	Section 10.7.2	10644(b)	If revised, submit a copy of the water shortage contingency plan to DWR within 30 days of adoption.	Plan Adoption, Submittal, and Implementation	Section 10.6



## Appendix D

### Agency and Public Notices



November 25, 2020

Evan Jacobs  
California American Water District  
4701 Beloit Drive  
Sacramento, CA 95838

SUBJECT: Preparation of 2020 Urban Water Management Plan and Water Shortage Contingency Plan

Dear Mr. Jacobs:

The City of Lincoln is currently in the process of updating its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The Urban Water Management Planning Act, Water Code Section 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 periodically update that plan at least every five years. Further, changes to the Act since 2015 require updates to the City of Lincoln's WSCP. The City of Lincoln's 2015 UWMP was adopted in June 2016, and the City's 2020 UWMP is required to be submitted to the California Department of Water Resources by July 1, 2021.

The UWMP is a planning document and a source document which reports, describes and evaluates water deliveries and uses, water supply sources and conservation efforts. The WSCP provides a plan for response to various water supply shortage conditions. As an urban water supplier, the City of Lincoln coordinates with water management agencies, relevant public agencies and other water suppliers on the preparation of the UWMP and WSCP updates. The City of Lincoln will be reviewing the UWMP and WSCP and will make amendments and updates, as appropriate.

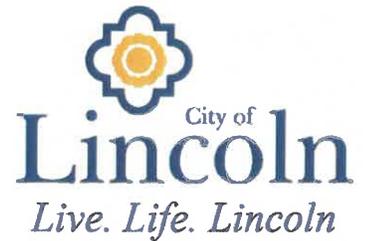
If you wish to contact the City of Lincoln about its review process, you may do so by writing to the undersigned or by email to [Araceli.Cazarez@lincolnca.gov](mailto:Araceli.Cazarez@lincolnca.gov).

Sincerely,

City of Lincoln

Araceli Cazarez, P.E.  
Engineering Manager

cc: Ray Leftwich, P.E. City Engineer  
Brenda Estrada, West Yost Associates



November 25, 2020

Mr. Remleh Scherzinger, General Manager  
Nevada Irrigation District  
1036 W. Main Street  
Grass Valley CA 95945

SUBJECT: Preparation of 2020 Urban Water Management Plan and Water Shortage Contingency Plan

Dear Mr. Scherzinger:

The City of Lincoln is currently in the process of updating its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The Urban Water Management Planning Act, Water Code Section 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 periodically update that plan at least every five years. Further, changes to the Act since 2015 require updates to the City of Lincoln's WSCP. The City of Lincoln's 2015 UWMP was adopted in June 2016, and the City's 2020 UWMP is required to be submitted to the California Department of Water Resources by July 1, 2021.

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If you wish to contact the City of Lincoln about its review process, you may do so by writing to the undersigned or by email to [Araceli.Cazarez@lincolnca.gov](mailto:Araceli.Cazarez@lincolnca.gov).

Sincerely,

City of Lincoln

Araceli Cazarez, P.E.  
Engineering Manager

cc: Ray Leftwich, P.E. City Engineer  
Brenda Estrada, West Yost Associates



November 25, 2020

Attn: Paul Joiner  
Sacramento Area Council of Governments  
1415 L Street, Suite 300  
Sacramento, CA 95814

SUBJECT: Preparation of 2020 Urban Water Management Plan and Water Shortage Contingency Plan

Dear Mr. Joiner:

The City of Lincoln is currently in the process of updating its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The Urban Water Management Planning Act, Water Code Section 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 periodically update that plan at least every five years. Further, changes to the Act since 2015 require updates to the City of Lincoln's WSCP. The City of Lincoln's 2015 UWMP was adopted in June 2016, and the City's 2020 UWMP is required to be submitted to the California Department of Water Resources by July 1, 2021.

The UWMP is a planning document and a source document which reports, describes and evaluates water deliveries and uses, water supply sources and conservation efforts. The WSCP provides a plan for response to various water supply shortage conditions. As an urban water supplier, the City of Lincoln coordinates with water management agencies, relevant public agencies and other water suppliers on the preparation of the UWMP and WSCP updates. The City of Lincoln will be reviewing the UWMP and WSCP and will make amendments and updates, as appropriate.

If you wish to contact the City of Lincoln about its review process, you may do so by writing to the undersigned or by email to [Araceli.Cazarez@lincolnca.gov](mailto:Araceli.Cazarez@lincolnca.gov).

Sincerely,

City of Lincoln

Araceli Cazarez, P.E.  
Engineering Manager

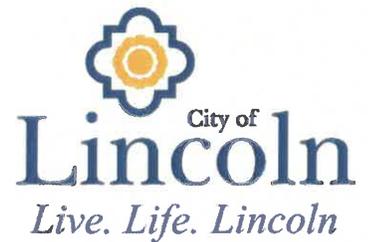
cc: Ray Leftwich, P.E. City Engineer  
Brenda Estrada, West Yost Associates

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City Hall • 600 Sixth Street • Lincoln, CA 95648

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City Manager's Office ♦ Community Development ♦ Engineering ♦ Fire  
Library ♦ Recreation ♦ Police ♦ Public Services ♦ Support Services



November 25, 2020

Mr. Einar Maisch, General Manager  
Placer County Water Agency  
PO Box 6570  
Auburn CA 95604

SUBJECT: Preparation of 2020 Urban Water Management Plan and Water Shortage Contingency Plan

Dear Mr. Maisch:

The City of Lincoln is currently in the process of updating its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The Urban Water Management Planning Act, Water Code Section 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 periodically update that plan at least every five years. Further, changes to the Act since 2015 require updates to the City of Lincoln's WSCP. The City of Lincoln's 2015 UWMP was adopted in June 2016, and the City's 2020 UWMP is required to be submitted to the California Department of Water Resources by July 1, 2021.

The UWMP is a planning document and a source document which reports, describes and evaluates water deliveries and uses, water supply sources and conservation efforts. The WSCP provides a plan for response to various water supply shortage conditions. As an urban water supplier, the City of Lincoln coordinates with water management agencies, relevant public agencies and other water suppliers on the preparation of the UWMP and WSCP updates. The City of Lincoln will be reviewing the UWMP and WSCP and will make amendments and updates, as appropriate.

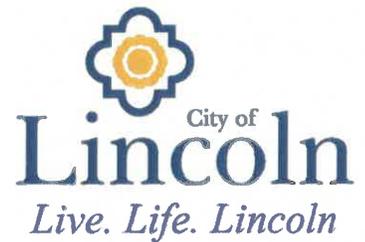
If you wish to contact the City of Lincoln about its review process, you may do so by writing to the undersigned or by email to [Araceli.Cazarez@lincolnca.gov](mailto:Araceli.Cazarez@lincolnca.gov).

Sincerely,

City of Lincoln

Araceli Cazarez, P.E.  
Engineering Manager

cc: Ray Leftwich, P.E. City Engineer  
Brenda Estrada, West Yost Associates



November 25, 2020

Assistant Environmental Utilities Director  
City of Roseville  
2005 Hilltop Circle  
Roseville, CA 95747

SUBJECT: Preparation of 2020 Urban Water Management Plan and Water Shortage Contingency Plan

To Whom It May Concern:

The City of Lincoln is currently in the process of updating its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The Urban Water Management Planning Act, Water Code Section 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 periodically update that plan at least every five years. Further, changes to the Act since 2015 require updates to the City of Lincoln's WSCP. The City of Lincoln's 2015 UWMP was adopted in June 2016, and the City's 2020 UWMP is required to be submitted to the California Department of Water Resources by July 1, 2021.

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Sincerely,

City of Lincoln

Araceli Cazarez, P.E.  
Engineering Manager

cc: Ray Leftwich, P.E. City Engineer  
Brenda Estrada, West Yost Associates

---

City Hall • 600 Sixth Street • Lincoln, CA 95648

(916) 434-2400 • [www.lincolnca.gov](http://www.lincolnca.gov)

City Manager's Office ♦ Community Development ♦ Engineering ♦ Fire  
Library ♦ Recreation ♦ Police ♦ Public Services ♦ Support Services



November 25, 2020

Brad Arnold  
South Sutter Water District  
2464 Pacific Avenue  
Trowbridge, CA 95659

SUBJECT: Preparation of 2020 Urban Water Management Plan and Water Shortage Contingency Plan

Dear Mr. Arnold:

The City of Lincoln is currently in the process of updating its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The Urban Water Management Planning Act, Water Code Section 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 periodically update that plan at least every five years. Further, changes to the Act since 2015 require updates to the City of Lincoln's WSCP. The City of Lincoln's 2015 UWMP was adopted in June 2016, and the City's 2020 UWMP is required to be submitted to the California Department of Water Resources by July 1, 2021.

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If you wish to contact the City of Lincoln about its review process, you may do so by writing to the undersigned or by email to [Araceli.Cazarez@lincolnca.gov](mailto:Araceli.Cazarez@lincolnca.gov).

Sincerely,

City of Lincoln

Araceli Cazarez, P.E.  
Engineering Manager

cc: Ray Leftwich, P.E. City Engineer  
Brenda Estrada, West Yost Associates

---

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November 25, 2020

Attn: Ken Grehm  
Public Works Placer County  
3091 County Center Drive, Suite 220  
Auburn, CA 95603

SUBJECT: Preparation of 2020 Urban Water Management Plan and Water Shortage Contingency Plan

Dear Mr. Grehm:

The City of Lincoln is currently in the process of updating its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The Urban Water Management Planning Act, Water Code Section 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 periodically update that plan at least every five years. Further, changes to the Act since 2015 require updates to the City of Lincoln's WSCP. The City of Lincoln's 2015 UWMP was adopted in June 2016, and the City's 2020 UWMP is required to be submitted to the California Department of Water Resources by July 1, 2021.

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If you wish to contact the City of Lincoln about its review process, you may do so by writing to the undersigned or by email to [Araceli.Cazarez@lincolnca.gov](mailto:Araceli.Cazarez@lincolnca.gov).

Sincerely,

City of Lincoln

Araceli Cazarez, P.E.  
Engineering Manager

cc: Ray Leftwich, P.E. City Engineer  
Brenda Estrada, West Yost Associates

---

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Library ♦ Recreation ♦ Police ♦ Public Services ♦ Support Services

**NOTICE OF AVAILABILITY OF CITY OF LINCOLN DRAFT 2020 URBAN WATER  
MANAGEMENT PLAN UPDATE, UPDATED WATER SHORTAGE CONTINGENCY PLAN,  
AND PUBLIC HEARING TO RECEIVE COMMENTS**

NOTICE IS HEREBY GIVEN that the City of Lincoln Draft 2020 Urban Water Management Plan Update (2020 UWMP) and Draft Water Shortage Contingency Plan Update (WSCP) will be made available for public review and comment, and that the City Council of the City of Lincoln has set a public hearing to receive comments on the 2020 UWMP and WSCP. The public hearing is to be conducted on June 8<sup>th</sup> at 6:00 p.m. at the regularly scheduled City Council meeting.

NOTICE IS FURTHER GIVEN that, as part of the public hearing on the 2020 UWMP and WSCP, the City of Lincoln will conduct a public hearing to: allow community input regarding the City's planned conservation and demand management measures, including the economic impacts of these measures. Note, this action is not subject to the California Environmental Quality Act ("CEQA"), as codified at Public Resources Code §§ 21000, *et seq.*, and as further governed by 14 California Code of Regulations §§ 15000, *et seq.*, because it is not a project as contemplated by 14 C.C.R. § 15378.

Administrative remedies must be exhausted prior to action being initiated in a court of law. If you challenge these actions in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice or in written correspondence delivered to the Development Services Department at, or prior to, the public hearing.

The City of Lincoln and the State of California do not discriminate in the housing or employment on the basis of race, religion, sex, age, national origin, or handicap. The location of the public hearing is fully accessible to mobility impaired individuals. In compliance with the California Disability Access Guidelines, the City of Lincoln encourages those persons with disabilities to participate fully in the public hearing process. If you have special needs to allow you to attend or participate in this public hearing process, please contact our office prior to the public hearing, so that we may accommodate you.

Copies of the 2020 UWMP and WSCP will be made available for public review at the City of Lincoln website [www.lincolnca.gov](http://www.lincolnca.gov) on and after May 20, 2021 or available in hard copy at the office of the City Manager (City Hall) for review on-site as well as at the Twelve Bridges Library. Members of the public are invited to present their views on the 2020 UWMP and WSCP. Comments may be presented during the public hearing or may be submitted in writing prior to the hearing, addressed to Araceli Cazarez, mailed to City of Lincoln, 600 Sixth Street, Lincoln, CA 95648 or e-mailed to [araceli.cazarez@lincolnca.gov](mailto:araceli.cazarez@lincolnca.gov)

Gwen Scanlon  
City Clerk

DATE: May 11, 2021  
PUBLISH: May 20 and May 27, 2021 Lincoln News-Messenger

**NOTICE OF AVAILABILITY OF CITY OF LINCOLN DRAFT 2020 URBAN WATER  
MANAGEMENT PLAN UPDATE, UPDATED WATER SHORTAGE CONTINGENCY PLAN,  
AND PUBLIC HEARING TO RECEIVE COMMENTS**

NOTICE IS HEREBY GIVEN that the City of Lincoln Draft 2020 Urban Water Management Plan Update (2020 UWMP) and Draft Water Shortage Contingency Plan Update (WSCP) will be made available for public review and comment, and that the City Council of the City of Lincoln has set a public hearing. The public hearing to receive comments on the 2020 UWMP and WSCP is to be conducted on **Tuesday, June 8, 2021 at 6:00 p.m.**, or soon thereafter as feasible, in a meeting format on the City's YouTube Channel (Accessed on the City's Website) or Wave Channel 18. The meeting can also be joined from your computer, tablet, or smartphone via a Zoom Webinar. Register in advance for this Webinar at [https://zoom.us/webinar/register/WN\\_kZDFqA1DSqKLj67LPdgDew](https://zoom.us/webinar/register/WN_kZDFqA1DSqKLj67LPdgDew) , after registering, you will receive a confirmation email containing information to join the Webinar.

NOTICE IS FURTHER GIVEN that, as part of the public hearing on the 2020 UWMP and WSCP, the City of Lincoln will conduct a public hearing to: allow community input regarding the City's planned conservation and demand management measures, including the economic impacts of these measures. Note, this action is not subject to the California Environmental Quality Act ("CEQA"), as codified at Public Resources Code §§ 21000, *et seq.*, and as further governed by 14 California Code of Regulations §§ 15000, *et seq.*, because it is not a project as contemplated by 14 C.C.R. § 15378.

NOTICE IS FURTHER GIVEN that, the Public Hearing is to allow citizens or interested parties to address the Council on the proposed Ordinance 1037B which repeals and re-enacts Municipal Code Section 13.04 Article VI and Article IX related to water conservation penalties.

Administrative remedies must be exhausted prior to action being initiated in a court of law. If you challenge these actions in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice or in written correspondence delivered to the Development Services Department at, or prior to, the public hearing.

The City of Lincoln and the State of California do not discriminate in the housing or employment on the basis of race, religion, sex, age, national origin, or handicap. The location of the public hearing is fully accessible to mobility impaired individuals. In compliance with the California Disability Access Guidelines, the City of Lincoln encourages those persons with disabilities to participate fully in the public hearing process. If you have special needs to allow you to attend or participate in this public hearing process, please contact our office prior to the public hearing, so that we may accommodate you.

Copies of the 2020 UWMP, WSCP and draft Ordinance 1037B will be made available for public review at the City of Lincoln website [www.lincolncalifornia.gov](http://www.lincolncalifornia.gov) on and after May 20, 2021 or available in hard copy at the office of the City Manager (City Hall) for review on-site as well as at the Twelve Bridges Library. Members of the public are invited to present their views on the 2020 UWMP and WSCP. Comments may be presented during the public hearing or may be submitted in writing

prior to the hearing, addressed to Araceli Cazarez, mailed to City of Lincoln, 600 Sixth Street, Lincoln, CA 95648 or e-mailed to [araceli.cazarez@lincolnca.gov](mailto:araceli.cazarez@lincolnca.gov)

Gwen Scanlon  
City Clerk

DATE: May 20, 2021  
PUBLISH: May 27 and June 3, 2021 Lincoln News-Messenger

**PUBLIC NOTICE  
SUMMARY OF ORDINANCE FOR PUBLICATION  
(GOV'T CODE §36933)  
ORDINANCE NO. 1037B**

AN ORDINANCE REPEALING AND RE-ENACTING CHAPTER 13.04 ARTICLE VI -  
CONSERVATION AND CHAPTER 13.04 ARTICLE IX – WATER CONSERVATION;  
PENALTIES OF THE LINCOLN MUNICIPAL CODE; AND FINDING THE ORDINANCE  
IS EXEMPT FROM ENVIRONMENTAL REVIEW UNDER CEQA

**Date of First Reading: June 8, 2021**, with approval by the following vote: AYES: 5  
(Joiner, Andreatta, Karleskint, Lauritsen, Silhi); NOES: 0; ABSENT: 0.

**Date of Second Reading: June 22, 2021.**

The full text of this Ordinance is available for inspection at the Lincoln City Hall, 600 6th Street, Lincoln, CA. 95648 and on the City's website at: <http://www.lincolнца.gov>.

Summary of Ordinance: The Water Conservation Ordinance needs to be updated to meet current legislation and shall be revised to comply with the requirements of the 2018 Water Conservation Legislation which include an annual process for assessing potential gaps between planned supply and demands and aligns water service area's water shortage levels with the State for consistent messaging and reporting;

Gwen Scanlon, City Clerk

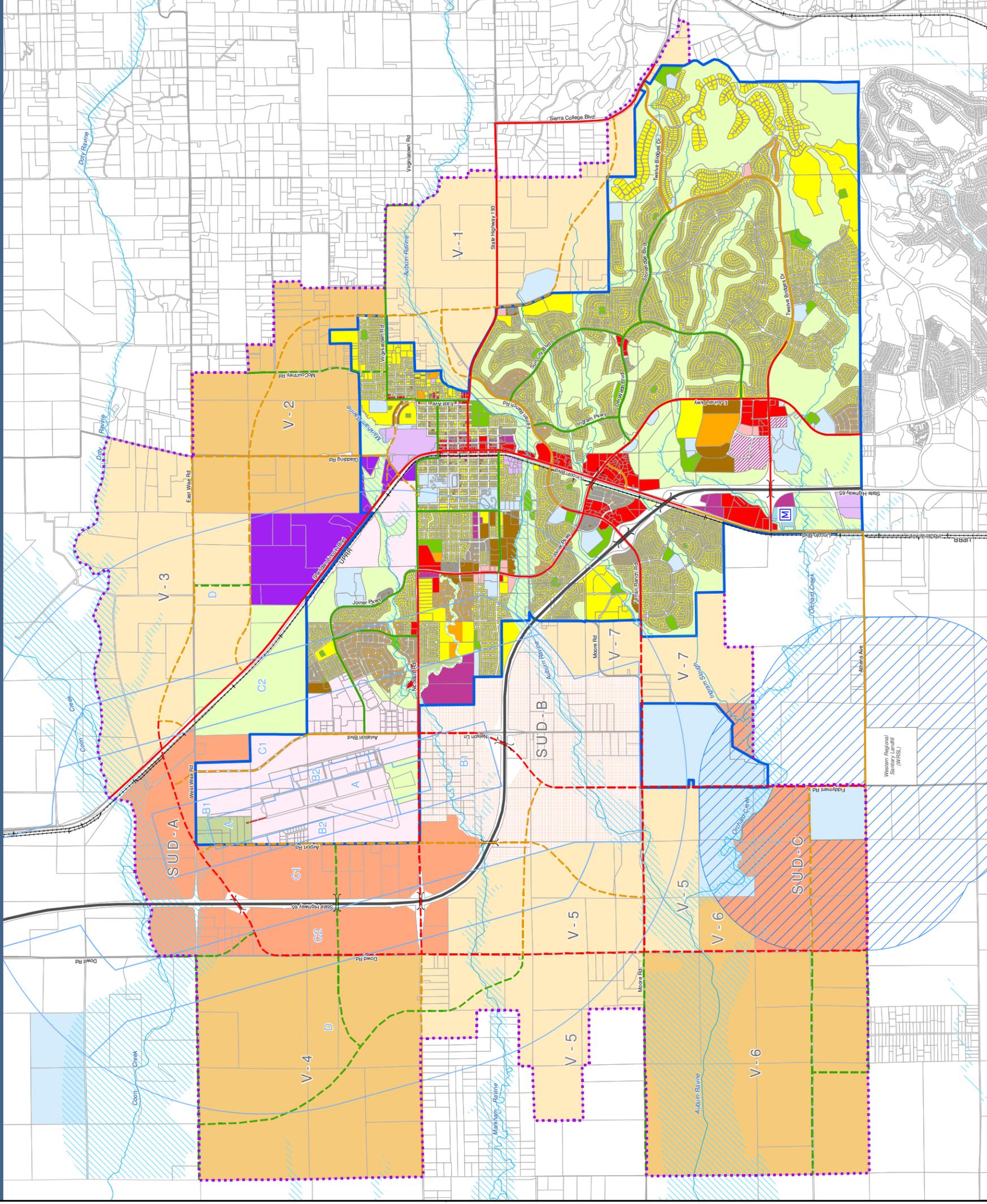
Date: June 10, 2021

Publish: June 17, 2021 (Lincoln News Messenger) Customer #: 3888



## Appendix E

### General Plan Land Use



**Legend**

**LAND USE DESIGNATIONS**

- Rural Residential (RR)
- Country Estates (CE)
- Low Density Residential (LDR)
- Medium Density Residential (MDR)
- High Density Residential (HDR)
- Special Use District (SUD)
- Village (V)
- Mixed Use (MU)
- Neighborhood Commercial (NC)
- Community Commercial (CC)
- Regional Commercial (RC)
- Business and Professional (BP)
- Employment Center (EC)
- Industrial Planned Development (IPD)
- Light Industrial (LI)
- Industrial (I)
- Open Space (OS)
- Agriculture (AG)
- Parks and Recreation (PR)
- Public Facilities (PF)
- Medical Center (MC)

**ROADWAY CLASSIFICATIONS**

- Existing**
- Freeway
- Major Arterial
- Minor Arterial
- Collector
- Proposed**
- Major Arterial
- Minor Arterial
- Collector

**BOUNDARIES**

- City Limits
- Sphere of Influence
- ALUCP Compatibility Zones

**OTHER**

- Airport Runway Expansion
- Railroad
- Landfill
- 1-Mile Buffer
- 100 Year Flood Zone
- Waterways





## Appendix F

### Land Use Projections

**City of Lincoln Land Use Projections<sup>(a)</sup>**

Land Use Category	2025 (2025 minus existing)		2030 (2030 minus 2025)		2050 (2050 minus 2030)		Total (2050 minus existing)	
	Dwelling Units	Acreage	Dwelling Units	Acreage	Dwelling Units	Acreage	Dwelling Units	Acreage
Country Estates	0	0	75	40	1,100	500	1,175	540
Low Density Residential	1,400	280	925	170	3,400	122	5,725	572
Medium Density Residential	1,500	140	200	28	3,500	441	5,200	609
High Density Residential	0	0	400	30	2,000	118	2,400	148
<b>Total Residential</b>	<b>2,900</b>	<b>420</b>	<b>1,600</b>	<b>268</b>	<b>10,000</b>	<b>1,181</b>	<b>14,500</b>	<b>1,869</b>
Commercial	NA	13	NA	50	NA	500	NA	563
Business and Professional	NA	5	NA	10	NA	49	NA	64
Mixed Use	0	0	0	22	0	8	0	30
Industrial	NA	0	NA	0	NA	1,700	NA	1,700
Public Facilities	NA	0	NA	10	NA	60	NA	70
Parks and Recreation	NA	10	NA	60	NA	200	NA	270
<b>Total Non-Residential</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>152</b>	<b>0</b>	<b>2,517</b>	<b>0</b>	<b>2,697</b>
<b>Grand Total</b>	<b>2,900</b>	<b>448</b>	<b>1,600</b>	<b>420</b>	<b>10,000</b>	<b>3,698</b>	<b>14,500</b>	<b>4,566</b>

(a) Received from City Community Development Department on February 26, 2021.

## Water Demand Factor Update Methodology

## TECHNICAL MEMORANDUM

DATE: April 16, 2021

Project No.: 206-60-20-24

SENT VIA: EMAIL

TO: Araceli Cazarez, City of Lincoln

CC: Jennifer Brown, City of Lincoln

FROM: Nathaniel Homan, PE, RCE #89903  
Kiersten Miller, EIT, #162281

REVIEWED BY: Brenda Estrada, PE, RCE #67062

SUBJECT: City of Lincoln Water Use Factors Development Methodology



The City of Lincoln (City) calculates future system demands using land use-based unit water use factors. The City last developed unit use factors as part of the 2017 Water System Master Plan (WSMP) which used water consumption data from 2013. Based on historic water production information, 2013 was the City's highest water use year. After 2013, the City's water use sharply decreased as a result of the 2014-2015 severe drought conditions and mandatory water conservation measures. Since 2015, the City has seen a rebound in water use. However, recent water use is still below 2013 production which indicates customers have continued to use less water. The City decided to update their unit demand factors to reflect the recent consumption trends of its customers.

To develop land use-based unit water use factors the City provided West Yost with the following data:

- 2019 water meter records
- Spatially located water meter locations from 2017
- City of Lincoln existing zoning and General Plan land use maps in Geographic Information System (GIS) format

Water use factors were then determined by using the following methodology:

- Annual 2019 water meter records were first linked to the spatially located 2017 water meter file by using the meter IDs. Approximately 92 percent of 2019 consumption could be located in this way.
- 2019 records which did not link to a 2017 water meter ID were then spatially located using a parcel-based address locator created in GIS. An additional four percent of 2019 consumption was located in this way, bringing the located consumption total to 96 percent.
- Spatially located meter consumption were then linked to the parcel file with the City's land use designations by using a spatial join.

This methodology allowed West Yost to calculate water use factors for land use designations used in the City’s current General Plan. Subsequent sections describe the development of the updated unit water use factors, followed by a discussion of total projected water demands.

## Development of Unit Water Use Factors

Due to the changes in water use patterns over time, new unit water use factors were developed using recent water consumption data to help project more accurate water demands. The following sections discuss the methodologies used to develop residential and non-residential unit water demand factors.

### *General Methodology*

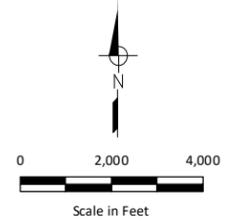
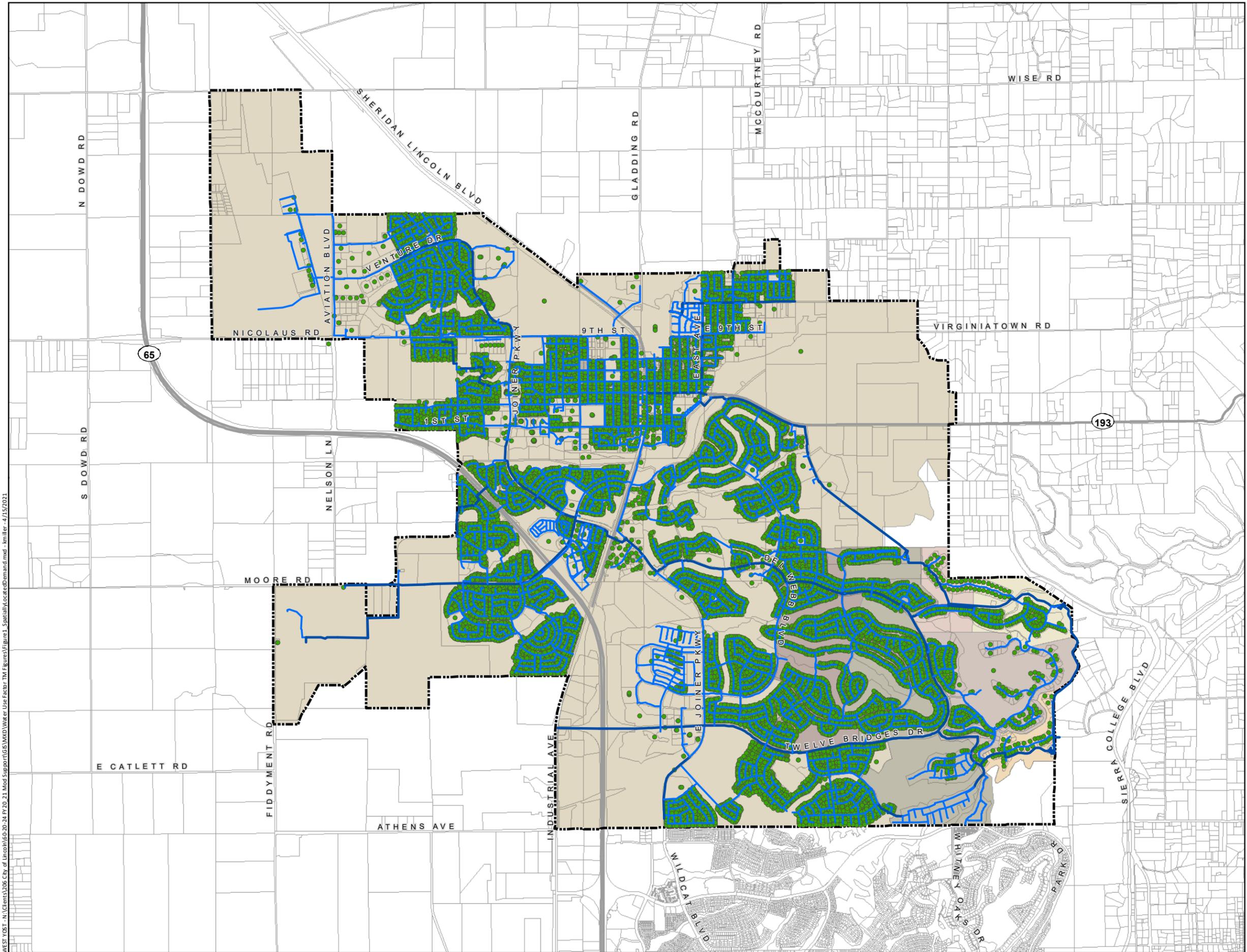
Unit water demand factors were developed using existing land use and parcel information in GIS format, which were correlated to existing (2019) metered water use data. Meter data from 2019 was used to develop the unit water demand factors because it was the most recent data representative of normal water use. Meter data from 2020 was not used because changes in behavior caused by the COVID-19 pandemic, such as employees working from home rather than commuting and reduced commercial activity, disrupted typical water use patterns. To calculate unit water demand factors by land use designation, the City’s spatially located meter consumption data was spatially joined to the parcel land use data. Some records were manually linked to land use data if the meter was located outside of a parcel. The unit water demand factor for each land use designation was then calculated by dividing the total metered water use by the total associated dwelling units or the total parcel area to which it was linked for residential and non-residential land uses respectively. Manual adjustments were made to these calculations to account for a variety of factors, such as acreage which was not automatically linked with metered water use, existing land use, which is not representative of future development, and partially developed parcels.

Figure 1 shows the spatial distribution of the linked meter data. Figure 2 shows the parcels used to calculate the unit water demand factors.

The parcel area used in this initial calculation did not include streets and therefore represented net area. Accordingly, the unit water demand factors calculated were “net” factors. Subsequently, the “net” unit water use factors were adjusted to account for acreage from streets so they could be applied to the gross acreage information provided by City staff for future development<sup>1</sup>. The gross unit water demand factors were then increased by a factor of five percent to be conservative and account for variability in annual water use. The following sections describe the updated unit water use factors by land use designation.

---

<sup>1</sup> The gross acreage within the existing City limits is 15,224 acres, and the net acreage within the City limits assigned to an existing or planned land use is 13,758 acres. Therefore, a factor of 1.11 was used to convert from net acreage to gross acreage.



- Spatially Located Water Meters
- ▭ City Limits
- Pipeline Diameter**
  - 16-inch and smaller
  - 18-inch and greater
- Pressure Zones**
  - 375 Zone
  - 475 Zone
  - 575 Zone
  - 610 Zone
  - 650 Zone
  - 750 Zone
  - 775 Zone

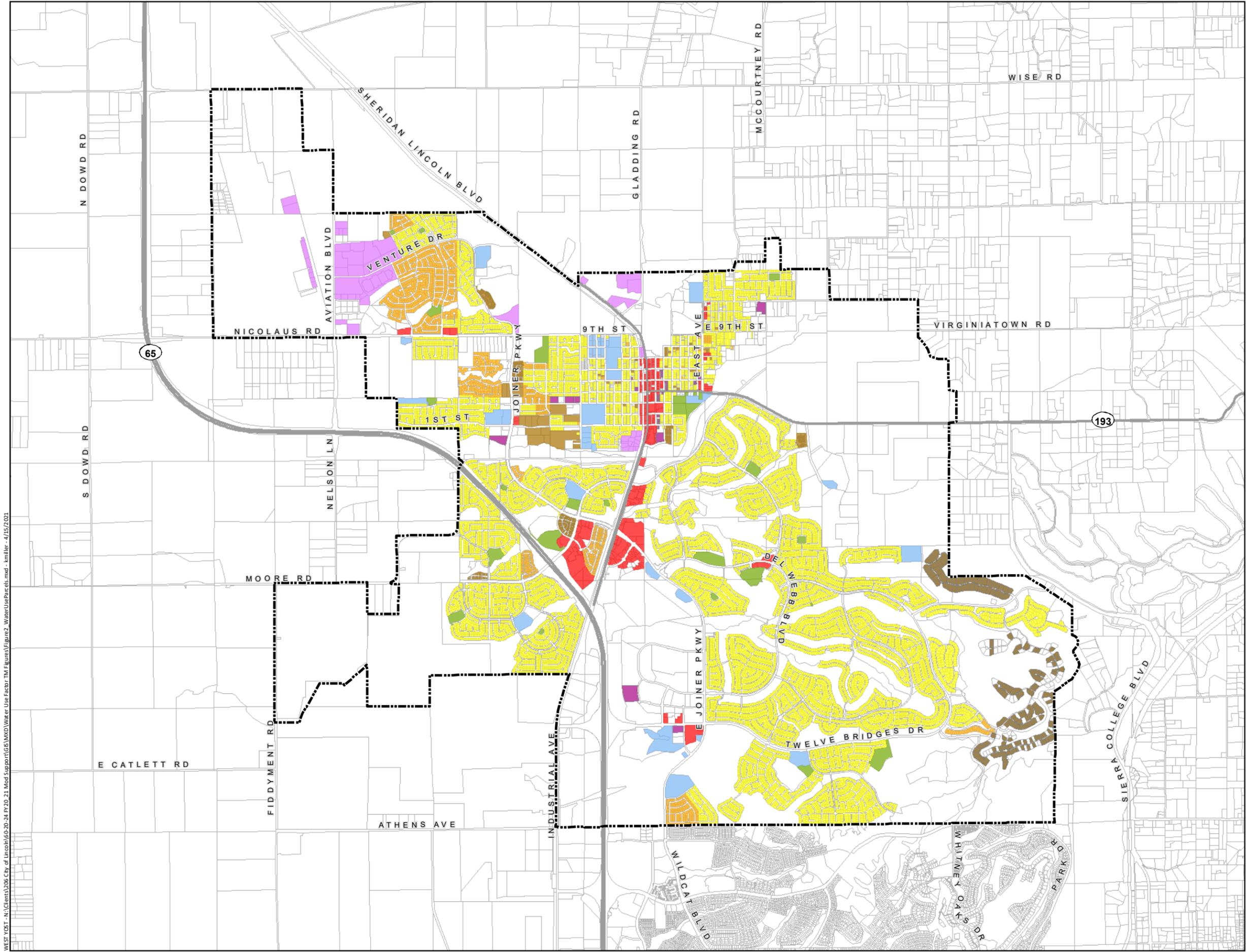
Notes:

1. 2019 meter data from Meters2019Consumption.shp provided by City staff in March 2021.
2. Meters spatially located either by linking to previously located 2017 meters or by an address locator created in GIS.

WEST YOST - N:\Clients\206 City of Lincoln\602-24 PZ 21 Mod Support\GIS\WKD\Water Use Factor\TM Figures\Figure1\_Spatially Located Demand.mxd - mllr - 4/19/2021



**Figure 1**  
**Spatially Located Water Meters**



**City Limits**

**Zoning**

- Country Estates
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Business Professional
- Industrial
- Public Facilities
- Parks and Recreation

- Notes:**
1. Zoning is shown only for parcels where the associated dwelling units or acreage was include in the demand factor calculations.
  2. Recommended water demand factors for Parks and Recreation and Public Facilities were not based on the parcels displayed here due to unusually low irrigation of these parcels in 2019.
  3. Zoning data from Existing Land Use geodatabase provided by City staff in February 2021.



**Figure 2**  
**Parcels Used in Demand Factor Calculations**

WEST YOST - N:\Clients\2016 City of Lincoln\GIS\2021 Mod Support\GIS\WKD\Water Use Factor\TM F\figures\Figure2\_WaterUseParcels.mxd - kmiller - 4/15/2021

## ***Unit Water Use Factors***

Unit water use factors were calculated by spatially joining the City's located meter data and the land use data. Single-family residences (Country Estates, Low-Density Residential, and Medium-Density Residential) are typically served by a single meter, and there is typically only one single-family residence on a given parcel. High-Density Residential land uses, and non-residential land uses often have multiple meters and multiple addresses associated with a single parcel. To calculate residential unit water demand factors, the total annual water use was divided by the associated total dwelling unit counts for parcels which used water in 2019. Non-Residential unit water demand factors were calculated by dividing the total annual water use by the associated total acreage for parcels which used water in 2019. As described in the following sections, some adjustments were made to include or exclude water use from select meters, dwelling unit counts, and parcel acreage as necessary to develop water use factors which are representative of water use expected in future development. The subsequent sections present the calculated unit water use factors for each residential and non-residential land use designation.

### ***Country Estates***

The Country Estates land use designation represents residential parcels with a density of less than three dwelling units per acre. Existing Country Estates in the City are concentrated around the Catta Verdera golf course or along Camino Cielo. These parcels tend to include large multi-story homes with large yards and extensive landscaping. Many have swimming pools. Because of this, Country Estates tend to use significantly more water than typical Low-Density Residential homes. It was assumed that there was a single dwelling unit on each existing Country Estates parcel. A unit water use factor of 1.30 acre-feet per dwelling unit (af/du) was calculated from the 2019-meter data. To be conservative, it is recommended that the City adopt a Country Estates unit water use factor of 1.37 af/du, which is five percent greater than the calculated factor.

### ***Low Density Residential***

The Low-Density Residential land use designation represents residential parcels with a density of 3 to 5.9 dwelling units per acre. Low-Density Residential use consists of traditional single-family homes on individual lots. It was assumed that there was a single dwelling unit on each existing Low-Density Residential parcel. Water use and dwelling unit counts from parcels with an area greater than one acre were excluded from the calculation as these parcels are still under development and have not yet been subdivided in the City's land use files. A unit water use demand factor of 0.38 af/du was calculated from the 2019-meter data. To be conservative, it is recommended that the City adopt a Low-Density Residential unit water use factor of 0.40 af/du, which is five percent greater than the calculated factor.

### ***Medium-Density Density Residential***

The Medium-Density Residential land use designation represents residential parcels with a density of 6 to 12.9 dwelling units per acre. In the City, the majority of existing Medium-Density Residential use consists of traditional single-family homes on lots which are slightly smaller than those of Low-Density Residential residences. Some Medium-Density Residential developments have driveways shared by multiple units. When calculating the number of Medium-Density Residential dwelling units, parcels zoned as Duplex Residential (R-2) were assigned two dwelling units. All other parcels were assigned one dwelling unit because they resembled traditional single-family homes upon visual inspection of aerial imagery. Water use and dwelling unit counts for very large parcels zoned Medium-Density Residential were excluded from the calculation as these parcels are still under development and have not yet been subdivided in the City's land use files. A unit water use factor of 0.34 af/du was calculated from the 2019-meter data. To be

conservative, it is recommended that the City adopt a Medium-Density Residential unit water use factor of 0.36 af/du, which is five percent greater than the calculated factor.

### *High Density Residential*

The High-Density Residential land use designation represents residential parcels with a density of greater than 12.9 dwelling units per acre. Typically, high-density residential developments are apartment complexes or other kinds of attached dwelling units in multi-family buildings. Dwelling unit counts were calculated based on the dwelling unit per acre information provided in the City's zoning land use file. A unit water use demand factor of 0.19 af/du was calculated from the 2019-meter data. To be conservative, it is recommended that the City adopt a High-Density Residential unit water use factor of 0.20 af/du, which is five percent greater than the calculated factor.

### *Commercial*

A single Commercial water use factor was developed to represent the Neighborhood Commercial, Community Commercial, Regional Commercial, and Village Commercial land use designations. To ensure that the commercial demand factor correctly captured the total gross acreage for commercial developments, parking lot acreage for commercial buildings was manually included in the unit water use factor calculation. A unit water use factor of 1.60 acre-feet per acre (af/ac) was calculated from the 2019-meter data. To be conservative, it is recommended that the City adopt a Commercial unit water use factor of 1.68 af/du, which is five percent greater than the calculated factor.

### *Business and Professional*

A single Business and Professional water use factor was developed to represent the Business and Professional and Employment Center land use designations. These land use types include offices and other buildings associated with professional services. Water use and acreage for employment center parcels not developed by 2019 were excluded from the demand factor calculation. A unit water use factor of 1.44 af/ac was calculated from the 2019-meter data. To be conservative, it is recommended that the City adopt a Business and Professional unit water use factor of 1.51 af/du, which is five percent greater than the calculated factor.

### *Mixed Use*

The Mixed-Use land use designation represents developments that physically and functionally provide space to integrate residential and commercial uses. It is expected that typical Mixed-Use developments within the City will consist of buildings with commercial use on the first floor and residences on the second floor. Because the City does not have existing Mixed-Use developments, the unit water use demand factor was estimated from other agencies in the Central Valley with similar climates. It is recommended that a Mixed-Use unit water use factor of 2.00 af/ac be adopted. It is recommended that the City monitor water use for mixed used developments that are constructed in the future and re-evaluate and make adjustments to the water use factor based on actual water use.

### *Industrial*

A single Industrial water use factor was developed to represent the Industrial, Light Industrial and Industrial Planned Development land use designations. Water use and parcel acreage for the Gladding McBean clay plant and the Sierra Pacific Industries sawmill plant were excluded from the calculations. It is expected that future Industrial developments within the City will be distribution warehouses or other light industrial use. Therefore, these large manufacturing plants are not representative of future Industrial

developments within the City. Furthermore, the Sierra Pacific Industries sawmill plant uses recycled water as process water, and so cannot be used to develop a factor for industries which may only be served by potable water. Finally, it is unclear if the Gladding McBean plant is supplementing its potable water use from a private well or some other source.

The City does not have an existing Industrial water use factor. An Industrial unit water use factor of 0.41 af/ac was calculated from the 2019-meter data. To be conservative, it is recommended that the City adopt an Industrial unit water use factor of 0.43 af/du, which is five percent greater than the calculated factor.

### *Public Facilities*

The Public Facilities land use designation represents the Public Facilities and Schools land use designations. The City voluntarily minimized irrigation of City buildings and public areas in 2019. It is expected that the City will resume full irrigation of these areas in the future. Because irrigation water use in 2019 was not representative of future water use, a new water demand factor could not be developed from the 2019 data. However, the City's existing Public Facilities unit water demand factor of 2.8 af/ac was compared with those of other agencies in the Central Valley with similar climates. Based on this comparison, it is recommended that the City's Public Facilities water use factor be reduced to 1.80 af/ac, as the existing factor is significantly higher than those observed in other municipalities.

### *Parks and Recreation*

The Parks and Recreation land use designation represents irrigated public parks and areas maintained for recreation, such as sports fields, courts, and playgrounds. The City voluntarily minimized irrigation of City parks and recreational areas in 2019, however it is expected that the City will resume full irrigation of these areas in the future. Because irrigation water use in 2019 was not representative of future water use, no changes are recommended to the City's existing Parks and Recreation unit water use factor of 3.55 af/ac, as the factor is similar to those of other agencies in the Central Valley with similar climates.

## **Recommended Water Use Factors**

Table 1 summarizes the updated unit water use factors recommended for use by the City for future water system planning and compares them with the factors previously adopted for the 2017 WSMP. The Low Density Residential and High-Density Residential water use factors decreased slightly from the previous factors. This is consistent with general water use trends observed throughout the Central Valley in response to the 2012 – 2016 drought. However, the Country Estates, Medium-Density Residential, and Commercial factors increased significantly compared with the previous factors. This may be because the previous factors were based on small sample sizes which did not accurately represent the average water use City-wide.

Based on the work completed to develop these adopted factors, they are appropriate for use in projecting future water demands.

**Table 1. Recommended Unit Water Demand Factors**

Water Use Factor	General Plan Land Use Designation(s)	af/du/yr	af/ac/yr	Change from 2017 WSMP, percent
<b>Residential</b>				
Country Estates	Country Estates	1.37	--	59
Low Density Residential	Low Density Residential	0.40	--	-13
Medium-Density Density Residential	Medium-Density Density Residential	0.36	--	24
High Density Residential	High Density Residential	0.20	--	-5
<b>Non-Residential</b>				
Commercial	Neighborhood Commercial	--	1.68	70
	Community Commercial			
	Regional Commercial			
	Village Commercial			
Business and Professional	Business and Professional	--	1.51	24
	Employment Center			
Mixed Use	Mixed Use	--	2.00	--
Industrial	Industrial	--	0.43	--
	Light Industrial			
	Industrial Planned Development			
Public Facilities	Public Facilities	--	1.80	-36
	Schools			
Parks and Recreation	Parks and Recreation	--	3.55	0

Distribution System Water Loss Audit



# AWWA Free Water Audit Software: Reporting Worksheet

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**Water Audit Report for:** City of Lincoln (3110004)  
**Reporting Year:** 2016    1/2016 - 12/2016

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

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

### WATER SUPPLIED

----- Enter grading in column 'E' and 'J' ----->	
Volume from own sources:	+ ? 7 176.838 MG/Yr
Water imported:	+ ? 7 2,531.411 MG/Yr
Water exported:	+ ? 0.000 MG/Yr

### Master Meter and Supply Error Adjustments

Pcnt:	Value:
+ ? 3 0.00%	MG/Yr
+ ? 4 0.00%	MG/Yr
+ ?	MG/Yr

Enter negative % or value for under-registration  
Enter positive % or value for over-registration

**WATER SUPPLIED:** 2,708.249 MG/Yr

### AUTHORIZED CONSUMPTION

Billed metered:	+ ? 5 2,379.305 MG/Yr
Billed unmetered:	+ ? 1 0.000 MG/Yr
Unbilled metered:	+ ? n/a MG/Yr
Unbilled unmetered:	+ ? 5 <u>6.771</u> MG/Yr

Click here: ?  
for help using option buttons below

Pcnt:	Value:
	6.771 MG/Yr

Use buttons to select percentage of water supplied OR value

**AUTHORIZED CONSUMPTION:** 2,386.076 MG/Yr

### WATER LOSSES (Water Supplied - Authorized Consumption)

322.173 MG/Yr

#### Apparent Losses

Unauthorized consumption: + ? 6.771 MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	+ ? 3 <u>48.557</u> MG/Yr
Systematic data handling errors:	+ ? <u>5.948</u> MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

**Apparent Losses:** 61.276 MG/Yr

Pcnt:	Value:
0.25%	MG/Yr

2.00%	MG/Yr
0.25%	MG/Yr

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

Real Losses = Water Losses - Apparent Losses: ? 260.897 MG/Yr

**WATER LOSSES:** 322.173 MG/Yr

### NON-REVENUE WATER

**NON-REVENUE WATER:** 328.944 MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

### SYSTEM DATA

Length of mains:	+ ? 8 245.0 miles
Number of <u>active AND inactive</u> service connections:	+ ? 8 18,348
Service connection density:	? <u>75</u> conn./mile main

Are customer meters typically located at the curbstop or property line? Yes

Average length of customer service line: + ? (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: + ? 5 90.0 psi

### COST DATA

Total annual cost of operating water system:	+ ? 10 \$8,343,488 \$/Year
Customer retail unit cost (applied to Apparent Losses):	+ ? 1 \$5.51 \$/1000 gallons (US)
Variable production cost (applied to Real Losses):	+ ? 5 \$2,519.69 \$/Million gallons <input type="checkbox"/> Use Customer Retail Unit Cost to value real losses

### WATER AUDIT DATA VALIDITY SCORE:

**\*\*\* YOUR SCORE IS: 58 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: Water imported
- 2: Customer retail unit cost (applied to Apparent Losses)
- 3: Customer metering inaccuracies



# AWWA Free Water Audit Software: Reporting Worksheet

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**Reporting Year:** 2017 1/2017 - 12/2017

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 (n/a or 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**

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

**WATER SUPPLIED**

		----- Enter grading in column 'E' and 'J' ----->				Master Meter and Supply Error Adjustments	
Volume from own sources:	<input type="button" value="+"/> <input type="button" value="?"/> 5	<input type="text" value="239.056"/>	MG/Yr	<input type="button" value="+"/> <input type="button" value="?"/> 3	<input type="text" value=""/>	<input type="text" value=""/>	MG/Yr
Water imported:	<input type="button" value="+"/> <input type="button" value="?"/> 5	<input type="text" value="2,757.940"/>	MG/Yr	<input type="button" value="+"/> <input type="button" value="?"/> 10	<input type="text" value=""/>	<input type="text" value=""/>	MG/Yr
Water exported:	<input type="button" value="+"/> <input type="button" value="?"/> n/a	<input type="text" value="0.000"/>	MG/Yr	<input type="button" value="+"/> <input type="button" value="?"/> ?	<input type="text" value=""/>	<input type="text" value=""/>	MG/Yr

**WATER SUPPLIED:**   MG/Yr

**Master Meter and Supply Error Adjustments**

Pcnt:  Value:

Enter negative % or value for under-registration  
Enter positive % or value for over-registration

**AUTHORIZED CONSUMPTION**

Billed metered:	<input type="button" value="+"/> <input type="button" value="?"/> 5	<input type="text" value="2,623.930"/>	MG/Yr	<input type="button" value="?"/> ?	<input type="text" value=""/>	<input type="text" value=""/>	MG/Yr
Billed unmetered:	<input type="button" value="+"/> <input type="button" value="?"/> 6	<input type="text" value="0.300"/>	MG/Yr	<input type="button" value="?"/> ?	<input type="text" value=""/>	<input type="text" value=""/>	MG/Yr
Unbilled metered:	<input type="button" value="+"/> <input type="button" value="?"/> 10	<input type="text" value="40.932"/>	MG/Yr	<input type="button" value="?"/> ?	<input type="text" value=""/>	<input type="text" value=""/>	MG/Yr
Unbilled unmetered:	<input type="button" value="+"/> <input type="button" value="?"/> 5	<input type="text" value="7.492"/>	MG/Yr	<input type="button" value="?"/> ?	<input type="text" value=""/>	<input type="text" value=""/>	MG/Yr

**AUTHORIZED CONSUMPTION:**   MG/Yr

Click here:  for help using option buttons below

Pcnt:  Value:  MG/Yr

Use buttons to select percentage of water supplied OR value

Pcnt:  Value:

**WATER LOSSES (Water Supplied - Authorized Consumption)**

MG/Yr

**Apparent Losses**

Unauthorized consumption:    MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:   3  MG/Yr  
Systematic data handling errors:    MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

**Apparent Losses:**   MG/Yr

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

Real Losses = Water Losses - Apparent Losses:   MG/Yr

**WATER LOSSES:**  MG/Yr

**NON-REVENUE WATER**

**NON-REVENUE WATER:**   MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

**SYSTEM DATA**

Length of mains:   8  miles  
Number of active AND inactive service connections:   8   
Service connection density:   conn./mile main

Are customer meters typically located at the curbside or property line?  (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure:   5  psi

**COST DATA**

Total annual cost of operating water system:   10  \$/Year  
Customer retail unit cost (applied to Apparent Losses):   8  \$/1000 gallons (US)  
Variable production cost (applied to Real Losses):   5  \$/Million gallons  Use Customer Retail Unit Cost to value real losses

Retail costs are less than (or equal to) production costs; please review and correct if necessary

**WATER AUDIT DATA VALIDITY SCORE:**

\*\*\* YOUR SCORE IS: 59 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: Water imported
- 2: Customer metering inaccuracies
- 3: Billed metered



# AWWA Free Water Audit Software: Reporting Worksheet

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

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

**WATER SUPPLIED**

----- Enter grading in column 'E' and 'J' ----->

Volume from own sources:	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="6"/>	<input type="text" value="112.120"/>	MG/Yr
Water imported:	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="6"/>	<input type="text" value="2,939.374"/>	MG/Yr
Water exported:	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="n/a"/>	<input type="text" value="0.000"/>	MG/Yr

Master Meter and Supply Error Adjustments

Pcnt:	<input type="text" value="0.00%"/>	<input type="button" value="0"/>	<input type="button" value="100"/>	<input type="text" value=""/>	MG/Yr
Value:	<input type="text" value="0.00%"/>	<input type="button" value="0"/>	<input type="button" value="100"/>	<input type="text" value=""/>	MG/Yr
Pcnt:	<input type="text" value="0.00%"/>	<input type="button" value="0"/>	<input type="button" value="100"/>	<input type="text" value=""/>	MG/Yr
Value:	<input type="text" value="0.00%"/>	<input type="button" value="0"/>	<input type="button" value="100"/>	<input type="text" value=""/>	MG/Yr

**WATER SUPPLIED:**  **3,051.494** MG/Yr

Enter negative % or value for under-registration  
Enter positive % or value for over-registration

**AUTHORIZED CONSUMPTION**

Billed metered:	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="5"/>	<input type="text" value="2,781.000"/>	MG/Yr
Billed unmetered:	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="n/a"/>	<input type="text" value="0.000"/>	MG/Yr
Unbilled metered:	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="n/a"/>	<input type="text" value="0.000"/>	MG/Yr
Unbilled unmetered:	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="5"/>	<input type="text" value="7.629"/>	MG/Yr

Click here:  for help using option buttons below

Pcnt:  Value:  MG/Yr

**AUTHORIZED CONSUMPTION:**  **2,788.629** MG/Yr

Use buttons to select percentage of water supplied OR value

**WATER LOSSES (Water Supplied - Authorized Consumption)**

**262.865** MG/Yr

**Apparent Losses**

Unauthorized consumption:    MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="3"/>	<input type="text" value="56.755"/>	MG/Yr
Systematic data handling errors:	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="5"/>	<input type="text" value="6.953"/>	MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

**Apparent Losses:**  **71.336** MG/Yr

Pcnt:  Value:  MG/Yr

MG/Yr

MG/Yr

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

Real Losses = Water Losses - Apparent Losses:  **191.529** MG/Yr

**WATER LOSSES:**  **262.865** MG/Yr

**NON-REVENUE WATER**

**NON-REVENUE WATER:**  **270.494** MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

**SYSTEM DATA**

Length of mains:	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="9"/>	<input type="text" value="247.0"/>	miles
Number of <u>active AND inactive</u> service connections:	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="8"/>	<input type="text" value="18,156"/>	
Service connection density:	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="74"/>	<input type="text" value="74"/>	conn./mile main

Are customer meters typically located at the curbside or property line?  (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure:     psi

**COST DATA**

Total annual cost of operating water system:	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="10"/>	<input type="text" value="\$9,262,499"/>	\$/Year
Customer retail unit cost (applied to Apparent Losses):	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="8"/>	<input type="text" value="\$10.11"/>	\$/1000 gallons (US)
Variable production cost (applied to Real Losses):	<input type="button" value="+"/>	<input type="button" value="?"/>	<input type="text" value="5"/>	<input type="text" value="\$2,577.82"/>	\$/Million gallons <input type="checkbox"/> Use Customer Retail Unit Cost to value real losses

**WATER AUDIT DATA VALIDITY SCORE:**

**\*\*\* YOUR SCORE IS: 60 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: Water imported
- 2: Customer metering inaccuracies
- 3: Billed metered



# AWWA Free Water Audit Software: Reporting Worksheet

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**Reporting Year:** 2019    1/2019 - 12/2019

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

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

**WATER SUPPLIED**

----- Enter grading in column 'E' and 'J' ----->

Volume from own sources:	+	?	5	215.007	MG/Yr
Water imported:	+	?	5	2,874.921	MG/Yr
Water exported:	+	?	n/a	0.000	MG/Yr

**Master Meter and Supply Error Adjustments**

Pcnt:	Value:	MG/Yr					
+	?	3	0.00%	<input type="radio"/>	<input type="radio"/>		MG/Yr
+	?	8	0.00%	<input type="radio"/>	<input type="radio"/>		MG/Yr
+	?			<input type="radio"/>	<input type="radio"/>		MG/Yr

Enter negative % or value for under-registration  
Enter positive % or value for over-registration

**WATER SUPPLIED:** 3,089.928 MG/Yr

**AUTHORIZED CONSUMPTION**

Billed metered:	+	?	5	2,773.076	MG/Yr
Billed unmetered:	+	?	n/a	0.000	MG/Yr
Unbilled metered:	+	?	n/a	0.000	MG/Yr
Unbilled unmetered:	+	?	5	7.725	MG/Yr

Click here: ?  
for help using option buttons below

Pcnt:	Value:	MG/Yr		
	<input type="radio"/>	<input checked="" type="radio"/>	7.725	MG/Yr

Use buttons to select percentage of water supplied OR value

**AUTHORIZED CONSUMPTION:** 2,780.801 MG/Yr

**WATER LOSSES (Water Supplied - Authorized Consumption)**

309.127 MG/Yr

**Apparent Losses**

Unauthorized consumption: 7.725 MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	+	?	3	56.593	MG/Yr
Systematic data handling errors:	+	?	5	6.933	MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

**Apparent Losses:** 71.251 MG/Yr

Pcnt:	Value:	MG/Yr		
0.25%	<input checked="" type="radio"/>	<input type="radio"/>		MG/Yr

2.00%	<input type="radio"/>	<input type="radio"/>		MG/Yr
0.25%	<input type="radio"/>	<input type="radio"/>		MG/Yr

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

Real Losses = Water Losses - Apparent Losses: 237.876 MG/Yr

**WATER LOSSES:** 309.127 MG/Yr

**NON-REVENUE WATER**

**NON-REVENUE WATER:** 316.852 MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

**SYSTEM DATA**

Length of mains:	+	?	9	252.0	miles
Number of <u>active AND inactive</u> service connections:	+	?	8	18,982	
Service connection density:	?			75	conn./mile main

Are customer meters typically located at the curbside or property line? Yes

Average length of customer service line: ? (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: 92.3 psi

**COST DATA**

Total annual cost of operating water system:	+	?	10	\$8,983,966	\$/Year
Customer retail unit cost (applied to Apparent Losses):	+	?	8	\$2.64	\$/1000 gallons (US)
Variable production cost (applied to Real Losses):	+	?	5	\$2,639.20	\$/Million gallons

Use Customer Retail Unit Cost to value real losses

**WATER AUDIT DATA VALIDITY SCORE:**

**\*\*\* YOUR SCORE IS: 57 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: Water imported
- 2: Customer metering inaccuracies
- 3: Billed metered